



Junos[®] OS

Routing Matrix with a TX Matrix Router Deployment Guide



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Junos® OS Routing Matrix with a TX Matrix Router Deployment Guide
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About the Documentation

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- Supported Platforms on page ix
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Documentation and Release Notes

To obtain the most current version of all Juniper Networks[®] technical documentation, see the product documentation page on the Juniper Networks website at <https://www.juniper.net/documentation/>.

If the information in the latest release notes differs from the information in the documentation, follow the product Release Notes.

Juniper Networks Books publishes books by Juniper Networks engineers and subject matter experts. These books go beyond the technical documentation to explore the nuances of network architecture, deployment, and administration. The current list can be viewed at <https://www.juniper.net/books>.

Supported Platforms

For the features described in this document, the following platforms are supported:

- [TX Matrix](#)

Using the Examples in This Manual

If you want to use the examples in this manual, you can use the **load merge** or the **load merge relative** command. These commands cause the software to merge the incoming configuration into the current candidate configuration. The example does not become active until you commit the candidate configuration.

If the example configuration contains the top level of the hierarchy (or multiple hierarchies), the example is a *full example*. In this case, use the **load merge** command.

If the example configuration does not start at the top level of the hierarchy, the example is a *snippet*. In this case, use the **load merge relative** command. These procedures are described in the following sections.

Merging a Full Example

To merge a full example, follow these steps:

1. From the HTML or PDF version of the manual, copy a configuration example into a text file, save the file with a name, and copy the file to a directory on your routing platform.

For example, copy the following configuration to a file and name the file **ex-script.conf**. Copy the **ex-script.conf** file to the **/var/tmp** directory on your routing platform.

```
system {
  scripts {
    commit {
      file ex-script.xml;
    }
  }
}
interfaces {
  fxp0 {
    disable;
    unit 0 {
      family inet {
        address 10.0.0.1/24;
      }
    }
  }
}
```

2. Merge the contents of the file into your routing platform configuration by issuing the **load merge** configuration mode command:

```
[edit]
user@host# load merge /var/tmp/ex-script.conf
load complete
```

Merging a Snippet

To merge a snippet, follow these steps:

1. From the HTML or PDF version of the manual, copy a configuration snippet into a text file, save the file with a name, and copy the file to a directory on your routing platform.

For example, copy the following snippet to a file and name the file **ex-script-snippet.conf**. Copy the **ex-script-snippet.conf** file to the **/var/tmp** directory on your routing platform.

```
commit {
  file ex-script-snippet.xml; }
```

2. Move to the hierarchy level that is relevant for this snippet by issuing the following configuration mode command:

```
[edit]
user@host# edit system scripts
[edit system scripts]
```

3. Merge the contents of the file into your routing platform configuration by issuing the **load merge relative** configuration mode command:

```
[edit system scripts]
user@host# load merge relative /var/tmp/ex-script-snippet.conf
load complete
```

For more information about the **load** command, see [CLI Explorer](#).

Documentation Conventions

Table 1 on page xi defines notice icons used in this guide.

Table 1: Notice Icons

| Icon | Meaning | Description |
|---|--------------------|---|
|  | Informational note | Indicates important features or instructions. |
|  | Caution | Indicates a situation that might result in loss of data or hardware damage. |
|  | Warning | Alerts you to the risk of personal injury or death. |
|  | Laser warning | Alerts you to the risk of personal injury from a laser. |
|  | Tip | Indicates helpful information. |
|  | Best practice | Alerts you to a recommended use or implementation. |

Table 2 on page xii defines the text and syntax conventions used in this guide.

Table 2: Text and Syntax Conventions

| Convention | Description | Examples |
|--------------------------------|---|--|
| Bold text like this | Represents text that you type. | To enter configuration mode, type the configure command: user@host> configure |
| Fixed-width text like this | Represents output that appears on the terminal screen. | user@host> show chassis alarms No alarms currently active |
| <i>Italic text like this</i> | <ul style="list-style-type: none"> Introduces or emphasizes important new terms. Identifies guide names. Identifies RFC and Internet draft titles. | <ul style="list-style-type: none"> A policy <i>term</i> is a named structure that defines match conditions and actions. <i>Junos OS CLI User Guide</i> RFC 1997, <i>BGP Communities Attribute</i> |
| <i>Italic text like this</i> | Represents variables (options for which you substitute a value) in commands or configuration statements. | Configure the machine's domain name: [edit] root@# set system domain-name <i>domain-name</i> |
| Text like this | Represents names of configuration statements, commands, files, and directories; configuration hierarchy levels; or labels on routing platform components. | <ul style="list-style-type: none"> To configure a stub area, include the stub statement at the [edit protocols ospf area area-id] hierarchy level. The console port is labeled CONSOLE. |
| < > (angle brackets) | Encloses optional keywords or variables. | stub <default-metric <i>metric</i> >; |
| (pipe symbol) | Indicates a choice between the mutually exclusive keywords or variables on either side of the symbol. The set of choices is often enclosed in parentheses for clarity. | broadcast multicast (<i>string1</i> <i>string2</i> <i>string3</i>) |
| # (pound sign) | Indicates a comment specified on the same line as the configuration statement to which it applies. | rsvp { # Required for dynamic MPLS only |
| [] (square brackets) | Encloses a variable for which you can substitute one or more values. | community name members [<i>community-ids</i>] |
| Indentation and braces ({ }) | Identifies a level in the configuration hierarchy. | [edit] routing-options { static { route default { nexthop <i>address</i> ; retain; } } } |
| ;(semicolon) | Identifies a leaf statement at a configuration hierarchy level. | } |

GUI Conventions

Table 2: Text and Syntax Conventions (*continued*)

| Convention | Description | Examples |
|------------------------------|--|---|
| Bold text like this | Represents graphical user interface (GUI) items you click or select. | <ul style="list-style-type: none"> In the Logical Interfaces box, select All Interfaces. To cancel the configuration, click Cancel. |
| > (bold right angle bracket) | Separates levels in a hierarchy of menu selections. | In the configuration editor hierarchy, select Protocols>Ospf . |

Documentation Feedback

We encourage you to provide feedback, comments, and suggestions so that we can improve the documentation. You can provide feedback by using either of the following methods:

- Online feedback rating system—On any page of the Juniper Networks TechLibrary site at <https://www.juniper.net/documentation/index.html>, simply click the stars to rate the content, and use the pop-up form to provide us with information about your experience. Alternately, you can use the online feedback form at <https://www.juniper.net/documentation/feedback/>.
- E-mail—Send your comments to techpubs-comments@juniper.net. Include the document or topic name, URL or page number, and software version (if applicable).

Requesting Technical Support

Technical product support is available through the Juniper Networks Technical Assistance Center (JTAC). If you are a customer with an active J-Care or Partner Support Service support contract, or are covered under warranty, and need post-sales technical support, you can access our tools and resources online or open a case with JTAC.

- JTAC policies—For a complete understanding of our JTAC procedures and policies, review the *JTAC User Guide* located at <https://www.juniper.net/us/en/local/pdf/resource-guides/7100059-en.pdf>.
- Product warranties—For product warranty information, visit <https://www.juniper.net/support/warranty/>.
- JTAC hours of operation—The JTAC centers have resources available 24 hours a day, 7 days a week, 365 days a year.

Self-Help Online Tools and Resources

For quick and easy problem resolution, Juniper Networks has designed an online self-service portal called the Customer Support Center (CSC) that provides you with the following features:

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- Search for known bugs: <https://prsearch.juniper.net/>
- Find product documentation: <https://www.juniper.net/documentation/>
- Find solutions and answer questions using our Knowledge Base: <https://kb.juniper.net/>
- Download the latest versions of software and review release notes: <https://www.juniper.net/customers/csc/software/>
- Search technical bulletins for relevant hardware and software notifications: <https://kb.juniper.net/InfoCenter/>
- Join and participate in the Juniper Networks Community Forum: <https://www.juniper.net/company/communities/>
- Open a case online in the CSC Case Management tool: <https://www.juniper.net/cm/>

To verify service entitlement by product serial number, use our Serial Number Entitlement (SNE) Tool: <https://entitlementsearch.juniper.net/entitlementsearch/>

Opening a Case with JTAC

You can open a case with JTAC on the Web or by telephone.

- Use the Case Management tool in the CSC at <https://www.juniper.net/cm/>.
- Call 1-888-314-JTAC (1-888-314-5822 toll-free in the USA, Canada, and Mexico).

For international or direct-dial options in countries without toll-free numbers, see <https://www.juniper.net/support/requesting-support.html>.

CHAPTER 1

Overview

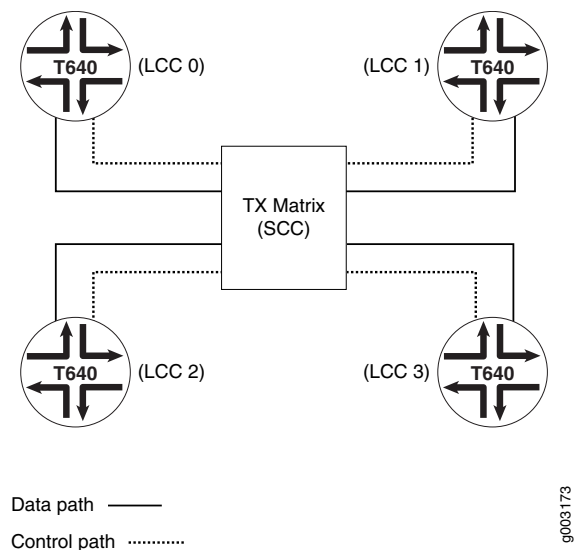
- [Overview of the Routing Matrix with a TX Matrix Router on page 15](#)
- [Terms and Acronyms for the Routing Matrix on page 17](#)

Overview of the Routing Matrix with a TX Matrix Router

The routing matrix with a TX Matrix router is the first multichassis product from Juniper Networks. The T640 and T320 routers were the first core routers that provided scalable bandwidth and intelligent networking features with a capacity of 80 to 640 gigabits per second (Gbps) of throughput. A key part of the T Series design was the ability to scale individual T640 routers to 2.5 terabits of bandwidth by combining them in a multichassis configuration. Such scalability is now available with the routing matrix.

The physical system of a routing matrix consists of one TX Matrix router and from one to four T640 routers, as shown in [Figure 1 on page 15](#). A key element of the routing matrix design is the ability to migrate existing T640 routers and connect them with the TX Matrix router through fiber-optic cables and Switch Interface Boards (SIBs).

Figure 1: Routing Matrix with a TX Matrix Router Architecture



The TX Matrix router connection between the T640 routers uses a scalable, three-stage switch fabric. This system architecture provides terabit bandwidth expansion capacity

and eliminates the use of subscriber line cards to connect devices within points of presence (POPs). As a result, the primary application for the routing matrix is to collapse aggregation and core layers in large POPs and central offices.

The routing matrix appears as a single router to the operator and utilizes the existing Junos OS command-line interface (CLI) for configuration and management. To manage this multichassis system, some enhancements have been made to the CLI that allow you to select the amount of output you wish to receive when you issue operational commands. You can specify the entire routing matrix, the TX Matrix router, a specific T640 router and its Flexible PIC Concentrators (FPCs), or a combination thereof.

Similarly, you can limit which portions of the routing matrix are modified during configuration or maintenance procedures (for example, performing software upgrades or halting Routing Engines).

Identifying Routing Matrix with a TX Matrix Router Components

A routing matrix with a TX Matrix router contains two types of chassis:

- TX Matrix router—

There is only one TX Matrix router per routing matrix. It is referred to as the switch-card chassis (**scc**) in the Junos OS CLI.

- T640 routers—

There can be one to four T640 routers in a routing matrix. These are referred to as line-card chassis 0 through 3 (**lcc0–lcc3**) in the Junos OS CLI. The T640 router number is set by the hardware. See the *TX Matrix Router Hardware Guide* for further information on installing and connecting the hardware.

Viewing the Routing Matrix with a TX Matrix Router as a Single Router

Even though a routing matrix with a TX Matrix router can be comprised of five separate physical components (a TX Matrix router and up to four T640 routers), it is best if you consider a routing matrix as a single router. When you issue configuration and operational commands on the TX Matrix router, your view of the routing matrix shows a single routing device with a high number of FPCs and PICs. For a detailed discussion of FPC numbering in a routing matrix with a TX Matrix router, see [“Adjusting the Configuration to Accommodate Increased FPC Numbers in a Routing Matrix with a TX Matrix Router” on page 27](#).

Related Documentation

- *Routing Matrix with a TX Matrix Router Deployment Guide*
- [System Requirements for the Routing Matrix with a TX Matrix Router on page 19](#)
- [Roadmap to Configuring a Routing Matrix with a TX Matrix Router on page 21](#)
- [Example: Routing Matrix with a TX Matrix Router Configuration on page 30](#)

Terms and Acronyms for the Routing Matrix

L

line-card chassis (LCC) A T640 router or T1600 router installed in a routing matrix.

R

routing matrix A high capacity, multichassis router. The routing matrix with a TX Matrix router combines multiple T640 routers with a TX Matrix router switch fabric. The routing matrix with a TX Matrix Plus router combines multiple T1600 routers with a TX Matrix Plus router switch fabric.

S

Switch Interface Board (SIB) On T640 and T1600 routers and on TX Matrix router and TX Matrix Plus routers, a switch fabric plane component that forwards packets from a source Packet Forwarding Engine to a destination Packet Forwarding Engine.

switch-card chassis (SCC) A TX Matrix router installed in a routing matrix.

switch-fabric chassis (SFC) A TX Matrix Plus router installed in a routing matrix.

T

TX Matrix Plus router A high-speed centralized switch fabric that connects multiple T1600 routers in a routing matrix.

TX Matrix router A high-speed centralized switch fabric that connects multiple T640 routers in a routing matrix.

Related Documentation

- [Routing Matrix with a TX Matrix Router Deployment Guide](#)
- [Overview of the Routing Matrix with a TX Matrix Router on page 15](#)
- [Roadmap to Configuring a Routing Matrix with a TX Matrix Router on page 21](#)
- [Example: Routing Matrix with a TX Matrix Router Configuration on page 30](#)

CHAPTER 2

System Requirements

- [System Requirements for the Routing Matrix with a TX Matrix Router on page 19](#)

System Requirements for the Routing Matrix with a TX Matrix Router

To implement the TX Matrix router, your system must meet these minimum requirements:

- Junos OS Release 7.0 or later
- One TX Matrix router
- Two Juniper Networks T640 routers
- Physical Interface Cards (PICs) of your choice (To view a list of supported PICs, see the *T640 Router PIC Guide*)

Related Documentation

- [Routing Matrix with a TX Matrix Router Deployment Guide](#)
- [Overview of the Routing Matrix with a TX Matrix Router on page 15](#)
- [Roadmap to Configuring a Routing Matrix with a TX Matrix Router on page 21](#)
- [Example: Routing Matrix with a TX Matrix Router Configuration on page 30](#)

CHAPTER 3

Configuring a Routing Matrix with a TX Matrix Router

- [Roadmap to Configuring a Routing Matrix with a TX Matrix Router on page 21](#)
- [Connecting to a Routing Matrix with a TX Matrix Router on page 22](#)
- [Configuring Groups to Support a Routing Matrix with a TX Matrix Router Components on page 24](#)
- [Configuring Protocols and Other Features for a Routing Matrix with a TX Matrix Router on page 25](#)
- [Routing Matrix with a TX Matrix Router FPC Numbering on page 26](#)
- [Adjusting the Configuration to Accommodate Increased FPC Numbers in a Routing Matrix with a TX Matrix Router on page 27](#)
- [Configuring Chassis-Specific Statements for a Routing Matrix with a TX Matrix Router on page 28](#)
- [Committing Configurations on a Routing Matrix with a TX Matrix Router on page 29](#)
- [Example: Routing Matrix with a TX Matrix Router Configuration on page 30](#)

Roadmap to Configuring a Routing Matrix with a TX Matrix Router

When you configure the routing matrix with a TX Matrix router, you should do some or all of the following:

- You must connect to the Routing Engines of the routing matrix. For information on how to do this, see [“Connecting to a Routing Matrix with a TX Matrix Router” on page 22](#).
- You must configure groups that support the components of the routing matrix. Groups offer a simple way to establish hostnames, management interfaces, and default routes. For more information on how to do this, see [“Configuring Groups to Support a Routing Matrix with a TX Matrix Router Components” on page 24](#).
- You can adjust the configuration to accommodate the number of FPCs installed on the routing matrix. For information on FPC numbering, see [“Routing Matrix with a TX Matrix Router FPC Numbering” on page 26](#). For information on configuring the routing matrix to accommodate FPCs, see [“Adjusting the Configuration to Accommodate Increased FPC Numbers in a Routing Matrix with a TX Matrix Router” on page 27](#).

- You can configure protocols and other features on the routing matrix. Other than the expanded range of FPC numbers for interfaces and the requirement to create groups for the T640 routers, you can configure protocols in exactly the same manner as you would for other Juniper Networks routers.
- For T640 routers, you can configure PIC-specific features, create an alarm for nodes that do not come online, and take a node offline. For more information, see [“Configuring Chassis-Specific Statements for a Routing Matrix with a TX Matrix Router” on page 28](#).
- As with every Junos router, you must commit configurations on the routing matrix before they take effect. For information on how to do this, see [“Committing Configurations on a Routing Matrix with a TX Matrix Router” on page 29](#).
- When you upgrade the software on the routing matrix, the new image is loaded on the TX Matrix and distributed to all T640 routers. For more information, see [“Upgrading the Software for a Routing Matrix with a TX Matrix Router” on page 59](#).
- For information about managing system processes in the routing matrix, see [“Managing System Processes in the Routing Matrix with a TX Matrix Router” on page 51](#).
- For information about rebooting the routing matrix or halting routing matrix software components, see [“Rebooting and Halting Routing Matrix with a TX Matrix Router Components” on page 53](#).
- For information about enabling or temporarily disabling routing matrix hardware components, see [“Enabling and Disabling Specific Routing Matrix with a TX Matrix Router Hardware Components” on page 54](#).
- For information about managing files on the routing matrix, see [“Managing Files on Routing Engines in a Routing Matrix with a TX Matrix Router” on page 52](#).
- For information about commonly used commands for the routing matrix, see [“Monitoring a Routing Matrix with a TX Matrix Router” on page 57](#).

Related Documentation

- *Routing Matrix with a TX Matrix Router Deployment Guide*
- [Overview of the Routing Matrix with a TX Matrix Router on page 15](#)
- [System Requirements for the Routing Matrix with a TX Matrix Router on page 19](#)
- [Example: Routing Matrix with a TX Matrix Router Configuration on page 30](#)

Connecting to a Routing Matrix with a TX Matrix Router

The TX Matrix router and every T640 router can each be configured with two Routing Engines to provide redundancy and graceful Routing Engine switchover capabilities. You can connect to each Routing Engine in the following ways:

- Console/AUX—Asynchronous access via the console and auxiliary ports on the TX Matrix router or T640 router Connector Interface Panel (CIP).
- Management Ethernet—Telnet access via the Fast Ethernet ports on the TX Matrix router or T640 router CIPs.

- CLI login from one Routing Engine to another—All Routing Engines in the routing matrix with a TX Matrix router are connected to their respective control boards, which in turn are connected to the CIP on the TX Matrix router (see the *TX Matrix Router Hardware Guide* for more details). After you log in to one Routing Engine, you can connect to another Routing Engine as follows:

```
user@router> request routing-engine login ?
Possible completions:
  backup      Log in to backup RE
  lcc          Log in to LCC (0..3)
  master      Log in to master RE
  other-routing-engine Log in to the other Routing Engine
  re0         Log in to RE0
  re1         Log in to RE1
```

```
user@router> request routing-engine login lcc ?
Possible completions:
  <lcc>        Log in to LCC (0..3)
```

```
user@router> request routing-engine login lcc 0 ?
Possible completions:
  backup      Log in to backup RE
  master      Log in to master RE
  re0         Log in to RE0
  re1         Log in to RE1
```



NOTE: Because the routing matrix appears as a single router, we recommend that you access the master Routing Engine of the TX Matrix router to perform all configuration tasks for the routing matrix. Under normal operating conditions, you do not need to access or configure the T640 router directly. If you access a Routing Engine on a T640 router, the following warning is displayed:

```
user@router> request routing-engine login lcc 0 re0
--- JUNOS 7.0-20040625.1 built 2004-06-25 19:51:38 UTC
%
% cli
warning: This chassis is a Line Card Chassis (LCC) in a multichassis
system.
warning: Use of interactive commands should be limited to debugging.
warning: Normal CLI access is provided by the Switch Card Chassis
(SCC).
warning: Use 'request routing-engine login scc' to log into the SCC.
```

To manage the backup Routing Engines on all components (for example, to upgrade Junos OS), log in to the TX Matrix router backup Routing Engine and perform the necessary operations.

Related Documentation

- [Routing Matrix with a TX Matrix Router Deployment Guide](#)
- [Overview of the Routing Matrix with a TX Matrix Router on page 15](#)
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- [Example: Routing Matrix with a TX Matrix Router Configuration on page 30](#)

Configuring Groups to Support a Routing Matrix with a TX Matrix Router Components

For easy maintenance of the chassis in a routing matrix with a TX Matrix router, you can add a configuration group for each Routing Engine in the T640 router and TX Matrix router. The configuration groups added to the TX Matrix router configuration offer a simple way to establish hostnames, management interfaces, and default routes. In the example below, groups **re0** and **re1** refer to the TX Matrix router Routing Engines, while groups **lcc0-re0** and **lcc0-re1** refer to the Routing Engines on T640 router **LCC0**. To configure groups for the TX Matrix router, include the **re0** and **re1** statements at the **[edit groups]** hierarchy level. To configure groups for the T640 router, include the **lccnumber-re0** and **lccnumber-re1** statements at the **[edit groups]** hierarchy level.

```
[edit]
groups {
  re0 {
    system {
      host-name hostname-scc-re0;
      backup-router ip-address;
    }
    interfaces {
      fxp0 {
        unit 0 {
          family inet {
            address ip-address;
          }
        }
      }
    }
  }
  re1 {
    system {
      host-name hostname-scc-re1;
      backup-router ip-address;
    }
    interfaces {
      fxp0 {
        unit 0 {
          family inet {
            address ip-address;
          }
        }
      }
    }
  }
  lcc0-re0 {
    system {
      host-name hostname-lcc0-re0;
      backup-router ip-address;
    }
    interfaces {
      fxp0 {
```



```

        unit 0 {
            family inet {
                address ip-address;
            }
        }
    }
}
lcc0-re1 {
    system {
        host-name hostname-lcc0-re1;
        backup-router ip-address;
    }
    interfaces {
        fxp0 {
            unit 0 {
                family inet {
                    address ip-address;
                }
            }
        }
    }
}
}
apply-groups [ re0 re1 lcc0-re0 lcc0-re1 ];

```

Note that apply groups can be nested. For example, any configuration statements that are common to `lcc0-re0` and `lcc0-re1` can be put into a separate group and then added as an apply group to the `lcc0-re0` and `lcc0-re1` groups, which in turn are applied to the main configuration.

For more information about configuration groups, see the *Junos OS CLI User Guide*.

Related Documentation

- [Routing Matrix with a TX Matrix Router Deployment Guide](#)
- [Overview of the Routing Matrix with a TX Matrix Router on page 15](#)
- [Roadmap to Configuring a Routing Matrix with a TX Matrix Router on page 21](#)
- [Example: Routing Matrix with a TX Matrix Router Configuration on page 30](#)

Configuring Protocols and Other Features for a Routing Matrix with a TX Matrix Router

Other than the expanded range of FPC numbers for interfaces and the requirement to create groups for the T640 routers, the configuration of a routing matrix with a TX Matrix router is exactly the same as for all other Juniper Networks routers. You can configure routing protocols, Multiprotocol Label Switching (MPLS) applications, virtual private networks (VPNs), routing and forwarding options, and other software features as usual.

For more information on configuring Junos OS-based routers, see the Junos configuration guides.

Related Documentation

- [Routing Matrix with a TX Matrix Router Deployment Guide](#)
- [Overview of the Routing Matrix with a TX Matrix Router on page 15](#)
- [Roadmap to Configuring a Routing Matrix with a TX Matrix Router on page 21](#)
- [Example: Routing Matrix with a TX Matrix Router Configuration on page 30](#)

Routing Matrix with a TX Matrix Router FPC Numbering

A routing matrix with a TX Matrix router can contain up to four T640 routers, and each T640 router can contain up to eight FPCs (numbered 0 through 7). Therefore, the routing matrix as a whole can consist of up to 32 FPCs (numbered 0 through 31).

Each T640 router is assigned a number (LCCs 0 through 3) that depends upon the hardware setup and connectivity to the TX Matrix router. [Table 3 on page 26](#) shows the basic correspondence between the FPC hardware slot numbers in T640 routers and the FPC assignments recognized by a routing matrix.

Table 3: FPC Correspondence Between T640 Routers and the Routing Matrix with a TX Matrix Router

| T640 Router | T640 FPC Range | Routing Matrix FPC Range |
|-------------|----------------|--------------------------|
| LCC 0 | 0–7 | 0–7 |
| LCC 1 | 0–7 | 8–15 |
| LCC 2 | 0–7 | 16–23 |
| LCC 3 | 0–7 | 24–31 |

To easily convert FPC numbers in the T640 routers to the correct FPC number in a routing matrix, use the conversion chart shown in [Table 4 on page 26](#). You can use the converted FPC number to configure the interfaces on the TX Matrix router in your routing matrix.

Table 4: T640 to Routing Matrix with a TX Matrix Router FPC Conversion Chart

| FPC Numbering | T640 Routers | | | | | | | |
|-------------------------------------|--------------|---|---|---|---|---|---|---|
| | LCC 0 | | | | | | | |
| T640 FPC Slots | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Routing Matrix FPC Slots Equivalent | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | LCC 1 | | | | | | | |
| T640 FPC Slots | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Table 4: T640 to Routing Matrix with a TX Matrix Router FPC Conversion Chart (*continued*)

| FPC Numbering | T640 Routers | | | | | | | |
|-------------------------------------|--------------|----|----|----|----|----|----|----|
| Routing Matrix FPC Slots Equivalent | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| LCC 2 | | | | | | | | |
| T640 FPC Slots | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Routing Matrix FPC Slots Equivalent | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| LCC 3 | | | | | | | | |
| T640 FPC Slots | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Routing Matrix FPC Slots Equivalent | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |

Related Documentation

- [Routing Matrix with a TX Matrix Router Deployment Guide](#)
- [Adjusting the Configuration to Accommodate Increased FPC Numbers in a Routing Matrix with a TX Matrix Router on page 27](#)
- [Overview of the Routing Matrix with a TX Matrix Router on page 15](#)
- [Example: Routing Matrix with a TX Matrix Router Configuration on page 30](#)

Adjusting the Configuration to Accommodate Increased FPC Numbers in a Routing Matrix with a TX Matrix Router

You must adjust the routing matrix with a TX Matrix router configuration to accommodate increased FPC numbers.

For example, if you have a Gigabit Ethernet interface installed in FPC slot 7, PIC slot 0, port 0 of T640 router LCC 3, you can configure this interface on the TX Matrix router by including the `ge-31/0/0` statement at the **[edit interfaces]** hierarchy level.

```
[edit]
interfaces {
  ge-31/0/0 {
    unit 0 {
      family inet {
        address ip-address;
      }
    }
  }
}
```

For more information about physically connecting T640 routers and a TX Matrix router together in a routing matrix, see the *TX Matrix Router Hardware Guide*. For more information about the interface-naming conventions for a routing matrix, see the *Junos Network Interfaces Configuration Guide*.

Related Documentation

- [Routing Matrix with a TX Matrix Router Deployment Guide](#)
- [Routing Matrix with a TX Matrix Router FPC Numbering on page 26](#)
- [Overview of the Routing Matrix with a TX Matrix Router on page 15](#)
- [Roadmap to Configuring a Routing Matrix with a TX Matrix Router on page 21](#)
- [Example: Routing Matrix with a TX Matrix Router Configuration on page 30](#)

Configuring Chassis-Specific Statements for a Routing Matrix with a TX Matrix Router

You can configure PIC-specific features, such as SONET/SDH framing, on specific T640 routers within the routing matrix with a TX Matrix router. To do so, include the **lcc** **lcc-number** statement at the **[edit chassis]** hierarchy level and specify the chassis-specific feature to configure.

```
[edit]
chassis {
  lcc lcc-number {
    fpc slot-number { # Use the T640 router FPC hardware slot number.
      pic pic-number {
        ...
      }
    }
  }
}
```



NOTE: When you include statements at the **[edit chassis lcc lcc-number]** hierarchy level, specify the actual FPC hardware slot number as labeled on the T640 router chassis. Do not use the routing matrix-based FPC number shown in [Table 4 on page 26](#).

By default, the Junos OS allows all T640 routers in the routing matrix to come online. Optionally, you can configure the TX Matrix router to generate an alarm if the T640 routers in the routing matrix do not come online. To configure, include the **online-expected** statement at the **[edit chassis lcc number]** hierarchy level on the TX Matrix router.

```
[edit chassis lcc number]
online-expected;
```

If you do not want a T640 router to be part of the routing matrix, you can configure it to be offline. This is useful when you are performing maintenance on a T640 router. To configure a T640 router so that it is offline, include the **offline** statement at the **[edit chassis lcc number]** hierarchy level.

```
[edit chassis lcc number]
offline;
```

When you are ready to bring the T640 router back online, delete the **offline** configuration statement at the **[edit chassis lcc number]** hierarchy level.



NOTE: If you do not configure the `online-expected` or `offline` statement, any T640 router that is part of the routing matrix is allowed to come online. However, if a T640 router does not come online, the TX Matrix router does not generate an alarm.

For more information about chassis-specific statements, see the *Junos System Basics Configuration Guide*.

Related Documentation

- [Routing Matrix with a TX Matrix Router Deployment Guide](#)
- [Overview of the Routing Matrix with a TX Matrix Router on page 15](#)
- [Roadmap to Configuring a Routing Matrix with a TX Matrix Router on page 21](#)
- [Example: Routing Matrix with a TX Matrix Router Configuration on page 30](#)

Committing Configurations on a Routing Matrix with a TX Matrix Router

You must commit configuration changes for a routing matrix with a TX Matrix router on the TX Matrix router rather than on the individual T640 routers. If you commit a configuration directly on a T640 router within a routing matrix, the configuration is not distributed to the TX Matrix router or the other T640 routers in the routing matrix. Conversely, all configuration changes you commit on the TX Matrix router are distributed to all the T640 routers in the routing matrix and override any changes committed directly on a T640 router.

There are two main ways to commit configurations on a TX Matrix router. When you issue the **commit synchronize** command, you synchronize the configurations of both the primary and backup Routing Engines on the TX Matrix router and the primary and backup Routing Engines of all the associated T640 routers.

```
user@router# commit synchronize
scc-re0:
configuration check succeeds
lcc0-re1:
commit complete
lcc0-re0:
commit complete
lcc1-re1:
commit complete
lcc1-re0:
commit complete
scc-re1:
commit complete
scc-re0:
commit complete
```

If you issue the basic form of the **commit** command on the TX Matrix router, this action updates only the master Routing Engines of the TX Matrix router and the T640 routers in the routing matrix.

```
user@router# commit
scc-re0:
configuration check succeeds
lcc0-re0:
commit complete
lcc1-re0:
commit complete
scc-re0:
commit complete
```

**Related
Documentation**

- [Routing Matrix with a TX Matrix Router Deployment Guide](#)
- [Overview of the Routing Matrix with a TX Matrix Router on page 15](#)
- [Roadmap to Configuring a Routing Matrix with a TX Matrix Router on page 21](#)
- [Example: Routing Matrix with a TX Matrix Router Configuration on page 30](#)

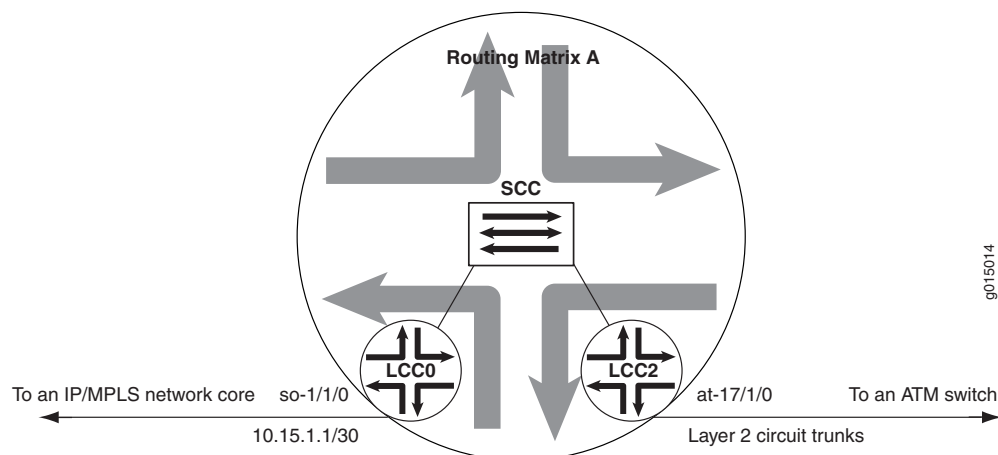
Example: Routing Matrix with a TX Matrix Router Configuration

- [Routing Matrix with a TX Matrix Router Topology on page 30](#)
- [TX Matrix Router—SCC on page 31](#)
- [Verifying Your Work on the Routing Matrix with a TX Matrix Router on page 37](#)

Routing Matrix with a TX Matrix Router Topology

[Figure 2 on page 31](#) shows Routing Matrix A, a basic routing matrix consisting of a TX Matrix router and two T640 routers. The TX Matrix router is named **SCC** and the nodes are named **LCC0** and **LCC2**. The routing matrix with a TX Matrix router is acting as a provider edge (PE) router in a Layer 2 circuit network. SONET interface **so-1/1/0** in node **LCC0** connects to an IP/MPLS core network, and Asynchronous Transfer Mode 2 (ATM2) intelligent queuing (IQ) interface **at-17/1/0** in node **LCC2** runs Layer 2 circuit trunk mode to connect to an ATM switch. (For more information about Layer 2 see the *Junos VPNs Configuration Guide*.)

Figure 2: Routing Matrix with a TX Matrix Router Topology Diagram



Some key considerations for this configuration are as follows:

- Treat the routing matrix like a single router and execute all configuration and operational commands on the TX Matrix router **SCC**.
- Create configuration groups for each Routing Engine in the routing matrix by using groups **re0**, **re1**, **lcc0-re0**, **lcc2-re0**, **lcc0-re1**, and **lcc2-re1**. In the groups, configure hostnames, default routes, and management interfaces.
- To configure interfaces, use the routing matrix FPC numbering convention of slots **0** through **31**.
- To enable ATM2 IQ trunk mode and other chassis-based commands, include the **lcc lcc-number** statement at the **[edit chassis]** hierarchy level and use the hardware FPC slot numbers **0** through **7** of node **LCC2**.
- Configure most other processes as usual, such as routing, class of service (CoS), and firewalls.

TX Matrix Router—SCC

```
[edit]
groups { # You can create special configuration groups in a routing matrix.
  re0 { # This group corresponds to the master Routing Engine.
    system { # on the TX Matrix router.
      host-name scc;
      backup-router 192.168.17.254;
    }
    interfaces {
      fxp0 {
        unit 0 {
          family inet {
            address 192.168.77.158/21;
          }
        }
      }
    }
  }
}
```

```
re1 { # This group corresponds to the backup Routing Engine
  system { # on the TX Matrix router.
    host-name scc1;
    backup-router 192.168.17.254;
  }
  interfaces {
    fxp0 {
      unit 0 {
        family inet {
          address 192.168.77.168/21;
        }
      }
    }
  }
}

lcc0-re0 { # This group corresponds to the master Routing Engine
  system { # on the T640 router LCC0.
    host-name lcc0;
    backup-router 192.168.17.254 destination [10.0.0.0/8 192.168.0.0/16];
  }
  interfaces {
    fxp0 {
      unit 0 {
        family inet {
          address 192.168.77.157/21;
        }
      }
    }
  }
}

lcc2-re0 { # This group corresponds to the master Routing Engine
  system { # on the T640 router LCC2.
    host-name lcc2;
    backup-router 192.168.17.254 destination [10.0.0.0/8 192.168.0.0/16];
  }
  interfaces {
    fxp0 {
      unit 0 {
        family inet {
          address 192.168.77.159/21;
        }
      }
    }
  }
}

lcc0-re1 { # This group corresponds to the backup Routing Engine
  system { # on the T640 router LCC0.
    host-name lcc0-1;
    backup-router 192.168.17.254 destination [10.0.0.0/8 192.168.0.0/16];
  }
  interfaces {
    fxp0 {
      unit 0 {
        family inet {
          address 192.168.77.169/21;
        }
      }
    }
  }
}
```



```

    }
  }
}
lcc2-re1 { # This group corresponds to the backup Routing Engine
  system { # on the T640 routing node LCC2.
    host-name lcc2-1;
    backup-router 192.168.17.254 destination [10.0.0.0/8 192.168.0.0/16];
  }
  interfaces {
    fxp0 {
      unit 0 {
        family inet {
          address 192.168.77.192/21;
        }
      }
    }
  }
}
}
apply-groups [ re0 re1 lcc0-re1 lcc2-re1 lcc0-re0 lcc2-re0 ];
system {
  syslog {
    file messages {
      any any;
    }
  }
}
}
chassis { # You must apply chassis commands to a specific T640 router.
  lcc 2 { # Specify the T640 router and the FPC hardware slot of the node.
    fpc 1 { # This FPC is equivalent to slot 17 in the routing matrix.
      pic 1 {
        atm-l2circuit-mode {
          trunk nni;
        }
      }
    }
  }
}
}
interfaces {
  so-1/1/0 { # This is a SONET interface at FPC 1, PIC 1, port 0
    mtu 9192; # on the T640 router LCC0.
    unit 0 {
      family inet {
        address 10.15.1.1/30 {
          destination 10.15.1.2;
        }
      }
      family iso;
      family mpls {
        filter {
          input filter_1;
        }
      }
    }
  }
}
}

```

```
at-17/1/0 { # This is an ATM2 IQ interface at FPC 1, PIC 1, port 0
encapsulation atm-ccc-cell-relay; # on the T640 router LCC2.
atm-options {
pic-type atm2;
scheduler-maps { # CoS on an ATM2 IQ PIC works the same in a routing matrix.
cos1 { # as it does in a standalone T640 router.
forwarding-class ubr {
priority low;
transmit-weight percent 25;
}
forwarding-class nrtvbr {
priority low;
transmit-weight percent 25;
}
forwarding-class rtvbr {
priority low;
transmit-weight percent 25;
}
forwarding-class cbr {
priority high;
transmit-weight percent 25;
}
}
cos2 {
forwarding-class ubr {
priority low;
transmit-weight percent 10;
}
forwarding-class nrtvbr {
priority low;
transmit-weight percent 20;
}
forwarding-class rtvbr {
priority low;
transmit-weight percent 30;
}
forwarding-class cbr {
priority high;
transmit-weight percent 40;
}
}
cos3 {
forwarding-class ubr {
priority low;
transmit-weight percent 40;
}
forwarding-class nrtvbr {
priority low;
transmit-weight percent 30;
}
forwarding-class rtvbr {
priority low;
transmit-weight percent 20;
}
forwarding-class cbr {
priority high;
```

```

        transmit-weight percent 10;
    }
}
}
unit 0 {
    trunk-id 0;
    trunk-bandwidth 10m;
    cell-bundle-size 2;
}
unit 1 {
    trunk-id 1;
    trunk-bandwidth 10m;
    cell-bundle-size 1;
    atm-scheduler-map cos1;
}
unit 2 {
    trunk-id 2;
    trunk-bandwidth 10m;
    cell-bundle-size 2;
    atm-scheduler-map cos2;
}
unit 3 {
    trunk-id 3;
    trunk-bandwidth 10m;
    cell-bundle-size 3;
    atm-scheduler-map cos3;
}
}
lo0 {
    unit 0 {
        family inet {
            address 127.0.0.1/32;
            address 10.255.77.158/32 {
                primary;
            }
        }
        family iso {
            address 47.0005.80ff.f800.0000.0108.0001.0102.5507.0158.00;
        }
        family inet6 {
            address 2001:db8::10:255:77:158/32 {
                primary;
            }
        }
    }
}
}
protocols { # You can configure protocols in the routing matrix as usual.
    mpls {
        interface so-1/1/0.0;
    }
    isis {
        interface so-1/1/0.0;
        interface lo0.0;
    }
}

```

```
ldp {
  interface so-1/1/0.0;
  interface lo0.0;
}
l2circuit {
  neighbor 10.255.71.97 {
    interface at-17/1/0.0 {
      virtual-circuit-id 100;
    }
    interface at-17/1/0.1 {
      virtual-circuit-id 101;
    }
    interface at-17/1/0.2 {
      virtual-circuit-id 102;
    }
    interface at-17/1/0.3 {
      virtual-circuit-id 103;
    }
  }
}
}
class-of-service { # You can configure CoS in the routing matrix as usual.
  forwarding-classes {
    queue 0 ubr;
    queue 1 nrtvbr;
    queue 2 rtvbr;
    queue 3 cbr;
  }
  traceoptions {
    flag all;
  }
}
firewall { # You can configure firewalls in the routing matrix as usual.
  family mpls {
    filter filter_1 {
      term plp0 {
        from {
          exp [ 0 2 4 6 ];
        }
        then {
          count LOW;
          loss-priority low;
        }
      }
      term plp1 {
        from {
          exp [ 1 3 5 7 ];
        }
        then {
          count HIGH;
          loss-priority high;
        }
      }
    }
  }
}
```

Verifying Your Work on the Routing Matrix with a TX Matrix Router

To verify proper operation of the routing matrix with a TX Matrix router, use the following commands on the TX Matrix router:

- **show chassis alarms** <lcc *lcc-number* | scc>
- **show chassis craft-interface** <lcc *lcc-number* | scc>
- **show chassis ethernet-switch** <lcc *lcc-number* | scc>
- **show chassis hardware** <lcc *lcc-number* | scc>
- **show chassis fpc** <lcc *lcc-number*>
- **show chassis lccs**
- **show chassis location** <fpc | interface | lcc *lcc-number* | scc>
- **show chassis routing-engine** <lcc *lcc-number* | scc>
- **show chassis sibs** <lcc *lcc-number* | scc>
- **show interfaces terse**
- **show route summary**
- **show system uptime** <all-lcc | lcc *lcc-number* | scc>
- **show version** <all-lcc | lcc *lcc-number* | scc>

In general, when you issue standard operational commands on a TX Matrix router, you receive output from the primary Routing Engines of all components in the routing matrix. To limit the output of information for a specific T640 router within the routing matrix, include the **lcc *lcc-number*** option. To display information for the TX Matrix router only, include the **scc** option. To display information for all T640 routers within the routing matrix (selected commands only), include the **all-lcc** option. Any exceptions to this general rule are mentioned next to the appropriate commands.

The following sections show the output of select operational commands used with the configuration example:

- [Displaying the Software Version on A Routing Matrix with a TX Matrix Router on page 37](#)
- [Displaying Interfaces on page 40](#)
- [Displaying Routes on page 41](#)
- [Displaying Alarms and System Uptime on page 41](#)
- [Displaying Chassis Hardware and Status for a Routing Matrix with a TX Matrix Router on page 44](#)

Displaying the Software Version on A Routing Matrix with a TX Matrix Router

The **show version** command provides an excellent example of how you can select output for various components of the routing matrix with a TX Matrix router. If the TX Matrix

router (SCC) or a T640 router (LCC) is not specified in the command, then the command displays output for all components.

```
user@router> show version ?
```

Possible completions:

| | |
|-----------|--|
| <[Enter]> | Execute this command |
| all-lcc | Show software version on all LCC chassis |
| brief | Display brief output |
| detail | Display detailed output |
| lcc | Show software version on specific LCC (0..3) |
| scc | Show software version on the SCC |
| | Pipe through a command |

To display the software version for all routing matrix components, issue the **show version** command on the TX Matrix router:

```
user@router> show version
```

```
scc-re0:
```

```
-----
Hostname: scc
Model: TX Matrix
JUNOS Base OS boot [7.0-20040630.0]
JUNOS Base OS Software Suite [7.0-20040629.0]
JUNOS Kernel Software Suite [7.0-20040630.0]
JUNOS Packet Forwarding Engine Support (T-Series) [7.0-20040630.0]
JUNOS Routing Software Suite [7.0-20040630.0]
JUNOS Online Documentation [7.0-20040630.0]
JUNOS Crypto Software Suite [7.0-20040630.0]
lcc0-re0:
```

```
-----
Hostname: lcc0
Model: t640
JUNOS Base OS boot [7.0-20040630.0]
JUNOS Base OS Software Suite [7.0-20040629.0]
JUNOS Kernel Software Suite [7.0-20040630.0]
JUNOS Packet Forwarding Engine Support (T-Series) [7.0-20040630.0]
JUNOS Routing Software Suite [7.0-20040630.0]
JUNOS Online Documentation [7.0-20040630.0]
JUNOS Crypto Software Suite [7.0-20040630.0]
JUNOS Support Tools Package [7.0-20040630.0]
lcc2-re0:
```

```
-----
Hostname: lcc2
Model: t640
JUNOS Base OS boot [7.0-20040630.0]
JUNOS Base OS Software Suite [7.0-20040629.0]
JUNOS Kernel Software Suite [7.0-20040630.0]
JUNOS Packet Forwarding Engine Support (T-Series) [7.0-20040630.0]
JUNOS Routing Software Suite [7.0-20040630.0]
JUNOS Online Documentation [7.0-20040630.0]
JUNOS Crypto Software Suite [7.0-20040630.0]
JUNOS Support Tools Package [7.0-20040630.0]
```

To display the software version for the TX Matrix router only, include the **scc** option:

```
user@router> show version scc
Hostname: scc
Model: TX Matrix
JUNOS Base OS boot [7.0-20040630.0]
JUNOS Base OS Software Suite [7.0-20040629.0]
JUNOS Kernel Software Suite [7.0-20040630.0]
JUNOS Packet Forwarding Engine Support (T-Series) [7.0-20040630.0]
JUNOS Routing Software Suite [7.0-20040630.0]
JUNOS Online Documentation [7.0-20040630.0]
JUNOS Crypto Software Suite [7.0-20040630.0]
```

To display the software version for a specific T640 router, include the **lcc** option:

```
user@router> show version lcc 0
lcc0-re0:
-----
Hostname: lcc0
Model: t640
JUNOS Base OS boot [7.0-20040630.0]
JUNOS Base OS Software Suite [7.0-20040629.0]
JUNOS Kernel Software Suite [7.0-20040630.0]
JUNOS Packet Forwarding Engine Support (T-Series) [7.0-20040630.0]
JUNOS Routing Software Suite [7.0-20040630.0]
JUNOS Online Documentation [7.0-20040630.0]
JUNOS Crypto Software Suite [7.0-20040630.0]
JUNOS Support Tools Package [7.0-20040630.0]
```

To display the output for all T640 routers, include the **all-lcc** option:

```
user@router> show version all-lcc
lcc0-re0:
-----
Hostname: lcc0
Model: t640
JUNOS Base OS boot [7.0-20040630.0]
JUNOS Base OS Software Suite [7.0-20040629.0]
JUNOS Kernel Software Suite [7.0-20040630.0]
JUNOS Packet Forwarding Engine Support (T-Series) [7.0-20040630.0]
JUNOS Routing Software Suite [7.0-20040630.0]
JUNOS Online Documentation [7.0-20040630.0]
JUNOS Crypto Software Suite [7.0-20040630.0]
JUNOS Support Tools Package [7.0-20040630.0]
lcc2-re0:
-----
Hostname: lcc2
Model: t640
JUNOS Base OS boot [7.0-20040630.0]
JUNOS Base OS Software Suite [7.0-20040629.0]
JUNOS Kernel Software Suite [7.0-20040630.0]
JUNOS Packet Forwarding Engine Support (T-Series) [7.0-20040630.0]
JUNOS Routing Software Suite [7.0-20040630.0]
JUNOS Online Documentation [7.0-20040630.0]
JUNOS Crypto Software Suite [7.0-20040630.0]
JUNOS Support Tools Package [7.0-20040630.0]
```

Displaying Interfaces

Although individual FPCs are installed in each of the T640 routers, the routing matrix is designed to collect interface information centrally at the TX Matrix router. To display available interfaces in the routing matrix, issue a **show interfaces** command on the TX Matrix router:

```
user@router> show interfaces terse
```

| Interface | Admin | Link | Proto | Local | Remote |
|--|-------|------|-------|--------------------------|---------------|
| so-1/0/0 | up | up | | | |
| so-1/1/0 | up | up | | | |
| so-1/1/0.0 | up | up | inet | 10.15.1.1 | --> 10.15.1.2 |
| | | | iso | | |
| | | | mpls | | |
| so-1/3/0 | up | down | | | |
| at-2/1/0 | up | up | | | |
| ge-2/2/0 | up | up | | | |
| so-3/3/0 | up | up | | | |
| so-3/3/1 | up | up | | | |
| so-3/3/2 | up | down | | | |
| so-3/3/3 | up | down | | | |
| so-16/0/0 | up | down | | | |
| so-16/0/1 | up | down | | | |
| so-16/0/2 | up | down | | | |
| so-16/0/3 | up | up | | | |
| ge-16/1/0 | up | down | | | |
| so-17/0/0 | up | down | | | |
| at-17/1/0 | up | up | | | |
| at-17/1/0.0 | up | up | ccc | | |
| at-17/1/0.1 | up | up | ccc | | |
| at-17/1/0.2 | up | up | ccc | | |
| at-17/1/0.3 | up | up | ccc | | |
| at-17/1/1 | up | up | | | |
| ge-17/2/0 | up | up | | | |
| ge-17/2/1 | up | up | | | |
| so-17/3/0 | up | down | | | |
| so-19/0/0 | up | down | | | |
| so-19/1/0 | up | down | | | |
| so-19/2/0 | up | down | | | |
| so-19/3/0 | up | down | | | |
| bcm0 | up | up | | | |
| bcm0.0 | up | up | tnp | 4 | |
| dsc | up | up | | | |
| em0 | up | up | | | |
| em0.0 | up | up | tnp | 4 | |
| fxp0 | up | up | | | |
| fxp0.0 | up | up | inet | 192.168.77.158/21 | |
| gre | up | up | | | |
| ipip | up | up | | | |
| lo0 | up | up | | | |
| lo0.0 | up | up | inet | 10.255.70.158 | --> 0/0 |
| | | | | 127.0.0.1 | --> 0/0 |
| | | | iso | | |
| 47.0005.80ff.f800.0000.0108.0001.0102.5507.0158.00 | | | inet6 | 2001:db8::10:255:70:158 | |
| | | | | fe80::280:42ff:fe13:269d | |
| lo0.16385 | up | up | inet | | |
| | | | inet6 | fe80::280:42ff:fe13:269d | |
| lsi | up | up | | | |


```

mtun          up    up
pimd          up    up
pime          up    up
tap           up    up

```

Displaying Routes

When you need to verify route information for a routing matrix, you must issue operational commands on the TX Matrix router. To display available routes for the routing matrix, issue a **show route** command:

```

user@router> show route summary
Router ID: 10.255.77.158
inet.0: 13 destinations, 14 routes (12 active, 0 holddown, 1 hidden)
    Direct:    4 routes,    3 active
    Local:     2 routes,    2 active
    Static:    6 routes,    6 active
    IS-IS:     2 routes,    1 active
inet.3: 1 destinations, 1 routes (1 active, 0 holddown, 0 hidden)
    LDP:       1 routes,    1 active
iso.0: 1 destinations, 1 routes (1 active, 0 holddown, 0 hidden)
    Direct:    1 routes,    1 active
mpls.0: 7 destinations, 7 routes (7 active, 0 holddown, 0 hidden)
    MPLS:      3 routes,    3 active
    LDP:       2 routes,    2 active
    L2CKT:     2 routes,    2 active
inet6.0: 2 destinations, 2 routes (2 active, 0 holddown, 0 hidden)
    Direct:    2 routes,    2 active
__juniper_private1__.inet6.0: 1 destinations, 1 routes (1 active, 0 holddown, 0
hidden)
    Direct:    1 routes,    1 active
l2circuit.0: 5 destinations, 5 routes (5 active, 0 holddown, 0 hidden)
    LDP:       1 routes,    1 active
    L2CKT:     4 routes,    4 active

```

Displaying Alarms and System Uptime

To display alarms for all routing matrix components, issue the **show chassis alarms** command:

```

user@router> show chassis alarms
scc-re0:
-----
2 alarms currently active
Alarm time          Class  Description
2004-09-27 08:50:57 PDT  Major  LCC 2 Major Errors
2004-09-27 08:50:42 PDT  Minor  LCC 0 Minor Errors
lcc0-re0:
-----
1 alarms currently active
Alarm time          Class  Description
2004-09-27 08:50:42 PDT  Minor  PEM 1 Absent
lcc2-re0:
-----
1 alarms currently active
Alarm time          Class  Description
2004-09-27 08:50:57 PDT  Major  PEM 1 Not OK

```

To display the craft interface display for all routing matrix components, issue the **show chassis craft-interface** command:

```
user@router> show chassis craft-interface
```

```
scc-re0:
```

```
-----  
FPM Display contents:
```

```
+-----+  
|scc      |  
|2 Alarms active  |  
|R: LCC 2 Major Error|  
|Y: LCC 0 Minor Error|  
+-----+
```

```
Front Panel System LEDs:
```

```
Routing Engine    0    1
```

```
-----  
OK                *    *  
Fail              .    .  
Master            *    .
```

```
Front Panel Alarm Indicators:
```

```
-----  
Red LED           *  
Yellow LED        *  
Major relay       *  
Minor relay       *
```

```
CB LEDs:
```

```
CB    0    1
```

```
-----  
Amber   .    .  
Green   *    *  
Blue    *    .
```

```
SIB LEDs:
```

```
SIB    0    1    2    3    4
```

```
-----  
Fail    .    .    .    .    .  
OK       *    *    *    *    *  
Active   .    *    *    *    *
```

```
lcc0-re0:
```

```
-----  
FPM Display contents:
```

```
+-----+  
|lcc0      |  
|1 Alarm active  |  
|Y: PEM 1 Absent  |  
|                |  
+-----+
```

```
Front Panel System LEDs:
```

```
Routing Engine    0    1
```

```
-----  
OK                *    *  
Fail              .    .  
Master            *    .
```

```
Front Panel Alarm Indicators:
```

```
-----  
Red LED           .  
Yellow LED        *  
Major relay       .  
Minor relay       *
```

```
Front Panel FPC LEDs:
```

```
FPC    0    1    2    3    4    5    6    7
```

```

Red      .  .  .  .  .  .  .  .
Green    .  *  *  *  .  .  .  .

```

```
CB LEDs:
```

```
CB  0  1
```

```
-----
Amber    .  .

```

```
Green    *  *
```

```
Blue     *  .

```

```
SCG LEDs:
```

```
SCG  0  1
```

```
-----
Amber    .  .

```

```
Green    *  *
```

```
Blue     *  .

```

```
SIB LEDs:
```

```
SIB  0  1  2  3  4
```

```
-----
Red      .  .  .  .  .

```

```
Green    *  *  *  *  *
```

```
lcc2-re0:
```

```
-----
FPM Display contents:
```

```

+-----+
|lcc2      |
|1 Alarm active      |
|R: PEM 1 Not OK      |
|                    |
+-----+
```

```
Front Panel System LEDs:
```

```
Routing Engine  0  1
```

```
-----
OK              *  *
```

```
Fail            .  .
```

```
Master          *  .
```

```
Front Panel Alarm Indicators:
```

```
-----
Red LED         *
```

```
Yellow LED      .
```

```
Major relay     *
```

```
Minor relay     .
```

```
Front Panel FPC LEDs:
```

```
FPC  0  1  2  3  4  5  6  7
```

```
-----
Red      .  .  .  .  .  .  .  .

```

```
Green    *  *  .  *  .  .  .  .
```

```
CB LEDs:
```

```
CB  0  1
```

```
-----
Amber    .  .

```

```
Green    *  *
```

```
Blue     *  .
```

```
SCG LEDs:
```

```
SCG  0  1
```

```
-----
Amber    .  .

```

```
Green    *  .
```

```
Blue     *  .
```

```
SIB LEDs:
```

```
SIB  0  1  2  3  4
```

```

Red      .   .   .   .   .
Green    *   *   *   *   *

```

To display the amount of time the routing matrix components have been in operation, issue the **show system uptime** command on the TX Matrix router:

```

user@router> show system uptime
scc-re0:
-----
Current time: 2004-09-27 09:44:55 PDT
System booted: 2004-09-27 08:49:31 PDT (00:55:24 ago)
Protocols started: 2004-09-27 08:50:27 PDT (00:54:28 ago)
Last configured: 2004-09-27 09:16:08 PDT (00:28:47 ago) by user
9:44AM PDT up 55 mins, 1 user, load averages: 0.00, 0.05, 0.06
lcc0-re0:
-----
Current time: 2004-09-27 09:44:55 PDT
System booted: 2004-09-27 08:49:24 PDT (00:55:31 ago)
Last configured: 2004-09-27 09:16:06 PDT (00:28:49 ago) by user
9:44AM PDT up 56 mins, 0 users, load averages: 0.00, 0.02, 0.00
lcc2-re0:
-----
Current time: 2004-09-27 09:44:55 PDT
System booted: 2004-09-27 08:49:26 PDT (00:55:29 ago)
Last configured: 2004-09-27 09:16:06 PDT (00:28:49 ago) by user
9:44AM PDT up 55 mins, 0 users, load averages: 0.02, 0.01, 0.00

```

Displaying Chassis Hardware and Status for a Routing Matrix with a TX Matrix Router

To display the hardware inventory for a routing matrix with a TX Matrix router, you can select output for the TX Matrix router only, a specific T640 router, or all components. If a specific component (**lcc** or **scc**) is not specified as an option in the command, the default output displays information for the entire routing matrix.

```

user@router> show chassis hardware ?
Possible completions:
  <[Enter]>      Execute this command
  detail         Include RAM and disk information in output
  extensive      Display ID EEPROM information
  frus           Display assembly IDs and extra PIC information
  lcc            Display chassis-specific information (0..3)
  scc            Display chassis-specific information
  |             Pipe through a command

```

To display all hardware components in a routing matrix, issue the **show chassis hardware** command on the TX Matrix router:

```

user@router> show chassis hardware
scc-re0:
-----
Hardware inventory:

```

| Item | Version | Part number | Serial number | Description |
|-------------|---------|-------------|---------------|--------------|
| Chassis | | | | TX Matrix |
| Midplane | REV 04 | 710-004396 | RB0013 | SCC Midplane |
| FPM GBUS | | | | |
| FPM Display | REV 04 | 710-004619 | HS5953 | SCC FPM |

| | | | | |
|------------------|--------|------------|--------------|-----------------------|
| CIP 0 | REV 01 | 710-010218 | HS5726 | SCC CIP |
| CIP 1 | REV 01 | 710-010218 | HV9163 | SCC CIP |
| PEM 0 | Rev 11 | 740-002595 | pm18529 | Power Entry Module |
| Routing Engine 0 | REV 02 | 740-008883 | 212058900121 | RE-4.0 |
| Routing Engine 1 | REV 03 | 740-008883 | 211123900258 | RE-4.0 |
| CB 0 | REV 01 | 710-011709 | HS5911 | Control Board (CB-TX) |
| CB 1 | REV 01 | 710-011709 | HZ2163 | Control Board (CB-TX) |
| SPMB 0 | REV 09 | 710-003229 | HT4129 | T-series Switch CPU |
| SPMB 1 | REV 09 | 710-003229 | HT4174 | T-series Switch CPU |
| SIB 0 | REV 01 | 710-011223 | HS0663 | SIB-S8-F16 1/2 |
| B Board | REV 05 | 710-011225 | HW1210 | SIB-S8-F16 1/2 (B) |
| SIB 1 | REV 01 | 710-005839 | HW1160 | SIB-S8-F16 |
| B Board | REV 01 | 710-005840 | HW1213 | SIB-S8-F16 (B) |
| SIB 2 | REV 05 | 710-011223 | HW1146 | SIB-S8-F16 1/2 |
| B Board | REV 05 | 710-011225 | JB8148 | SIB-S8-F16 1/2 (B) |
| SIB 3 | REV 05 | 710-011223 | HW1218 | SIB-S8-F16 1/2 |
| B Board | REV 05 | 710-011225 | HW1214 | SIB-S8-F16 1/2 (B) |
| SIB 4 | REV 05 | 710-011223 | HW1162 | SIB-S8-F16 1/2 |
| B Board | REV 05 | 710-011225 | HW1182 | SIB-S8-F16 1/2 (B) |
| lcc0-re0: | | | | |

Hardware inventory:

| Item | Version | Part number | Serial number | Description |
|------------------|---------|-------------|---------------|------------------------|
| Chassis | | | 65409 | T640 |
| Midplane | REV 03 | 710-005608 | RA1395 | T640 Backplane |
| FPM GBUS | REV 09 | 710-002901 | RA2649 | T640 FPM Board |
| FPM Display | REV 05 | 710-002897 | RA2608 | FPM Display |
| CIP | REV 06 | 710-002895 | HS0753 | T-series CIP |
| PEM 0 | Rev 01 | 740-002595 | MF16629 | Power Entry Module |
| SCG 0 | REV 11 | 710-003423 | HS4313 | T640 Sonet Clock Gen. |
| SCG 1 | REV 11 | 710-003423 | HR9161 | T640 Sonet Clock Gen. |
| Routing Engine 0 | REV 03 | 740-008883 | 211123900199 | RE-4.0 |
| Routing Engine 1 | REV 03 | 740-008883 | 211123900248 | RE-4.0 |
| CB 0 | REV 02 | 710-007655 | HS5909 | Control Board (CB-T) |
| CB 1 | REV 02 | 710-007655 | HS5910 | Control Board (CB-T) |
| FPC 1 | REV 07 | 710-007527 | HR0716 | FPC Type 2 |
| CPU | REV 15 | 710-001726 | HS6048 | FPC CPU |
| PIC 0 | REV 07 | 750-001900 | AR3722 | 1x OC-48 SONET, SMSR |
| PIC 1 | REV 05 | 750-001900 | AD3644 | 1x OC-48 SONET, SMSR |
| PIC 3 | REV 06 | 750-001900 | HD7603 | 1x OC-48 SONET, SMSR |
| MMB 1 | REV 03 | 710-005555 | HT5273 | MMB-288mbit |
| PPB 0 | REV 04 | 710-003758 | HR4249 | PPB Type 2 |
| PPB 1 | REV 04 | 710-003758 | HR4257 | PPB Type 2 |
| FPC 2 | REV 01 | 710-010233 | HM4189 | E-FPC Type 1 |
| CPU | REV 01 | 710-010169 | HS9936 | FPC CPU-Enhanced |
| PIC 1 | REV 03 | 750-005719 | HL8326 | 1x OC-12 ATM-II IQ, MM |
| PIC 2 | REV 01 | 750-003141 | AD9051 | 1x G/E, 1000 BASE-SX |
| MMB 1 | REV 01 | 710-008923 | HR0848 | MMB 3M 288-bit |
| FPC 3 | REV 01 | 710-010154 | HR0863 | E-FPC Type 3 |
| CPU | REV 01 | 710-010169 | HN3422 | FPC CPU-Enhanced |
| PIC 3 | REV 01 | 750-009553 | HP3576 | 4x OC-48 SONET |
| SFP 0 | REV 01 | 740-009030 | P11H5N1 | SFP-LR |
| SFP 1 | REV 01 | 740-009029 | 35D464P00060 | SFP-IR |
| SFP 3 | REV 01 | 740-009030 | P11H5LM | SFP-LR |
| MMB 0 | REV 01 | 710-010171 | HR0821 | MMB-288mbit |
| MMB 1 | REV 01 | 710-010171 | HR0818 | MMB-288mbit |
| SPMB 0 | REV 09 | 710-003229 | HT4177 | T-series Switch CPU |
| SPMB 1 | REV 09 | 710-003229 | HT4176 | T-series Switch CPU |
| SIB 0 | REV 07 | 710-005781 | HR5939 | SIB-L8-F16 |
| B Board | REV 06 | 710-005782 | HR5944 | SIB-L8-F16 (B) |
| SIB 1 | REV 02 | 710-005781 | HZ2146 | SIB-L8-F16 |

| | | | | |
|---------|--------|------------|--------|----------------|
| B Board | REV 03 | 710-005782 | HY4160 | SIB-L8-F16 (B) |
| SIB 2 | REV 07 | 710-005781 | HR5925 | SIB-L8-F16 |
| B Board | REV 03 | 710-005782 | HY4161 | SIB-L8-F16 (B) |
| SIB 3 | REV 07 | 710-005781 | HR5918 | SIB-L8-F16 |
| B Board | REV 06 | 710-005782 | HR5972 | SIB-L8-F16 (B) |
| SIB 4 | REV 07 | 710-005781 | HR5935 | SIB-L8-F16 |
| B Board | REV 06 | 710-005782 | HR5969 | SIB-L8-F16 (B) |

lcc2-re0:

Hardware inventory:

| Item | Version | Part number | Serial number | Description |
|------------------|---------|-------------|---------------|------------------------|
| Chassis | | | 55609 | T640 |
| Midplane | REV 03 | 710-005608 | RA1444 | T640 Backplane |
| FPM GBUS | REV 09 | 710-002901 | RA3309 | T640 FPM Board |
| FPM Display | REV 05 | 710-002897 | RA3273 | FPM Display |
| CIP | REV 06 | 710-002895 | HS0735 | T-series CIP |
| PEM 0 | Rev 11 | 740-002595 | PM18568 | Power Entry Module |
| PEM 1 | Rev 11 | 740-002595 | PM18572 | Power Entry Module |
| SCG 0 | REV 11 | 710-003423 | HS9991 | T640 Sonet Clock Gen. |
| Routing Engine 0 | REV 03 | 740-008883 | 211123900183 | RE-4.0 |
| Routing Engine 1 | REV 02 | 740-008883 | 212058900178 | RE-4.0 |
| CB 0 | REV 02 | 710-007655 | HS5913 | Control Board (CB-T) |
| CB 1 | REV 02 | 710-007655 | HS5944 | Control Board (CB-T) |
| FPC 0 | REV 05 | 710-001721 | HD5965 | FPC Type 3 |
| CPU | REV 09 | 710-001726 | AY4909 | FPC CPU |
| PIC 0 | REV 04 | 750-009553 | HV3648 | 4x OC-48 SONET |
| SFP 0 | REV 01 | 740-009029 | P11JXWP | SFP-IR |
| SFP 1 | REV 01 | 740-008169 | 36D525P00154 | UNKNOWN |
| SFP 2 | REV 01 | 740-009028 | 2353110 | SFP-SR |
| SFP 3 | REV 01 | 740-008169 | 36D525P00159 | UNKNOWN |
| PIC 1 | REV 02 | 750-009567 | HX2875 | 1x 10GE(LAN),XENPAK |
| SFP 0 | REV 01 | 740-009898 | USC202YW25 | XENPAK-LR |
| MMB 0 | REV 03 | 710-004047 | HE3427 | MMB-288mbit |
| MMB 1 | REV 03 | 710-004047 | HD5812 | MMB-288mbit |
| ICBM | REV 04 | 710-003384 | HB1884 | FPC ICBM |
| PPB 0 | REV 02 | 710-002845 | HC0964 | PPB Type 3 |
| PPB 1 | REV 02 | 710-002845 | HC0987 | PPB Type 3 |
| FPC 1 | REV 02 | 710-002385 | HC0618 | FPC Type 2 |
| CPU | REV 06 | 710-001726 | HA4724 | FPC CPU |
| PIC 0 | REV 02 | 750-009066 | HL9900 | 1x OC-48 SONET SFP |
| SFP 0 | | NON-JNPR | P11QS8W | SFP-LR |
| PIC 1 | REV 02 | 750-007219 | AZ1339 | 2x OC-12 ATM-II IQ, MM |
| PIC 2 | REV 02 | 750-002510 | AP7476 | 2x G/E, 1000 BASE-SX |
| PIC 3 | REV 05 | 750-001900 | AD5738 | 1x OC-48 SONET, SMSR |
| MMB 1 | REV 03 | 710-004047 | HD5829 | MMB-288mbit |
| ICBM | REV 04 | 710-003384 | HC0386 | FPC ICBM |
| PPB 0 | REV 02 | 710-003758 | HC0904 | PPB Type 2 |
| PPB 1 | REV 02 | 710-003758 | HC0898 | PPB Type 2 |
| FPC 3 | REV 07 | 710-007529 | HR3311 | FPC Type 3 |
| CPU | REV 15 | 710-001726 | HR2788 | FPC CPU |
| PIC 0 | REV 10 | 750-004535 | HT0545 | 1x OC-192 SM SR2 |
| PIC 1 | REV 12 | 750-004535 | HX2065 | 1x OC-192 SM SR2 |
| PIC 2 | REV 01 | 750-004535 | HC0241 | 1x OC-192 SM SR1 |
| PIC 3 | REV 01 | 750-004535 | HF6583 | 1x OC-192 SM SR1 |
| MMB 0 | REV 03 | 710-005555 | HR5642 | MMB-288mbit |
| MMB 1 | REV 03 | 710-005555 | HR5586 | MMB-288mbit |
| PPB 0 | REV 04 | 710-002845 | HT6719 | PPB Type 3 |
| PPB 1 | REV 04 | 710-002845 | HM0206 | PPB Type 3 |
| SPMB 0 | REV 09 | 710-003229 | HR8685 | T-series Switch CPU |
| SPMB 1 | REV 09 | 710-003229 | HR3730 | T-series Switch CPU |
| SIB 0 | REV 07 | 710-005781 | HR5937 | SIB-L8-F16 |

| | | | | |
|---------|--------|------------|--------|----------------|
| B Board | REV 06 | 710-005782 | HZ5288 | SIB-L8-F16 (B) |
| SIB 1 | REV 07 | 710-005781 | HZ5279 | SIB-L8-F16 |
| B Board | REV 06 | 710-005782 | HR5951 | SIB-L8-F16 (B) |
| SIB 2 | REV 07 | 710-005781 | HZ5276 | SIB-L8-F16 |
| B Board | REV 06 | 710-005782 | HR5950 | SIB-L8-F16 (B) |
| SIB 3 | REV 07 | 710-005781 | HR5915 | SIB-L8-F16 |
| B Board | REV 06 | 710-005782 | HZ5285 | SIB-L8-F16 (B) |
| SIB 4 | REV 07 | 710-005781 | HR5934 | SIB-L8-F16 |
| B Board | REV 06 | 710-005782 | HR5952 | SIB-L8-F16 (B) |

You can also display individual hardware components in the TX Matrix router, a specific T640 router, or the entire routing matrix. To display all the SIBs in the entire routing matrix, issue the **show chassis sibs** command on the TX Matrix router.

```
user@router> show chassis sibs
```

```
scc-re0:
```

```
-----
Slot  State          Uptime
0      Spare
1      Online          53 minutes, 38 seconds
2      Online          53 minutes, 36 seconds
3      Online          53 minutes, 33 seconds
4      Online          53 minutes, 30 seconds
```

```
lcc0-re0:
```

```
-----
Slot  State          Uptime
0      Spare
1      Online          53 minutes, 18 seconds
2      Online          53 minutes, 17 seconds
3      Online          53 minutes, 16 seconds
4      Online          53 minutes, 15 seconds
```

```
lcc2-re0:
```

```
-----
Slot  State          Uptime
0      Spare
1      Online          53 minutes, 18 seconds
2      Online          53 minutes, 17 seconds
3      Online          53 minutes, 16 seconds
4      Online          53 minutes, 15 seconds
```

To display information about all master Routing Engines in the routing matrix, issue the **show chassis routing-engine** command on the TX Matrix router:

```
user@router> show chassis routing-engine
```

```
scc-re0:
```

```
-----
Routing Engine status:
```

```
Slot 0:
```

```
Current state           Master
Election priority       Master (default)
Temperature              34 degrees C / 93 degrees F
CPU temperature          35 degrees C / 95 degrees F
DRAM                    2048 MB
Memory utilization      12 percent
CPU utilization:
  User                  0 percent
```

```

Background          0 percent
Kernel              5 percent
Interrupt            0 percent
Idle                95 percent
Model               RE-4.0
Serial ID            212058900121
Start time           2004-09-27 08:49:31 PDT
Uptime              1 hour, 4 seconds
Load averages:      1 minute   5 minute   15 minute
                    0.06       0.04       0.05

```

Routing Engine status:

Slot 1:

```

Current state        Backup
Election priority     Backup (default)
Temperature           33 degrees C / 91 degrees F
CPU temperature       34 degrees C / 93 degrees F
DRAM                 2048 MB
Memory utilization    10 percent
CPU utilization:
  User               0 percent
  Background         0 percent
  Kernel             0 percent
  Interrupt          1 percent
  Idle              99 percent
Model               RE-4.0
Serial ID            211123900258
Start time           2004-09-26 13:09:13 PDT
Uptime              20 hours, 40 minutes, 4 seconds

```

1cc0-re0:

Routing Engine status:

Slot 0:

```

Current state        Master
Election priority     Master (default)
Temperature           37 degrees C / 98 degrees F
CPU temperature       38 degrees C / 100 degrees F
DRAM                 2048 MB
Memory utilization    11 percent
CPU utilization:
  User               0 percent
  Background         0 percent
  Kernel             3 percent
  Interrupt          1 percent
  Idle              97 percent
Model               RE-4.0
Serial ID            211123900199
Start time           2004-09-27 08:49:24 PDT
Uptime              1 hour, 11 seconds
Load averages:      1 minute   5 minute   15 minute
                    0.02       0.02       0.00

```

Routing Engine status:

Slot 1:

```

Current state        Backup
Election priority     Backup (default)
Temperature           35 degrees C / 95 degrees F
CPU temperature       35 degrees C / 95 degrees F
DRAM                 2048 MB
Memory utilization    10 percent
CPU utilization:
  User               0 percent
  Background         0 percent

```



```

Kernel          0 percent
Interrupt       0 percent
Idle           99 percent
Model          RE-4.0
Serial ID       211123900248
Start time      2004-09-26 13:09:07 PDT
Uptime         20 hours, 40 minutes, 12 seconds
lcc2-re0:

```

Routing Engine status:

Slot 0:

```

Current state      Master
Election priority  Master (default)
Temperature        33 degrees C / 91 degrees F
CPU temperature    35 degrees C / 95 degrees F
DRAM              2048 MB
Memory utilization 11 percent
CPU utilization:
  User            0 percent
  Background      0 percent
  Kernel          4 percent
  Interrupt       0 percent
  Idle           96 percent
Model            RE-4.0
Serial ID         211123900183
Start time        2004-09-27 08:49:26 PDT
Uptime            1 hour, 9 seconds
Load averages:    1 minute   5 minute   15 minute
                  0.15      0.05      0.01

```

Routing Engine status:

Slot 1:

```

Current state      Backup
Election priority  Backup (default)
Temperature        32 degrees C / 89 degrees F
CPU temperature    34 degrees C / 93 degrees F
DRAM              2048 MB
Memory utilization 10 percent
CPU utilization:
  User            0 percent
  Background      0 percent
  Kernel          0 percent
  Interrupt       1 percent
  Idle           99 percent
Model            RE-4.0
Serial ID         212058900178
Start time        2004-09-26 13:09:10 PDT
Uptime            20 hours, 40 minutes, 8 seconds

```

To display information about FPCs in a routing matrix, issue the **show chassis fpc** command. Because there are no FPCs in a TX Matrix router, there is no **scc** option available for this command.

```
user@router> show chassis fpc
```

```
lcc0-re0:
```

| Slot | State | Temp (C) | CPU Utilization (%) Total Interrupt | Memory DRAM (MB) | Utilization (%) Heap Buffer |
|------|--------|-------------|--|---------------------|--------------------------------|
| 0 | Empty | | | | |
| 1 | Online | 31 | 1 0 | 256 | 7 44 |
| 2 | Online | 28 | 1 0 | 256 | 7 44 |

```
3 Online      31      3      0      256      14      44
4 Empty
5 Empty
6 Empty
7 Empty
lcc2-re0:
-----
Slot State      Temp CPU Utilization (%) Memory Utilization (%)
      (C) Total Interrupt  DRAM (MB) Heap      Buffer
0 Online      31      3      0      256      14      44
1 Online      30      2      0      256      7      44
2 Empty
3 Online      31      3      0      256      14      44
4 Empty
5 Empty
6 Empty
7 Empty
```

You can also check to see if the TX Matrix router and T640 routers are communicating correctly within the routing matrix. To verify that the T640 routers have proper connectivity to the routing matrix, issue the **show chassis lccs** command. In this example, there are two T640 routers in the routing matrix.

```
user@router> show chassis lccs
Slot State      Uptime
0 Online      52 minutes, 5 seconds
1 Empty
2 Online      52 minutes, 6 seconds
3 Empty
```

**Related
Documentation**

- [Routing Matrix with a TX Matrix Router Deployment Guide](#)
- [Overview of the Routing Matrix with a TX Matrix Router on page 15](#)
- [Roadmap to Configuring a Routing Matrix with a TX Matrix Router on page 21](#)
- [System Requirements for the Routing Matrix with a TX Matrix Router on page 19](#)

CHAPTER 4

Administering a Routing Matrix with a TX Matrix Router

- [Managing System Processes in the Routing Matrix with a TX Matrix Router on page 51](#)
- [Managing Files on Routing Engines in a Routing Matrix with a TX Matrix Router on page 52](#)
- [Rebooting and Halting Routing Matrix with a TX Matrix Router Components on page 53](#)
- [Enabling and Disabling Specific Routing Matrix with a TX Matrix Router Hardware Components on page 54](#)
- [Monitoring a Routing Matrix with a TX Matrix Router on page 57](#)

Managing System Processes in the Routing Matrix with a TX Matrix Router

Some system processes in a routing matrix with a TX Matrix router run on the TX Matrix router and some run on the T640 routers. For example, the routing protocol process (rpd) runs exclusively on the TX Matrix router. To restart the routing protocol process for the entire routing matrix, issue the **restart routing** command on the TX Matrix router.

```
user@router> restart routing ?
Possible completions:
<[Enter]>      Execute this command
gracefully     Gracefully restart the process
immediately    Immediately restart (SIGKILL) the process
logical-system Name of logical system
soft           Soft reset (SIGHUP) the process
|             Pipe through a command
```

Other processes run on both the TX Matrix router and the T640 routers. To restart the chassis process that manages PICs, FPCs, and other hardware components, issue the **restart chassis-control** command on the TX Matrix router and select the **all**, **all-lcc**, or **lcc-number** option.

```
user@router> restart chassis-control ?
Possible completions:
<[Enter]>      Execute this command
all           Restart software process on all chassis
all-lcc       Restart software process on all LCC chassis
gracefully     Gracefully restart the process
immediately    Immediately restart (SIGKILL) the process
```

| | |
|------|---|
| lcc | Restart software process on specific chassis (0..3) |
| soft | Soft reset (SIGHUP) the process |
| | Pipe through a command |

To restart the Simple Network Management Protocol (SNMP) process, issue the **restart snmp** command on the TX Matrix router and select the **all**, **all-lcc**, or **lcc lcc-number** option.

```
user@router> restart snmp ?
Possible completions:
<[Enter]>      Execute this command
all           Restart software process on all chassis
all-lcc       Restart software process on all LCC chassis
gracefully    Gracefully restart the process
immediately   Immediately restart (SIGKILL) the process
lcc           Restart software process on specific chassis (0..3)
soft          Soft reset (SIGHUP) the process
|            Pipe through a command
```

Related Documentation

- [Routing Matrix with a TX Matrix Router Deployment Guide](#)
- [Overview of the Routing Matrix with a TX Matrix Router on page 15](#)
- [Roadmap to Configuring a Routing Matrix with a TX Matrix Router on page 21](#)
- [Example: Routing Matrix with a TX Matrix Router Configuration on page 30](#)

Managing Files on Routing Engines in a Routing Matrix with a TX Matrix Router

You can manage files on all Routing Engines in a routing matrix with a TX Matrix router. For example, you can copy a file from the master Routing Engine in the TX Matrix router to the master Routing Engine on a T640 router.

```
user@router> file list lcc0-re0:
/var/home/user/lcc0-re0: No such file or directory
```

```
user@router> file list
/var/home/user/:
.ssh/
fred.txt
```

```
user@host> file copy fred.txt lcc0-re0:fred.txt
```

```
user@host> file list lcc0-re0:
lcc0-re0:
```

```
-----
/var/home/user/:
.ssh/
fred.txt
```

Related Documentation

- [Routing Matrix with a TX Matrix Router Deployment Guide](#)
- [Overview of the Routing Matrix with a TX Matrix Router on page 15](#)
- [Roadmap to Configuring a Routing Matrix with a TX Matrix Router on page 21](#)

- [Example: Routing Matrix with a TX Matrix Router Configuration on page 30](#)

Rebooting and Halting Routing Matrix with a TX Matrix Router Components

You can control which component in a routing matrix with a TX Matrix router is rebooted or halted. If you reboot or halt the TX Matrix router, by default you also reboot or halt the master Routing Engines on all T640 routers. To reboot a specific component, issue the **request system reboot** command with the **all-lcc**, **lcc**, or **scc** option.

```
user@router> request system reboot ?
Possible completions:
  <[Enter]>      Execute this command
  all-lcc       Reboot all LCC chassis
  at           Time at which to perform the operation
  in           Number of minutes to delay before operation
  lcc          Reboot LCC (0..3)
  media        Boot media for next boot
  message      Message to display to all users
  scc          Reboot SCC chassis
  |           Pipe through a command
user@router> request system reboot
Reboot the system ? [yes,no] (no) yes
Rebooting lcc0-re0
Rebooting lcc1-re0
```

Similarly, to halt a specific component in a routing matrix, issue the **request system halt** command with the **all-lcc**, **lcc**, or **scc** option.



CAUTION: Before entering this command, you must have access to the TX Matrix router console port and the console ports of all of the LCCs in order to bring up the TX Matrix Routing Engines.

```
user@router> request system halt ?
Possible completions:
  <[Enter]>      Execute this command
  all-lcc       Halt all LCC chassis
  at           Time at which to perform the operation
  both-routing-engines Halt both Routing Engines
  in           Number of minutes to delay before operation
  lcc          Halt LCC (0..3)
  media        Boot media for next boot
  message      Message to display to all users
  scc          Halt SCC
  |           Pipe through a command
```

Issuing the **request system halt both-routing-engines** command on a TX Matrix router halts both Routing Engines in the TX Matrix router and both Routing Engines in all T640 routers in the routing matrix. To reboot a Routing Engine that has been halted, you must connect through the console. For more information about system commands, see the [CLI Explorer](#).

- Related Documentation**
- [Routing Matrix with a TX Matrix Router Deployment Guide](#)
 - [Overview of the Routing Matrix with a TX Matrix Router on page 15](#)
 - [Roadmap to Configuring a Routing Matrix with a TX Matrix Router on page 21](#)
 - [Example: Routing Matrix with a TX Matrix Router Configuration on page 30](#)

Enabling and Disabling Specific Routing Matrix with a TX Matrix Router Hardware Components

You can temporarily disable certain hardware components (such as FPCs, PICs, and SIBs) that belong to the TX Matrix router and T640 routers in the routing matrix. To do so, issue the appropriate **request chassis** command and include the **lcc** or **scc** option as needed.



NOTE: If you issue a chassis-related command that references FPCs, we recommend that you use the FPC hardware slot number (0 through 7) of the specific T640 router and specify its corresponding LCC number.

```
user@router> request chassis ?
```

Possible completions:

| | |
|----------------|--|
| cb | Change Control Board status |
| fpc | Change Flexible PIC Concentrator status |
| fpm | Change craft interface status |
| lcc | Change LCC status |
| pic | Change Physical Interface Card status |
| routing-engine | Change Routing Engine status |
| scg | Change SONET Clock Generator status |
| sib | Change Switch Interface Board status |
| spmb | Change Switch Processor Mezzanine Board status |

```
user@router> request chassis fpc ?
```

Possible completions:

| | |
|---------|---|
| lcc | Slot number of LCC that houses FPC (0..3) |
| offline | Take FPC offline |
| online | Bring FPC online |
| restart | Restart FPC |
| slot | FPC slot number (0..31) |

```
user@router> request chassis pic ?
```

Possible completions:

| | |
|----------|--|
| fpc-slot | Slot number of FPC that houses PIC (0..31) |
| lcc | Slot number of LCC that houses FPC (0..3) |
| offline | Take PIC offline |
| online | Bring PIC online |
| pic-slot | PIC slot number (0..3) |

```
user@router> request chassis sib ?
```

Possible completions:

| | |
|---------|---|
| lcc | Change Switch Interface Board status (0..3) |
| offline | Take SIB offline |
| online | Bring SIB online |
| scc | Change Switch Interface Board status |

| | |
|----------------|-----------------------------------|
| <i>slot</i> | <i>SIB slot number (0..4)</i> |
| start-receiver | Start SIB optical receiver (0..3) |
| stop-receiver | Stop SIB optical receiver (0..3) |

The routing matrix extends the concept of taking specific hardware components offline or online to include an entire T640 router in a routing matrix. To enable or disable a T640 router in a routing matrix, issue the **request chassis lcc slot lcc-number (offline | online)** command.

```
user@router> request chassis lcc ?
Possible completions:
  offline      Take LCC offline
  online       Bring LCC online
  slot         LCC Slot (0..3)
```

Although you can enter the routing matrix-based slot number when you issue the **request chassis fpc** command, output from **show chassis** commands always references the FPC hardware slot number (0 through 7) of the specific T640 router and its corresponding LCC number. As a result, we recommend that you include the FPC hardware slot number when you issue **request chassis** or **show chassis** commands, as shown in the following example:

First, issue the **request chassis fpc** command with the routing matrix-based FPC slot number of **19**:

```
user@router> request chassis fpc offline slot 19
lcc2-re0:
-----
Offline initiated, use "show chassis fpc" to verify
```

However, when you issue the **show chassis fpc** command to check the result, the output displays the change using node-centric terminology: FPC slot number **3** on T640 router **LCC2** (the equivalent of routing matrix slot **19**).

```
user@router> show chassis fpc
lcc0-re0:
-----
```

| Slot | State | Temp (C) | CPU Utilization (%) | Memory | Utilization (%) |
|------|--------|----------|---------------------|-----------|-----------------|
| | | | Total Interrupt | DRAM (MB) | Heap Buffer |
| 0 | Empty | | | | |
| 1 | Online | 31 | 2 0 | 256 | 7 44 |
| 2 | Online | 28 | 1 0 | 256 | 7 44 |
| 3 | Online | 31 | 2 0 | 256 | 14 44 |
| 4 | Empty | | | | |
| 5 | Empty | | | | |
| 6 | Empty | | | | |
| 7 | Empty | | | | |

```
lcc2-re0:
-----
```

| Slot | State | Temp (C) | CPU Utilization (%) | Memory | Utilization (%) |
|------|--------|----------|---------------------|-----------|-----------------|
| | | | Total Interrupt | DRAM (MB) | Heap Buffer |
| 0 | Online | 31 | 2 0 | 256 | 14 44 |
| 1 | Online | 30 | 2 0 | 256 | 7 44 |
| 2 | Empty | | | | |

```

3 Offline    --- Offlined by cli command ---
4 Empty
5 Empty
6 Empty
7 Empty

```

To bring the same FPC back online, use the slot number and LCC number from the previous command output:

```

user@router> request chassis fpc online lcc 2 slot 3
lcc2-re0:

```

Online initiated, use "show chassis fpc" to verify

Once you bring the FPC back online, reissue the **show chassis fpc** command to see that the FPC slot and LCC number you used in the last command now matches the command output:

```

user@router> show chassis fpc
lcc0-re0:

```

```

-----
Slot State      Temp  CPU Utilization (%)  Memory  Utilization (%)
      (C)  Total  Interrupt      DRAM (MB)  Heap      Buffer
0 Empty
1 Online        31      1      0      256      7      44
2 Online        28      1      0      256      7      44
3 Online        31      3      0      256     14      44
4 Empty
5 Empty
6 Empty
7 Empty

```

```

lcc2-re0:

```

```

-----
Slot State      Temp  CPU Utilization (%)  Memory  Utilization (%)
      (C)  Total  Interrupt      DRAM (MB)  Heap      Buffer
0 Online        31      3      0      256     14      44
1 Online        30      1      0      256      7      44
2 Empty
3 Present      0  0  0  0  0  0
4 Empty
5 Empty
6 Empty
7 Empty

```

For more information about converting FPC hardware slot numbers on a T640 router to routing matrix FPC slot numbers, see [“Adjusting the Configuration to Accommodate Increased FPC Numbers in a Routing Matrix with a TX Matrix Router”](#) on page 27.

Related Documentation

- [Routing Matrix with a TX Matrix Router Deployment Guide](#)
- [Overview of the Routing Matrix with a TX Matrix Router](#) on page 15
- [Roadmap to Configuring a Routing Matrix with a TX Matrix Router](#) on page 21
- [Example: Routing Matrix with a TX Matrix Router Configuration](#) on page 30

Monitoring a Routing Matrix with a TX Matrix Router

There are a variety of other useful commands you can use to monitor a routing matrix with a TX Matrix router.

- To display the location of routing matrix components and convert FPCs from T640 router local numbering to routing matrix global numbering, issue the **show chassis location fpc** command on the TX Matrix router:

```
user@router> show chassis location fpc
Global FPC    LCC    Local FPC
      1         0         1
      2         0         2
      3         0         3
     16         2         0
     17         2         1
     19         2         3
```

- To check the status of the SIB connection between the TX Matrix router and T640 routers, issue the **show chassis fabric topology** command on the TX Matrix router. All values for each available T640 router (LCC) should be in the **UP** state. In the following excerpt of output for this command, a routing matrix that contains only LCCs **0** and **2** shows only these two T640 routers as being **UP**:

```
LCC0_SIB-L0_F0,03->SIB-S0_F0,00 UP
LCC1_SIB-L0_F0,03->SIB-S0_F0,01 RESET
LCC2_SIB-L0_F0,03->SIB-S0_F0,02 UP
LCC3_SIB-L0_F0,03->SIB-S0_F0,03 RESET
```

- To verify that the Ethernet links between the TX Matrix router and the T640 router control boards are operational, issue the **show chassis ethernet-switch** command on the TX Matrix router:

```
user@router> show chassis ethernet-switch
scc-re0:
-----
Link is good on FE port 4 connected to device: LCC0
  Speed is 100Mb
  Duplex is full
  Autonegotiate is Enabled
Link is good on FE port 6 connected to device: LCC2
  Speed is 100Mb
  Duplex is full
  Autonegotiate is Enabled
Link is good on FE port 8 connected to device: SPMB
  Speed is 100Mb
  Duplex is full
  Autonegotiate is Enabled
Link is good on GE port 13 connected to device: Other RE
  Speed is 1000Mb
  Duplex is full
  Autonegotiate is Enabled
lcc0-re0:
-----
Link is good on FE port 1 connected to device: FPC1
  Speed is 100Mb
```

```

Duplex is full
Autonegotiate is Enabled
Link is good on FE port 2 connected to device: FPC2
Speed is 100Mb
Duplex is full
Autonegotiate is Enabled
Link is good on FE port 3 connected to device: FPC3
Speed is 100Mb
Duplex is full
Autonegotiate is Enabled
Link is good on FE port 8 connected to device: SPMB
Speed is 100Mb
Duplex is full
Autonegotiate is Enabled
Link is good on FE port 10 connected to device: SCC
Speed is 100Mb
Duplex is full
Autonegotiate is Enabled
Link is good on GE port 13 connected to device: Other RE
Speed is 100Mb
Duplex is full
Autonegotiate is Enabled
lcc2-re0:
-----
Link is good on FE port 0 connected to device: FPC0
Speed is 100Mb
Duplex is full
Autonegotiate is Enabled
Link is good on FE port 1 connected to device: FPC1
Speed is 100Mb
Duplex is full
Autonegotiate is Enabled
Link is good on FE port 3 connected to device: FPC3
Speed is 100Mb
Duplex is full
Autonegotiate is Enabled
Link is good on FE port 8 connected to device: SPMB
Speed is 100Mb
Duplex is full
Autonegotiate is Enabled
Link is good on FE port 10 connected to device: SCC
Speed is 100Mb
Duplex is full
Autonegotiate is Enabled
Link is good on GE port 13 connected to device: Other RE
Speed is 100Mb
Duplex is full
Autonegotiate is Enabled

```

**Related
Documentation**

- [Routing Matrix with a TX Matrix Router Deployment Guide](#)
- [Overview of the Routing Matrix with a TX Matrix Router on page 15](#)
- [Roadmap to Configuring a Routing Matrix with a TX Matrix Router on page 21](#)
- [Example: Routing Matrix with a TX Matrix Router Configuration on page 30](#)

CHAPTER 5

Upgrading Software on a Routing Matrix with a TX Matrix Router

- Upgrading the Software for a Routing Matrix with a TX Matrix Router on page 59
- Troubleshooting Insufficient Space or DRAM Errors During Software Upgrade of a Routing Matrix with a TX Matrix Router on page 78
- Troubleshooting a Software Upgrade Failure Due to Mixed Software Versions on a Routing Matrix with a TX Matrix Router on page 83

Upgrading the Software for a Routing Matrix with a TX Matrix Router

Before you begin upgrading the software on a TX Matrix Router and to avoid unnecessary network disruption during the upgrade, ensure the following conditions are met.



NOTE: By default, when you upgrade software on the TX Matrix router (**scc**), the new image is loaded onto the TX Matrix router (**scc**) and distributed to all T640 routers (**lcc**) in the routing matrix.

Throughout this document, we use the term TX Matrix router to refer to the switch-card chassis (**SCC**) and T640 router to refer to the line-card chassis (**LCC**).

- A minimum of free disk space and DRAM on each Routing Engine. The software upgrade will fail on any Routing Engine without the required amount of free disk space and DRAM. To determine the amount of disk space currently available on all Routing Engines of the routing matrix, use the CLI **show system storage** command. To determine the amount of DRAM currently available on all the Routing Engines in the routing matrix, use the CLI **show chassis routing-engine** command.
- The master Routing Engines of the TX Matrix router (**scc**) and T640 routers (**lcc**) are all on **re0** or are all on **re1**.
- The backup Routing Engines of the TX Matrix router (**scc**) and T640 routers (**lcc**) are all on **re1** or are all on **re0**.
- All master Routing Engines in all routers run the same version of software. This is necessary for the routing matrix to operate.

- All master and backup Routing Engines run the same version of software before beginning the upgrade procedure. Different versions of the Junos OS can have incompatible message formats especially if you turn on GRES. Because the steps in the process include changing mastership, running the same version of software is recommended.
- The same Routing Engine model is used within a TX Matrix router (**scc**) and within a T640 router (**lcc**) of a routing matrix. For example, a routing matrix with an **scc** using two RE-A-2000s and an **lcc** using two RE-1600s is supported. However, an **scc** or an **lcc** with two different Routing Engine models is *not* supported. We suggest that all Routing Engines are the same model throughout all routers in the routing matrix. To determine the Routing Engine type, use the CLI **show chassis hardware | match routing** command.



NOTE: It is considered best practice to make sure that all master Routing Engines are **re0** and all backup Routing Engines are **re1** (or vice versa). For the purposes of this document, the master Routing Engine is **re0** and the backup Routing Engine is **re1**.

On the TX Matrix router, perform a Junos OS upgrade on each Routing Engine separately to avoid unnecessary disruption to network operation. Install the new Junos OS Release on the backup Routing Engine (**re1**) while keeping the currently running software version on the master Routing Engine (**re0**).

After making sure that the new software version is running correctly on the backup Routing Engine (**re1**), switch mastership over to **re1**, install the new software on the new backup Routing Engine (**re0**) and then revert mastership from **re1** back to **re0**. These changes are propagated to all of the T640 routers in the routing matrix.

To upgrade the Junos OS for a routing matrix, perform the following tasks:

- [Disabling GRES on the Routing Matrix with a TX Matrix Router on page 60](#)
- [Installing Software on All Backup Routing Engines of a Routing Matrix with a TX Matrix Router on page 62](#)
- [Loading the New Junos OS Version on the Backup Routing Engines of the Routing Matrix with a TX Matrix Router on page 69](#)
- [Installing Software on the Master Routing Engines of a Routing Matrix with a TX Matrix Router on page 71](#)
- [Finalizing the Installation for a Routing Engine with a TX Matrix Router on page 75](#)

Disabling GRES on the Routing Matrix with a TX Matrix Router

Before upgrading the software on the routing matrix with a TX Matrix router, you must disable graceful Routing Engine switchover (GRES) on all the routers in the routing matrix. To disable GRES, perform the following steps on the TX Matrix router:

1. Log in to the master Routing Engine's (**scc-re0**) console.

```
login: root
Password: xxx

--- Junos 9.5R2.1 built 2009-06-05 08:52:23 UTC
%
```

2. Enter the Junos OS CLI configuration mode:

- a. Start the CLI from the shell prompt using the **cli** command:

```
% cli
{master}
user@host-scc-re0>
```

- b. Launch configuration mode:

```
{master}
user@host-scc-re0> configure
Entering configuration mode

{master} [edit]
user@host-scc-re0 #
```

3. Disable Routing Engine redundancy and verify that the configuration is removed:

```
{master}[edit]
user@host-scc-re0# show chassis
redundancy {
    graceful-switchover;
}

{master}[edit]
user@host-scc-re0# delete chassis redundancy
{master}[edit]
user@host-scc-re0# show chassis
```

4. Save the configuration change on all Routing Engines in the routing matrix and exit the CLI configuration mode:

```
{master}[edit]
user@host-scc-re0# commit synchronize and-quit
scc-re0:
configuration check succeeds
lcc0-re1:
commit complete
lcc0-re0:
commit complete
lcc2-re1:
commit complete
lcc2-re0:
commit complete
scc-re1:
commit complete
scc-re0:
commit complete

user@host-scc-re0>
```

Installing Software on All Backup Routing Engines of a Routing Matrix with a TX Matrix Router

Install the new Junos OS Release on all backup Routing Engines (**re1**) of the TX Matrix router while keeping the currently running software version on the master Routing Engines (**re0**). This enables the master Routing Engines (**re0**) to continue operations, minimizing the disruption to the routing matrix with a TX Matrix router and your network.

To install the software on all of the backup Routing Engines (**re1**), perform the following steps:

1. Log in to the backup TX Matrix router (**re1**) Routing Engine's console.

For more information on logging in to the Routing Engine through the console port, see the administration manual for your particular router.

2. To upgrade software for all the backup Routing Engines (**re1**) in the routing matrix, issue the **request system software add** command. Below is an example of the **request system software add** command and the output as the software is being added.

```
user@host-scc-re1> request system software add
/var/tmp/jinstall-9.6B2.7-domestic-signed.tgz
Pushing bundle to lcc0-re1
Pushing bundle to lcc2-re1

Validating on lcc0-re1
Checking compatibility with configuration
Initializing...
Using jbase-9.6B1.8
Verified manifest signed by PackageProduction_9_6_0
Using /var/tmp/jinstall-9.6B2.7-domestic-signed.tgz
Verified jinstall-9.6B2.7-domestic.tgz signed by PackageProduction_9_6_0
Using jinstall-9.6B2.7-domestic.tgz
Using jbundle-9.6B2.7-domestic.tgz
Checking jbundle requirements on /
Using jbase-9.6B2.7.tgz
Verified manifest signed by PackageProduction_9_6_0
Using /var/validate/chroot/tmp/jbundle/jboot-9.6B2.7.tgz
Using jkernel-9.6B2.7.tgz
Verified manifest signed by PackageProduction_9_6_0
Using jcrypto-9.6B2.7.tgz
Verified manifest signed by PackageProduction_9_6_0
Using jpfe-9.6B2.7.tgz
Using jdocs-9.6B2.7.tgz
Verified manifest signed by PackageProduction_9_6_0
Using jroute-9.6B2.7.tgz
Verified manifest signed by PackageProduction_9_6_0
Using jservices-9.6B2.7.tgz
Auto-deleting old jservices-voice ...
Removing /opt/sdk/jservices-voice ...
Removing jservices-voice-bsg-9.6B1.8.tgz from /var/sw/pkg ...
Notifying mspd ...
Installing new jservices-voice ...
Verified jservices-voice-bsg-9.6B2.7.tgz signed by PackageProduction_9_6_0
Creating /var/sw/pkg ...
Creating /opt/sdk/jservices-voice ...
Storing jservices-voice-bsg-9.6B2.7.tgz in /var/sw/pkg ...
Link: /opt/sdk/jservices-voice/jservices-voice-bsg ->
/var/sw/pkg/jservices-voice-bsg-9.6B2.7.tgz...
```

```
Auto-deleting old jservices-bgf ...
Removing /opt/sdk/jservices-bgf ...
Removing jservices-bgf-pic-9.6B1.8.tgz from /var/sw/pkg ...
Notifying mspd ...
Installing new jservices-bgf ...
Verified jservices-bgf-pic-9.6B2.7.tgz signed by PackageProduction_9_6_0
Creating /opt/sdk/jservices-bgf ...
Storing jservices-bgf-pic-9.6B2.7.tgz in /var/sw/pkg ...
Link: /opt/sdk/jservices-bgf/jservices-bgf-pic ->
/var/sw/pkg/jservices-bgf-pic-9.6B2.7.tgz...
Auto-deleting old jservices-aacl ...
Removing /opt/sdk/jservices-aacl ...
Removing jservices-aacl-pic-9.6B1.8.tgz from /var/sw/pkg ...
Notifying mspd ...
Installing new jservices-aacl ...
Verified jservices-aacl-pic-9.6B2.7.tgz signed by PackageProduction_9_6_0
Creating /opt/sdk/jservices-aacl ...
Storing jservices-aacl-pic-9.6B2.7.tgz in /var/sw/pkg ...
Link: /opt/sdk/jservices-aacl/jservices-aacl-pic ->
/var/sw/pkg/jservices-aacl-pic-9.6B2.7.tgz...
Auto-deleting old jservices-llpdf ...
Removing /opt/sdk/jservices-llpdf ...
Removing jservices-llpdf-pic-9.6B1.8.tgz from /var/sw/pkg ...
Notifying mspd ...
Installing new jservices-llpdf ...
Verified jservices-llpdf-pic-9.6B2.7.tgz signed by PackageProduction_9_6_0
Creating /opt/sdk/jservices-llpdf ...
Storing jservices-llpdf-pic-9.6B2.7.tgz in /var/sw/pkg ...
Link: /opt/sdk/jservices-llpdf/jservices-llpdf-pic ->
/var/sw/pkg/jservices-llpdf-pic-9.6B2.7.tgz...
Auto-deleting old jservices-sfw ...
Removing /opt/sdk/jservices-sfw ...
Removing jservices-sfw-pic-9.6B1.8.tgz from /var/sw/pkg ...
Notifying mspd ...
Installing new jservices-sfw ...
Verified jservices-sfw-pic-9.6B2.7.tgz signed by PackageProduction_9_6_0
Creating /opt/sdk/jservices-sfw ...
Storing jservices-sfw-pic-9.6B2.7.tgz in /var/sw/pkg ...
Link: /opt/sdk/jservices-sfw/jservices-sfw-pic ->
/var/sw/pkg/jservices-sfw-pic-9.6B2.7.tgz...
Auto-deleting old jservices-appid ...
Removing /opt/sdk/jservices-appid ...
Removing jservices-appid-pic-9.6B1.8.tgz from /var/sw/pkg ...
Notifying mspd ...
Installing new jservices-appid ...
Verified jservices-appid-pic-9.6B2.7.tgz signed by PackageProduction_9_6_0
Creating /opt/sdk/jservices-appid ...
Storing jservices-appid-pic-9.6B2.7.tgz in /var/sw/pkg ...
Link: /opt/sdk/jservices-appid/jservices-appid-pic ->
/var/sw/pkg/jservices-appid-pic-9.6B2.7.tgz...
Auto-deleting old jservices-idp ...
Removing /opt/sdk/jservices-idp ...
Removing jservices-idp-pic-9.6B1.8.tgz from /var/sw/pkg ...
Notifying mspd ...
Installing new jservices-idp ...
Verified jservices-idp-pic-9.6B2.7.tgz signed by PackageProduction_9_6_0
Creating /opt/sdk/jservices-idp ...
Storing jservices-idp-pic-9.6B2.7.tgz in /var/sw/pkg ...
Link: /opt/sdk/jservices-idp/jservices-idp-pic ->
/var/sw/pkg/jservices-idp-pic-9.6B2.7.tgz...
Hardware Database regeneration succeeded
```

```
Validating against /config/juniper.conf.gz
mgd: commit complete
Validation succeeded

Validating on lcc2-re1
Checking compatibility with configuration
Initializing...
Using jbase-9.6B1.8
Verified manifest signed by PackageProduction_9_6_0
Using /var/tmp/jinstall-9.6B2.7-domestic-signed.tgz
Verified jinstall-9.6B2.7-domestic.tgz signed by PackageProduction_9_6_0
Using jinstall-9.6B2.7-domestic.tgz
Using jbundle-9.6B2.7-domestic.tgz
Checking jbundle requirements on /
Using jbase-9.6B2.7.tgz
Verified manifest signed by PackageProduction_9_6_0
Using /var/validate/chroot/tmp/jbundle/jboot-9.6B2.7.tgz
Using jkernel-9.6B2.7.tgz
Verified manifest signed by PackageProduction_9_6_0
Using jcrypto-9.6B2.7.tgz
Verified manifest signed by PackageProduction_9_6_0
Using jpfe-9.6B2.7.tgz
Using jdocs-9.6B2.7.tgz
Verified manifest signed by PackageProduction_9_6_0
Using jroute-9.6B2.7.tgz
Verified manifest signed by PackageProduction_9_6_0
Using jservices-9.6B2.7.tgz
Auto-deleting old jservices-voice ...
Removing /opt/sdk/jservices-voice ...
Removing jservices-voice-bsg-9.6B1.8.tgz from /var/sw/pkg ...
Notifying mspd ...
Installing new jservices-voice ...
Verified jservices-voice-bsg-9.6B2.7.tgz signed by PackageProduction_9_6_0
Creating /var/sw/pkg ...
Creating /opt/sdk/jservices-voice ...
Storing jservices-voice-bsg-9.6B2.7.tgz in /var/sw/pkg ...
Link: /opt/sdk/jservices-voice/jservices-voice-bsg ->
/var/sw/pkg/jservices-voice-bsg-9.6B2.7.tgz...
Auto-deleting old jservices-bgf ...
Removing /opt/sdk/jservices-bgf ...
Removing jservices-bgf-pic-9.6B1.8.tgz from /var/sw/pkg ...
Notifying mspd ...
Installing new jservices-bgf ...
Verified jservices-bgf-pic-9.6B2.7.tgz signed by PackageProduction_9_6_0
Creating /opt/sdk/jservices-bgf ...
Storing jservices-bgf-pic-9.6B2.7.tgz in /var/sw/pkg ...
Link: /opt/sdk/jservices-bgf/jservices-bgf-pic ->
/var/sw/pkg/jservices-bgf-pic-9.6B2.7.tgz...
Auto-deleting old jservices-aac1 ...
Removing /opt/sdk/jservices-aac1 ...
Removing jservices-aac1-pic-9.6B1.8.tgz from /var/sw/pkg ...
Notifying mspd ...
Installing new jservices-aac1 ...
Verified jservices-aac1-pic-9.6B2.7.tgz signed by PackageProduction_9_6_0
Creating /opt/sdk/jservices-aac1 ...
Storing jservices-aac1-pic-9.6B2.7.tgz in /var/sw/pkg ...
Link: /opt/sdk/jservices-aac1/jservices-aac1-pic ->
/var/sw/pkg/jservices-aac1-pic-9.6B2.7.tgz...
Auto-deleting old jservices-llpdf ...
Removing /opt/sdk/jservices-llpdf ...
Removing jservices-llpdf-pic-9.6B1.8.tgz from /var/sw/pkg ...
```



```

Notifying mspd ...
Installing new jservices-llpdf ...
Verified jservices-llpdf-pic-9.6B2.7.tgz signed by PackageProduction_9_6_0
Creating /opt/sdk/jservices-llpdf ...
Storing jservices-llpdf-pic-9.6B2.7.tgz in /var/sw/pkg ...
Link: /opt/sdk/jservices-llpdf/jservices-llpdf-pic ->
/var/sw/pkg/jservices-llpdf-pic-9.6B2.7.tgz...
Auto-deleting old jservices-sfw ...
Removing /opt/sdk/jservices-sfw ...
Removing jservices-sfw-pic-9.6B1.8.tgz from /var/sw/pkg ...
Notifying mspd ...
Installing new jservices-sfw ...
Verified jservices-sfw-pic-9.6B2.7.tgz signed by PackageProduction_9_6_0
Creating /opt/sdk/jservices-sfw ...
Storing jservices-sfw-pic-9.6B2.7.tgz in /var/sw/pkg ...
Link: /opt/sdk/jservices-sfw/jservices-sfw-pic ->
/var/sw/pkg/jservices-sfw-pic-9.6B2.7.tgz...
Auto-deleting old jservices-appid ...
Removing /opt/sdk/jservices-appid ...
Removing jservices-appid-pic-9.6B1.8.tgz from /var/sw/pkg ...
Notifying mspd ...
Installing new jservices-appid ...
Verified jservices-appid-pic-9.6B2.7.tgz signed by PackageProduction_9_6_0
Creating /opt/sdk/jservices-appid ...
Storing jservices-appid-pic-9.6B2.7.tgz in /var/sw/pkg ...
Link: /opt/sdk/jservices-appid/jservices-appid-pic ->
/var/sw/pkg/jservices-appid-pic-9.6B2.7.tgz...
Auto-deleting old jservices-idp ...
Removing /opt/sdk/jservices-idp ...
Removing jservices-idp-pic-9.6B1.8.tgz from /var/sw/pkg ...
Notifying mspd ...
Installing new jservices-idp ...
Verified jservices-idp-pic-9.6B2.7.tgz signed by PackageProduction_9_6_0
Creating /opt/sdk/jservices-idp ...
Storing jservices-idp-pic-9.6B2.7.tgz in /var/sw/pkg ...
Link: /opt/sdk/jservices-idp/jservices-idp-pic ->
/var/sw/pkg/jservices-idp-pic-9.6B2.7.tgz...
Hardware Database regeneration succeeded
Validating against /config/juniper.conf.gz
mgd: commit complete
Validation succeeded

Validating on scc-rel
Checking compatibility with configuration
Initializing...
Using jbase-9.6B1.8
Verified manifest signed by PackageProduction_9_6_0
Using /var/tmp/jinstall-9.6B2.7-domestic-signed.tgz
Verified jinstall-9.6B2.7-domestic.tgz signed by PackageProduction_9_6_0
Using jinstall-9.6B2.7-domestic.tgz
Using jbundle-9.6B2.7-domestic.tgz
Checking jbundle requirements on /
Using jbase-9.6B2.7.tgz
Verified manifest signed by PackageProduction_9_6_0
Using /var/validate/chroot/tmp/jbundle/jboot-9.6B2.7.tgz
Using jkernel-9.6B2.7.tgz
Verified manifest signed by PackageProduction_9_6_0
Using jcrypto-9.6B2.7.tgz
Verified manifest signed by PackageProduction_9_6_0
Using jpfe-9.6B2.7.tgz
Using jdocs-9.6B2.7.tgz

```

```
Verified manifest signed by PackageProduction_9_6_0
Using jroute-9.6B2.7.tgz
Verified manifest signed by PackageProduction_9_6_0
Using jservices-9.6B2.7.tgz
Auto-deleting old jservices-voice ...
Removing /opt/sdk/jservices-voice ...
Removing jservices-voice-bsg-9.6B1.8.tgz from /var/sw/pkg ...
Notifying mspd ...
Installing new jservices-voice ...
Verified jservices-voice-bsg-9.6B2.7.tgz signed by PackageProduction_9_6_0
Creating /var/sw/pkg ...
Creating /opt/sdk/jservices-voice ...
Storing jservices-voice-bsg-9.6B2.7.tgz in /var/sw/pkg ...
Link: /opt/sdk/jservices-voice/jservices-voice-bsg ->
/var/sw/pkg/jservices-voice-bsg-9.6B2.7.tgz...
Auto-deleting old jservices-bgf ...
Removing /opt/sdk/jservices-bgf ...
Removing jservices-bgf-pic-9.6B1.8.tgz from /var/sw/pkg ...
Notifying mspd ...
Installing new jservices-bgf ...
Verified jservices-bgf-pic-9.6B2.7.tgz signed by PackageProduction_9_6_0
Creating /opt/sdk/jservices-bgf ...
Storing jservices-bgf-pic-9.6B2.7.tgz in /var/sw/pkg ...
Link: /opt/sdk/jservices-bgf/jservices-bgf-pic ->
/var/sw/pkg/jservices-bgf-pic-9.6B2.7.tgz...
Auto-deleting old jservices-aac1 ...
Removing /opt/sdk/jservices-aac1 ...
Removing jservices-aac1-pic-9.6B1.8.tgz from /var/sw/pkg ...
Notifying mspd ...
Installing new jservices-aac1 ...
Verified jservices-aac1-pic-9.6B2.7.tgz signed by PackageProduction_9_6_0
Creating /opt/sdk/jservices-aac1 ...
Storing jservices-aac1-pic-9.6B2.7.tgz in /var/sw/pkg ...
Link: /opt/sdk/jservices-aac1/jservices-aac1-pic ->
/var/sw/pkg/jservices-aac1-pic-9.6B2.7.tgz...
Auto-deleting old jservices-llpdf ...
Removing /opt/sdk/jservices-llpdf ...
Removing jservices-llpdf-pic-9.6B1.8.tgz from /var/sw/pkg ...
Notifying mspd ...
Installing new jservices-llpdf ...
Verified jservices-llpdf-pic-9.6B2.7.tgz signed by PackageProduction_9_6_0
Creating /opt/sdk/jservices-llpdf ...
Storing jservices-llpdf-pic-9.6B2.7.tgz in /var/sw/pkg ...
Link: /opt/sdk/jservices-llpdf/jservices-llpdf-pic ->
/var/sw/pkg/jservices-llpdf-pic-9.6B2.7.tgz...
Auto-deleting old jservices-sfw ...
Removing /opt/sdk/jservices-sfw ...
Removing jservices-sfw-pic-9.6B1.8.tgz from /var/sw/pkg ...
Notifying mspd ...
Installing new jservices-sfw ...
Verified jservices-sfw-pic-9.6B2.7.tgz signed by PackageProduction_9_6_0
Creating /opt/sdk/jservices-sfw ...
Storing jservices-sfw-pic-9.6B2.7.tgz in /var/sw/pkg ...
Link: /opt/sdk/jservices-sfw/jservices-sfw-pic ->
/var/sw/pkg/jservices-sfw-pic-9.6B2.7.tgz...
Auto-deleting old jservices-appid ...
Removing /opt/sdk/jservices-appid ...
Removing jservices-appid-pic-9.6B1.8.tgz from /var/sw/pkg ...
Notifying mspd ...
Installing new jservices-appid ...
Verified jservices-appid-pic-9.6B2.7.tgz signed by PackageProduction_9_6_0
```

```

Creating /opt/sdk/jservices-appid ...
Storing jservices-appid-pic-9.6B2.7.tgz in /var/sw/pkg ...
Link: /opt/sdk/jservices-appid/jservices-appid-pic ->
/var/sw/pkg/jservices-appid-pic-9.6B2.7.tgz...
Auto-deleting old jservices-idp ...
Removing /opt/sdk/jservices-idp ...
Removing jservices-idp-pic-9.6B1.8.tgz from /var/sw/pkg ...
Notifying mspd ...
Installing new jservices-idp ...
Verified jservices-idp-pic-9.6B2.7.tgz signed by PackageProduction_9_6_0
Creating /opt/sdk/jservices-idp ...
Storing jservices-idp-pic-9.6B2.7.tgz in /var/sw/pkg ...
Link: /opt/sdk/jservices-idp/jservices-idp-pic ->
/var/sw/pkg/jservices-idp-pic-9.6B2.7.tgz...
Hardware Database regeneration succeeded
Validating against /config/juniper.conf.gz
mgd: commit complete
Validation succeeded
Done with validate on all chassis

```

```

lcc0-re1:
Installing package '/var/tmp/jinstall-9.6B2.7-domestic-signed.tgz' ...
Verified jinstall-9.6B2.7-domestic.tgz signed by PackageProduction_9_6_0
Adding jinstall...
Verified manifest signed by PackageProduction_9_6_0

```

```

WARNING: This package will load JUNOS 9.6B2.7 software.
WARNING: It will save JUNOS configuration files, and SSH keys
WARNING: (if configured), but erase all other files and information
WARNING: stored on this machine. It will attempt to preserve dumps
WARNING: and log files, but this can not be guaranteed. This is the
WARNING: pre-installation stage and all the software is loaded when
WARNING: you reboot the system.

```

```

Saving the config files ...
NOTICE: uncommitted changes have been saved in
/var/db/config/juniper.conf.pre-install
Installing the bootstrap installer ...

```

```

WARNING: A REBOOT IS REQUIRED TO LOAD THIS SOFTWARE CORRECTLY. Use the
WARNING: 'request system reboot' command when software installation is
WARNING: complete. To abort the installation, do not reboot your system,
WARNING: instead use the 'request system software delete jinstall'
WARNING: command as soon as this operation completes.

```

```

Saving package file in /var/sw/pkg/jinstall-9.6B2.7-domestic-signed.tgz ...
Saving state for rollback ...

```

```

lcc2-re1:
Installing package '/var/tmp/jinstall-9.6B2.7-domestic-signed.tgz' ...
Verified jinstall-9.6B2.7-domestic.tgz signed by PackageProduction_9_6_0
Adding jinstall...
Verified manifest signed by PackageProduction_9_6_0

```

```

WARNING: This package will load JUNOS 9.6B2.7 software.
WARNING: It will save JUNOS configuration files, and SSH keys
WARNING: (if configured), but erase all other files and information
WARNING: stored on this machine. It will attempt to preserve dumps
WARNING: and log files, but this can not be guaranteed. This is the
WARNING: pre-installation stage and all the software is loaded when
WARNING: you reboot the system.

```

```
Saving the config files ...
NOTICE: uncommitted changes have been saved in
/var/db/config/juniper.conf.pre-install
Installing the bootstrap installer ...

WARNING:  A REBOOT IS REQUIRED TO LOAD THIS SOFTWARE CORRECTLY. Use the
WARNING:  'request system reboot' command when software installation is
WARNING:  complete. To abort the installation, do not reboot your system,
WARNING:  instead use the 'request system software delete jinstall'
WARNING:  command as soon as this operation completes.

Saving package file in /var/sw/pkg/jinstall-9.6B2.7-domestic-signed.tgz ...
Saving state for rollback ...

scc-rel:
Installing package '/var/tmp/jinstall-9.6B2.7-domestic-signed.tgz' ...
Verified jinstall-9.6B2.7-domestic.tgz signed by PackageProduction_9_6_0
Adding jinstall...
Verified manifest signed by PackageProduction_9_6_0

WARNING:  This package will load JUNOS 9.6B2.7 software.
WARNING:  It will save JUNOS configuration files, and SSH keys
WARNING:  (if configured), but erase all other files and information
WARNING:  stored on this machine. It will attempt to preserve dumps
WARNING:  and log files, but this can not be guaranteed. This is the
WARNING:  pre-installation stage and all the software is loaded when
WARNING:  you reboot the system.

Saving the config files ...
NOTICE: uncommitted changes have been saved in
/var/db/config/juniper.conf.pre-install
Installing the bootstrap installer ...

WARNING:  A REBOOT IS REQUIRED TO LOAD THIS SOFTWARE CORRECTLY. Use the
WARNING:  'request system reboot' command when software installation is
WARNING:  complete. To abort the installation, do not reboot your system,
WARNING:  instead use the 'request system software delete jinstall'
WARNING:  command as soon as this operation completes.

Saving package file in /var/sw/pkg/jinstall-9.6B2.7-domestic-signed.tgz ...
Saving state for rollback ...

user@host-scc-rel>
```

For more information on the **request system software add** command, see the *Junos System Basics and Services Command Reference*.

Loading the New Junos OS Version on the Backup Routing Engines of the Routing Matrix with a TX Matrix Router

After you have added the new software version to the backup Routing Engines (**re1**), reboot the routing matrix with a TX Matrix router to load the new software and verify the version of the software. To reboot the routing matrix, reboot the TX Matrix router which forces all T640 routers to reboot and loads the new software on all backup Routing Engines (**re1**) in the routing matrix.

1. Reboot the TX Matrix router to start the new software using the **request system reboot** command:

```
user@host-scc-re1> request system reboot
Reboot the system ? [yes,no] (no) yes

rebooting 1cc0-re1
Rebooting 1cc2-re1
Shutdown NOW!
Reboot consistency check bypassed - jinstall 9.6B2.7 will complete installation
upon reboot
[pid 23517]

user@host-scc-re1>
```

```
*** FINAL System shutdown message from user@host-scc-re1> ***
```

```
System going down IMMEDIATELY
```

```
rlogin: connection closed
user@host-scc-re0>
```



NOTE: You must reboot to load the new installation of the Junos OS onto the backup Routing Engine (**re1**) of the TX Matrix router and to propagate the new image on all backup Routing Engines (**re1**) of the T640 routers in the routing matrix.

To abort the installation, do not reboot your system; instead, finish the installation and then issue the **request system software delete jinstall** command. This is your last chance to stop the installation.

All the software is loaded on all the backup Routing Engines when you reboot the system. Installation can take about 10 minutes. The backup Routing Engines (**re1**) then reboot from the boot device on which the software was just installed. When the reboot is complete, the TX Matrix router backup Routing Engine (**re1**) displays the login prompt.

While the software is being upgraded, the Routing Engine (**re1**) on which you are performing the installation is not routing traffic.

2. Log in to the TX Matrix router backup Routing Engine (**re1**) and issue the **show version** command to verify the version of the software installed:

```
user@host-scc-re1>> show version
```

```
scc-re1:
```

```
-----  
Hostname: z8-1  
Model: TX Matrix  
JUNOS Base OS boot [9.6B2.7]  
JUNOS Base OS Software Suite [9.6B2.7]  
JUNOS Kernel Software Suite [9.6B2.7]  
JUNOS Crypto Software Suite [9.6B2.7]  
JUNOS Packet Forwarding Engine Support (M/T Common) [9.6B2.7]  
JUNOS Packet Forwarding Engine Support (T-Series) [9.6B2.7]  
JUNOS Online Documentation [9.6B2.7]  
JUNOS Voice Services Container package [9.6B2.7]  
JUNOS Border Gateway Function package [9.6B2.7]  
JUNOS Services AACL Container package [9.6B2.7]  
JUNOS Services LL-PDF Container package [9.6B2.7]  
JUNOS Services Stateful Firewall [9.6B2.7]  
JUNOS AppId Services [9.6B2.7]  
JUNOS IDP Services [9.6B2.7]  
JUNOS Routing Software Suite [9.6B2.7]
```

```
lcc0-re1:
```

```
-----  
Hostname: z8-lcc0-re1  
Model: t640  
JUNOS Base OS boot [9.6B2.7]  
JUNOS Base OS Software Suite [9.6B2.7]  
JUNOS Kernel Software Suite [9.6B2.7]  
JUNOS Crypto Software Suite [9.6B2.7]  
JUNOS Packet Forwarding Engine Support (M/T Common) [9.6B2.7]  
JUNOS Packet Forwarding Engine Support (T-Series) [9.6B2.7]  
JUNOS Online Documentation [9.6B2.7]  
JUNOS Voice Services Container package [9.6B2.7]  
JUNOS Border Gateway Function package [9.6B2.7]  
JUNOS Services AACL Container package [9.6B2.7]  
JUNOS Services LL-PDF Container package [9.6B2.7]  
JUNOS Services Stateful Firewall [9.6B2.7]  
JUNOS AppId Services [9.6B2.7]  
JUNOS IDP Services [9.6B2.7]  
JUNOS Routing Software Suite [9.6B2.7]
```

```
lcc2-re1:
```

```
-----  
Hostname: z8-lcc2-re1  
Model: t640  
JUNOS Base OS boot [9.6B2.7]  
JUNOS Base OS Software Suite [9.6B2.7]  
JUNOS Kernel Software Suite [9.6B2.7]  
JUNOS Crypto Software Suite [9.6B2.7]  
JUNOS Packet Forwarding Engine Support (M/T Common) [9.6B2.7]  
JUNOS Packet Forwarding Engine Support (T-Series) [9.6B2.7]  
JUNOS Online Documentation [9.6B2.7]  
JUNOS Voice Services Container package [9.6B2.7]  
JUNOS Border Gateway Function package [9.6B2.7]  
JUNOS Services AACL Container package [9.6B2.7]  
JUNOS Services LL-PDF Container package [9.6B2.7]  
JUNOS Services Stateful Firewall [9.6B2.7]  
JUNOS AppId Services [9.6B2.7]
```

JUNOS IDP Services [9.6B2.7]
 JUNOS Routing Software Suite [9.6B2.7]

Installing Software on the Master Routing Engines of a Routing Matrix with a TX Matrix Router

Before you install the new software on the master Routing Engines (**re0**) of the routing matrix with a TX Matrix router, you need to switch mastership over to the backup Routing Engines (**re1**) to minimize the disruption to network operation.

To change mastership and install the new software version on the new backup Routing Engine (**re0**), perform the following steps:

1. On the TX Matrix router, log in to the original master Routing Engine (**re0**) console port.

For more information on logging in to the Routing Engine through the console port, see the administration guide for your particular router.
2. Transfer mastership to the backup Routing Engine (**re1**) for all routers in the routing matrix using the **request chassis routing-engine master switch all-chassis** command:

```
user@host-scc-re0> request chassis routing-engine master switch all-chassis
warning: Traffic will be interrupted while the PFE is re-initialized
Toggle mastership between routing engines ? [yes,no] (no) yes
```

```
1cc0-re0:
```

```
-----
warning: Traffic will be interrupted while the PFE is re-initialized
Resolving mastership...
Complete. The other routing engine becomes the master.
```

```
1cc2-re0:
```

```
-----
warning: Traffic will be interrupted while the PFE is re-initialized
Resolving mastership...
Complete. The other routing engine becomes the master.
```

```
scc-re0:
```

```
-----
warning: Traffic will be interrupted while the PFE is re-initialized
Resolving mastership...
Complete. The other routing engine becomes the master.
```

3. Verify that the backup Routing Engine (slot 1) is now the master Routing Engine on all routers in the routing matrix using the **show chassis routing-engine** command:

```
user@host-scc-re0> show chassis routing-engine
scc-re0:
```

```
-----
Routing Engine status:
```

```
Slot 0:
```

| | |
|--------------------------|------------------|
| Current state | Backup |
| Election priority | Master (default) |
| [...Output Truncated...] | |

```
Routing Engine status:
```

```
Slot 1:
```

| | |
|---------------|--------|
| Current state | Master |
|---------------|--------|

```

Election priority          Backup (default)
[...Output Truncated...]

lcc0-re0:
-----
Routing Engine status:
Slot 0:
  Current state          Backup
  Election priority      Master (default)
  [...]Output Truncated...
                                0.02      0.07      0.11
Routing Engine status:
Slot 1:
  Current state          Master
  Election priority      Backup (default)
  [...]Output Truncated...

lcc2-re0:
-----
Routing Engine status:
Slot 0:
  Current state          Backup
  Election priority      Master (default)
  [...]Output Truncated...
Routing Engine status:
Slot 1:
  Current state          Master
  Election priority      Backup (default)
  [...]Output Truncated...

```

4. Install the new software package using the **request system software add** command:

```

user@host-scc-re0> request system software add
/var/tmp/jinstall-9.6B2.7-domestic-signed.tgz
Pushing bundle to lcc0-re0
Pushing bundle to lcc2-re0
[...Output Truncated...]

```

5. Reboot the Routing Engine (re0) using the **request system reboot** command:

```

user@host-scc-re0> request system reboot
Reboot the system ? [yes,no] (no) yes

Rebooting lcc0-re0
Rebooting lcc2-re0
Shutdown NOW!
Reboot consistency check bypassed - jinstall 9.6B2.7 will complete installation
upon reboot
[pid 9071]

user@host-scc-re0>

*** FINAL System shutdown message from user@host-scc-re0> ***

System going down IMMEDIATELY

Connection closed by foreign host.

```




NOTE: You must reboot to load the new installation of the Junos OS onto the original master Routing Engine (re0) of the TX Matrix router and to propagate the new image on all original master Routing Engines (re0) of the T640 routers in the routing matrix.

To abort the installation, do not reboot your system; instead, finish the installation and then issue the `request system software delete jinstall` command. This is your last chance to stop the installation.

The software is loaded when you reboot the system. Installation can take about 10 minutes. The routers then reboot from the boot device on which the software was just installed. When the reboot is complete, the TX Matrix Routing Engine (re0) displays the login prompt.

While the software is being upgraded, the Routing Engine (re0) on which you are performing the installation does not route traffic.

6. Log in and issue the **show version** command to verify the version of the software installed:

```
user@host-scc-re0> show version
scc-re0:
```

```
-----
Hostname: z8
Model: TX Matrix
JUNOS Base OS boot [9.6B2.7]
JUNOS Base OS Software Suite [9.6B2.7]
JUNOS Kernel Software Suite [9.6B2.7]
JUNOS Crypto Software Suite [9.6B2.7]
JUNOS Packet Forwarding Engine Support (M/T Common) [9.6B2.7]
JUNOS Packet Forwarding Engine Support (T-Series) [9.6B2.7]
JUNOS Online Documentation [9.6B2.7]
JUNOS Voice Services Container package [9.6B2.7]
JUNOS Border Gateway Function package [9.6B2.7]
JUNOS Services AACL Container package [9.6B2.7]
JUNOS Services LL-PDF Container package [9.6B2.7]
JUNOS Services Stateful Firewall [9.6B2.7]
JUNOS AppId Services [9.6B2.7]
JUNOS IDP Services [9.6B2.7]
JUNOS Routing Software Suite [9.6B2.7]
```

```
lcc0-re0:
```

```
-----
Hostname: z8-lcc0-re0
Model: t640
JUNOS Base OS boot [9.6B2.7]
JUNOS Base OS Software Suite [9.6B2.7]
JUNOS Kernel Software Suite [9.6B2.7]
JUNOS Crypto Software Suite [9.6B2.7]
JUNOS Packet Forwarding Engine Support (M/T Common) [9.6B2.7]
JUNOS Packet Forwarding Engine Support (T-Series) [9.6B2.7]
JUNOS Online Documentation [9.6B2.7]
JUNOS Voice Services Container package [9.6B2.7]
JUNOS Border Gateway Function package [9.6B2.7]
JUNOS Services AACL Container package [9.6B2.7]
JUNOS Services LL-PDF Container package [9.6B2.7]
```

```
JUNOS Services Stateful Firewall [9.6B2.7]
JUNOS AppId Services [9.6B2.7]
JUNOS IDP Services [9.6B2.7]
JUNOS Routing Software Suite [9.6B2.7]
```

```
lcc2-re0:
```

```
-----
Hostname: z8-lcc2-re0
Model: t640
JUNOS Base OS boot [9.6B2.7]
JUNOS Base OS Software Suite [9.6B2.7]
JUNOS Kernel Software Suite [9.6B2.7]
JUNOS Crypto Software Suite [9.6B2.7]
JUNOS Packet Forwarding Engine Support (M/T Common) [9.6B2.7]
JUNOS Packet Forwarding Engine Support (T-Series) [9.6B2.7]
JUNOS Online Documentation [9.6B2.7]
JUNOS Voice Services Container package [9.6B2.7]
JUNOS Border Gateway Function package [9.6B2.7]
JUNOS Services AACL Container package [9.6B2.7]
JUNOS Services LL-PDF Container package [9.6B2.7]
JUNOS Services Stateful Firewall [9.6B2.7]
JUNOS AppId Services [9.6B2.7]
JUNOS IDP Services [9.6B2.7]
JUNOS Routing Software Suite [9.6B2.7]
```

7. (Optional to avoid another traffic disruption) Transfer routing control back to the original master Routing Engine (re0) using the **request chassis routing-engine master switch all-chassis** command:

```
user@host-scc-re0> request chassis routing-engine master switch all-chassis
warning: Traffic will be interrupted while the PFE is re-initialized
Toggle mastership between routing engines ? [yes,no] (no) yes
```

```
lcc0-re0:
```

```
-----
warning: Traffic will be interrupted while the PFE is re-initialized
Resolving mastership...
Complete. The local routing engine becomes the master.
```

```
lcc2-re0:
```

```
-----
warning: Traffic will be interrupted while the PFE is re-initialized
Resolving mastership...
Complete. The local routing engine becomes the master.
```

```
scc-re0:
```

```
-----
warning: Traffic will be interrupted while the PFE is re-initialized
Resolving mastership...
Complete. The local routing engine becomes the master.
```

8. Verify that the master Routing Engine (slot 0) is indeed the master Routing Engine using the show **chassis routing-engine** command:

```
user@host-scc-re0> show chassis routing-engine
scc-re0:
```

```
-----
Routing Engine status:
Slot 0:
```

```

Current state           Master
Election priority       Master (default)
[...Output Truncated...]

Routing Engine status:
Slot 1:
Current state           Backup
Election priority       Backup (default)
[...Output Truncated...]

lcc0-re0:
-----
Routing Engine status:
Slot 0:
Current state           Master
Election priority       Master (default)
[...Output Truncated...]

Routing Engine status:
Slot 1:
Current state           Backup
Election priority       Backup (default)
[...Output Truncated...]

lcc2-re0:
-----
Routing Engine status:
Slot 0:
Current state           Master
Election priority       Master (default)
[...Output Truncated...]

Routing Engine status:
Slot 1:
Current state           Backup
Election priority       Backup (default)
[...Output Truncated...]

```

Finalizing the Installation for a Routing Engine with a TX Matrix Router

After the software is installed on all Routing Engines, you return the routing matrix with a TX Matrix router back to its original configuration and back up the new installation.

1. Restore the configuration that existed before you deleted it at the start of this procedure using the **configure** and **rollback** commands:

```

user@host-scc-re0> configure
Entering configuration mode

[edit]
user@host-scc-re0# rollback 1
load complete

```

2. Save the configuration change on all Routing Engines using the **commit synchronize and-quit** command:

```

[edit]
user@host-scc-re0# commit synchronize and-quit

```

```
scc-re0:
configuration check succeeds
lcc0-re1:
commit complete
lcc0-re0:
commit complete
lcc2-re1:
commit complete
lcc2-re0:
commit complete
scc-re1:
commit complete
scc-re0:
commit complete

user@host-scc-re0>
```

3. After you have installed the new software and are satisfied that it is successfully running, issue the following commands to back up the new software on both the master (re0) and the backup (re1) Routing Engines:

```
user@host-scc-re0> request system snapshot
user@host-scc-re0> request chassis routing-engine master switch all-chassis
user@host-scc-re1> request system snapshot
```

The sample output below shows examples of all the commands above.

```
{master}
user@host-scc-re0> request system snapshot
scc-re0:
-----
Verifying compatibility of destination media partitions...
Running newfs (220MB) on hard-disk media / partition (ad1s1a)...
Running newfs (24MB) on hard-disk media /config partition (ad1s1e)...
Copying '/dev/ad0s1a' to '/dev/ad1s1a' .. (this may take a few minutes)
Copying '/dev/ad0s1e' to '/dev/ad1s1e' .. (this may take a few minutes)
The following filesystems were archived: / /config

lcc0-re0:
-----
Verifying compatibility of destination media partitions...
Running newfs (220MB) on hard-disk media / partition (ad1s1a)...
Running newfs (24MB) on hard-disk media /config partition (ad1s1e)...
Copying '/dev/ad0s1a' to '/dev/ad1s1a' .. (this may take a few minutes)
Copying '/dev/ad0s1e' to '/dev/ad1s1e' .. (this may take a few minutes)
The following filesystems were archived: / /config

lcc2-re0:
-----
Verifying compatibility of destination media partitions...
Running newfs (220MB) on hard-disk media / partition (ad1s1a)...
Running newfs (24MB) on hard-disk media /config partition (ad1s1e)...
Copying '/dev/ad0s1a' to '/dev/ad1s1a' .. (this may take a few minutes)
Copying '/dev/ad0s1e' to '/dev/ad1s1e' .. (this may take a few minutes)
The following filesystems were archived: / /config

{master}
user@host-scc-re0> request chassis routing-engine master switch all-chassis
Toggle mastership between routing engines ? [yes,no] (no) yes

lcc0-re0:
```

```
-----
Resolving mastership...
Complete. The other routing engine becomes the master.
```

```
lcc2-re0:
```

```
-----
Resolving mastership...
Complete. The other routing engine becomes the master.
```

```
scc-re0:
```

```
-----
Resolving mastership...
Complete. The other routing engine becomes the master.
```

```
{master}
```

```
user@host-scc-re1> request system snapshot
```

```
scc-re1:
```

```
-----
Verifying compatibility of destination media partitions...
Running newfs (220MB) on hard-disk media / partition (ad1s1a)...
Running newfs (24MB) on hard-disk media /config partition (ad1s1e)...
Copying '/dev/ad0s1a' to '/dev/ad1s1a' .. (this may take a few minutes)
Copying '/dev/ad0s1e' to '/dev/ad1s1e' .. (this may take a few minutes)
The following filesystems were archived: / /config
```

```
lcc0-re1:
```

```
-----
Verifying compatibility of destination media partitions...
Running newfs (223MB) on hard-disk media / partition (ad2s1a)...
Running newfs (24MB) on hard-disk media /config partition (ad2s1e)...
Copying '/dev/ad0s1a' to '/dev/ad2s1a' .. (this may take a few minutes)
Copying '/dev/ad0s1e' to '/dev/ad2s1e' .. (this may take a few minutes)
The following filesystems were archived: / /config
```

```
lcc2-re1:
```

```
-----
Verifying compatibility of destination media partitions...
Running newfs (220MB) on hard-disk media / partition (ad1s1a)...
Running newfs (24MB) on hard-disk media /config partition (ad1s1e)...
Copying '/dev/ad0s1a' to '/dev/ad1s1a' .. (this may take a few minutes)
Copying '/dev/ad0s1e' to '/dev/ad1s1e' .. (this may take a few minutes)
The following filesystems were archived: / /config
```

The root file system is backed up to **/altroot**, and **/config** is backed up to **/altconfig**. The root and **/config** file systems are on the router's CompactFlash card, and the **/altroot** and **/altconfig** file systems are on the router's hard disk.



NOTE: After you issue the **request system snapshot** command, you cannot return to the previous version of the software because the running copy and backup copy of the software are identical.

- See Also**
- *Routing Matrix with a TX Matrix Router Deployment Guide*
 - [Overview of the Routing Matrix with a TX Matrix Router on page 15](#)
 - [Roadmap to Configuring a Routing Matrix with a TX Matrix Router on page 21](#)

- [Example: Routing Matrix with a TX Matrix Router Configuration on page 30](#)
- [Troubleshooting Insufficient Space or DRAM Errors During Software Upgrade of a Routing Matrix with a TX Matrix Router on page 78](#)
- [Troubleshooting a Software Upgrade Failure Due to Mixed Software Versions on a Routing Matrix with a TX Matrix Router on page 83](#)

Troubleshooting Insufficient Space or DRAM Errors During Software Upgrade of a Routing Matrix with a TX Matrix Router

Problem Description:



NOTE: Throughout this document, we use the term TX Matrix router to refer to the switch-card chassis (SCC) and T640 router to refer to the line-card chassis (LCC).

A routing matrix with a TX Matrix router (**scc**) and T640 routers (**lcc**) must have sufficient disk space and DRAM on all Routing Engines for an upgrade of the Junos OS to install successfully. If there is insufficient disk space or DRAM, you might receive a warning indicating that the **/var file** system is low on free disk space similar to the following:

```
WARNING: The /var filesystem is low on free disk space.
WARNING: This package requires 1075136k free, but there
WARNING: is only 666502k available.
```

To determine the amount of free disk space on the Routing Engine, use the CLI **show system storage** command. To determine the amount of DRAM available on the Routing Engine, use the CLI **show chassis routing-engine** command.

Below is sample output showing the two commands.

```
{backup}
user@host-re1> show system storage
scc-re1:
```

| Filesystem | Size | Used | Avail | Capacity | Mounted on |
|-------------------------------|------|------|-------|----------|---------------------|
| /dev/ad0s1a | 217M | 176M | 24M | 88% | / |
| devfs | 1.0K | 1.0K | 0B | 100% | /dev |
| devfs | 1.0K | 1.0K | 0B | 100% | /dev/ |
| /dev/md0 | 31M | 31M | 0B | 100% | /packages/mnt/jbase |
| /dev/md1 | 199M | 199M | 0B | 100% | |
| /packages/mnt/jkernel-9.5R2.1 | | | | | |
| /dev/md3 | 4.9M | 4.9M | 0B | 100% | |
| /packages/mnt/jdocs-9.5R2.1 | | | | | |
| /dev/md4 | 55M | 55M | 0B | 100% | |
| /packages/mnt/jroute-9.5R2.1 | | | | | |
| /dev/md5 | 14M | 14M | 0B | 100% | |
| /packages/mnt/jcrypto-9.5R2.1 | | | | | |
| /dev/md7 | 2.0G | 40K | 1.8G | 0% | /tmp |
| /dev/md8 | 2.0G | 11M | 1.8G | 1% | /mfs |
| /dev/ad0s1e | 24M | 1.5M | 21M | 7% | /config |
| procfs | 4.0K | 4.0K | 0B | 100% | /proc |

```

/dev/ad1s1f          25G      2.4G      21G      10% /var
/dev/ad1s1e          24M      1.5M      22M      6%  /tmp/.snp3061/mnt

```

```
lcc0-re1:
```

```

-----
Filesystem           Size      Used      Avail  Capacity  Mounted on
/dev/ad0s1a          220M      186M      16M      92%      /
devfs                1.0K      1.0K      0B      100%     /dev
devfs                1.0K      1.0K      0B      100%     /dev/
/dev/md0              33M       33M       0B      100%     /packages/mnt/jbase
/dev/md1              216M      216M       0B      100%
/packages/mnt/jkernel-9.6B1.8
/dev/md2              66M       66M       0B      100%
/packages/mnt/jpfe-T-9.6B1.8
/dev/md3              4.1M      4.1M       0B      100%
/packages/mnt/jdocs-9.6B1.8
/dev/md4              57M       57M       0B      100%
/packages/mnt/jroute-9.6B1.8
/dev/md5              15M       15M       0B      100%
/packages/mnt/jcrypto-9.6B1.8
/dev/md6              34M       34M       0B      100%
/packages/mnt/jpfe-common-9.6B1.8
/dev/md7              2.0G      10.0K      1.8G      0%      /tmp
/dev/md8              2.0G      532K      1.8G      0%      /mfs
/dev/ad0s1e          24M       44K       22M      0%      /config

procfs              4.0K      4.0K       0B      100%     /proc
/dev/ad2s1f          34G       21G      11G      66%     /var

```

```
lcc2-re1:
```

```

-----
Filesystem           Size      Used      Avail  Capacity  Mounted on
/dev/ad0s1a          217M      178M      21M      89%      /
devfs                1.0K      1.0K      0B      100%     /dev
devfs                1.0K      1.0K      0B      100%     /dev/
/dev/md0              33M       33M       0B      100%     /packages/mnt/jbase
/dev/md1              216M      216M       0B      100%
/packages/mnt/jkernel-9.6B1.8
/dev/md2              66M       66M       0B      100%
/packages/mnt/jpfe-T-9.6B1.8
/dev/md3              4.1M      4.1M       0B      100%
/packages/mnt/jdocs-9.6B1.8
/dev/md4              57M       57M       0B      100%
/packages/mnt/jroute-9.6B1.8
/dev/md5              15M       15M       0B      100%
/packages/mnt/jcrypto-9.6B1.8
/dev/md6              34M       34M       0B      100%
/packages/mnt/jpfe-common-9.6B1.8
/dev/md7              2.0G      8.0K      1.8G      0%      /tmp
/dev/md8              2.0G      538K      1.8G      0%      /mfs
/dev/ad0s1e          24M       46K       22M      0%      /config
procfs              4.0K      4.0K       0B      100%     /proc
/dev/ad1s1f          25G      1.3G      22G      5%      /var

```

```

{master}
user@host-re0> show chassis routing-engine
scc-re0:

```

```

-----
Routing Engine status:
Slot 0:

```

```

Current state           Master
Election priority       Master (default)
Temperature             41 degrees C / 105 degrees F
CPU temperature         43 degrees C / 109 degrees F
DRAM                   2048 MB
Memory utilization      21 percent
CPU utilization:
  User                  0 percent
  Background            0 percent
  Kernel                4 percent
  Interrupt             0 percent
  Idle                  96 percent
Model                  RE-4.0
Serial ID               P11123909610
Start time              2009-06-16 13:21:12 PDT
Uptime                  21 hours, 19 minutes, 44 seconds
Last reboot reason      Router rebooted after a normal shutdown.
Load averages:          1 minute  5 minute  15 minute
                        0.03      0.06      0.07

Routing Engine status:
Slot 1:
  Current state         Backup
  Election priority     Backup (default)
  Temperature           39 degrees C / 102 degrees F
  CPU temperature        38 degrees C / 100 degrees F
  DRAM                  2048 MB
  Memory utilization     20 percent
  CPU utilization:
    User                0 percent
    Background          0 percent
    Kernel              0 percent
    Interrupt           0 percent
    Idle                100 percent
  Model                 RE-4.0
  Serial ID              211123900273
  Start time             2009-06-15 13:38:48 PDT
  Uptime                 1 day, 21 hours, 2 minutes, 5 seconds
  Last reboot reason     Router rebooted after a normal shutdown.

lcc0-re0:
-----
Routing Engine status:
Slot 0:
  Current state         Master
  Election priority     Master (default)
  Temperature           46 degrees C / 114 degrees F
  CPU temperature        50 degrees C / 122 degrees F
  DRAM                  2048 MB
  Memory utilization     18 percent
  CPU utilization:
    User                0 percent
    Background          0 percent
    Kernel              2 percent
    Interrupt           0 percent
    Idle                98 percent
  Model                 RE-4.0
  Serial ID              P11123908065
  Start time             2009-06-16 13:20:59 PDT
  Uptime                 21 hours, 19 minutes, 56 seconds
  Last reboot reason     Router rebooted after a normal shutdown.
  Load averages:        1 minute  5 minute  15 minute

```



```

0.05      0.03      0.00
Routing Engine status:
Slot 1:
  Current state           Backup
  Election priority       Backup (default)
  Temperature             50 degrees C / 122 degrees F
  CPU temperature         55 degrees C / 131 degrees F
  DRAM                   3584 MB
  Memory utilization      11 percent
  CPU utilization:
    User                  0 percent
    Background            0 percent
    Kernel                0 percent
    Interrupt             0 percent
    Idle                  100 percent
  Model                   RE-A-2000
  Serial ID               1000673710
  Start time              2009-06-15 13:34:44 PDT
  Uptime                  1 day, 21 hours, 6 minutes, 8 seconds
  Last reboot reason      Router rebooted after a normal shutdown.

```

```
lcc2-re0:
```

```

-----
Routing Engine status:
Slot 0:
  Current state           Master
  Election priority       Master (default)
  Temperature             41 degrees C / 105 degrees F
  CPU temperature         42 degrees C / 107 degrees F
  DRAM                   2048 MB
  Memory utilization      18 percent
  CPU utilization:
    User                  0 percent
    Background            0 percent
    Kernel                2 percent
    Interrupt             0 percent
    Idle                  98 percent
  Model                   RE-4.0
  Serial ID               P11123908326
  Start time              2009-06-16 13:21:10 PDT
  Uptime                  21 hours, 19 minutes, 44 seconds
  Last reboot reason      Router rebooted after a normal shutdown.
  Load averages:         1 minute  5 minute 15 minute
                        0.00      0.00    0.00

```

```

Routing Engine status:
Slot 1:
  Current state           Backup
  Election priority       Backup (default)
  Temperature             41 degrees C / 105 degrees F
  CPU temperature         42 degrees C / 107 degrees F
  DRAM                   2048 MB
  Memory utilization      18 percent
  CPU utilization:
    User                  0 percent
    Background            0 percent
    Kernel                0 percent
    Interrupt             0 percent
    Idle                  100 percent
  Model                   RE-4.0
  Serial ID               212058900119

```

```

Start time      2009-06-15 13:37:41 PDT
Uptime         1 day, 21 hours, 3 minutes, 8 seconds

```

Solution If you find that you need to free up some space, issue the **request system storage cleanup** command and delete everything that appears in the output. then try the upgrade again.

```

{master}
user@host-re0> request system storage cleanup

```

List of files to delete:

```

      Size Date      Name
      2B Jun 16 12:46 /var/crash/bounds
    80.4M Jun 15 14:56 /var/crash/cores/kernel.0.090615.1455
    80.4M Jun 15 15:46 /var/crash/cores/kernel.1.090615.1546
    80.4M Jun 15 15:58 /var/crash/cores/kernel.2.090615.1558
    80.4M Jun 16 12:47 /var/crash/cores/kernel.3.090616.1246
    30.6M Jun 15 15:05 /var/crash/cores/vmcore.0.090615.1455.tgz
    33.5M Jun 15 16:33 /var/crash/cores/vmcore.1.090615.1546.tgz
    35.9M Jun 15 17:52 /var/crash/cores/vmcore.2.090615.1558.tgz
    48.0M Jun 16 13:47 /var/crash/cores/vmcore.3.090616.1246.tgz
    504B Jun 15 14:55 /var/crash/info.0
    504B Jun 15 15:46 /var/crash/info.1
    505B Jun 15 15:58 /var/crash/info.2
    505B Jun 16 12:46 /var/crash/info.3
    716B Jun 15 13:43 /var/log/install.0.gz
   1669B Jun 13 18:05 /var/log/install.1.gz
[...Output Truncated...]
  201.6K Jun 11 02:27 /var/tmp/jnx-routeservice-9.6I20090611_0926_root.tgz
    59.7K Jun 10 09:07 /var/tmp/jnx_ifinfo_sanity.pl.base_test_cfg_66245
    59.9K Jun 10 15:19 /var/tmp/jnx_ifinfo_sanity.pl.base_test_cfg_74023
    59.7K Jun 11 02:57 /var/tmp/jnx_ifinfo_sanity.pl.base_test_cfg_83419
   181.0M Jul 23 2008 /var/tmp/mchassis-install.tgz
    59.7K Jun 10 09:07 /var/tmp/orig_z8_cfg_66245
    59.9K Jun 10 15:19 /var/tmp/orig_z8_cfg_74023
    59.7K Jun 11 02:57 /var/tmp/orig_z8_cfg_83419
Delete these files ? [yes,no] (no) yes

```



NOTE: For some DRAM issues, remove any superfluous files from the /root and /tmp directories.

Related Documentation

- [Upgrading the Software for a Routing Matrix with a TX Matrix Router on page 59](#)
- [Troubleshooting a Software Upgrade Failure Due to Mixed Software Versions on a Routing Matrix with a TX Matrix Router on page 83](#)
- [Overview of the Routing Matrix with a TX Matrix Router on page 15](#)
- [Example: Routing Matrix with a TX Matrix Router Configuration on page 30](#)

Troubleshooting a Software Upgrade Failure Due to Mixed Software Versions on a Routing Matrix with a TX Matrix Router

Problem Description:



NOTE: Throughout this document, we use the term TX Matrix router to refer to the switch-card chassis (SCC) and T640 router to refer to the line-card chassis (LCC).

A routing matrix with a TX Matrix router (**scc**) and T640 routers (**lcc**) must have all master and backup Routing Engines running the same version of software. This is necessary for the routing matrix to operate and for the Junos OS to install successfully. If the software versions on the Routing Engines are not aligned, the software upgrade will return an error.

The output below from the master (**scc-re0**) Routing Engine shows the Junos OS version on a routing matrix with a TX Matrix router and two T640 routers. The backup Routing Engine (**scc-re1**) has Junos OS Release 9.5R2.1 installed, while all the other Routing Engines have Junos OS Release 9.6B1.8 installed.

[edit]

user@host-reo# run show version invoke-on all-routing-engines

scc-re0:

```
-----
Hostname: z8
Model: TX Matrix
JUNOS Base OS boot [9.6B1.8]
JUNOS Base OS Software Suite [9.6B1.8]
JUNOS Kernel Software Suite [9.6B1.8]
JUNOS Crypto Software Suite [9.6B1.8]
JUNOS Packet Forwarding Engine Support (M/T Common) [9.6B1.8]
JUNOS Packet Forwarding Engine Support (T-Series) [9.6B1.8]
JUNOS Online Documentation [9.6B1.8]
JUNOS Voice Services Container package [9.6B1.8]
JUNOS Border Gateway Function package [9.6B1.8]
JUNOS Services ACL Container package [9.6B1.8]
JUNOS Services LL-PDF Container package [9.6B1.8]
JUNOS Services Stateful Firewall [9.6B1.8]
JUNOS AppId Services [9.6B1.8]
JUNOS IDP Services [9.6B1.8]
JUNOS Routing Software Suite [9.6B1.8]
```

scc-re1:

```
-----
Hostname: z8-1
Model: TX Matrix
JUNOS Base OS boot [9.5R2.1]
JUNOS Base OS Software Suite [9.5R2.1]
JUNOS Kernel Software Suite [9.5R2.1]
JUNOS Crypto Software Suite [9.5R2.1]
JUNOS Packet Forwarding Engine Support (M/T Common) [9.5R2.1]
JUNOS Packet Forwarding Engine Support (T-Series) [9.5R2.1]
JUNOS Online Documentation [9.5R2.1]
JUNOS Voice Services Container package [9.5R2.1]
JUNOS Services ACL Container package [9.5R2.1]
```

JUNOS Services LL-PDF Container package [9.5R2.1]
 JUNOS Services Stateful Firewall [9.5R2.1]
 JUNOS AppId Services [9.5R2.1]
 JUNOS IDP Services [9.5R2.1]
 JUNOS Routing Software Suite [9.5R2.1]
 JUNOS Installation Software [9.6B1.8]

lcc0-re0:

 Hostname: z8-lcc0-re0
 Model: t640
 JUNOS Base OS boot [9.6B1.8]
 JUNOS Base OS Software Suite [9.6B1.8]
 JUNOS Kernel Software Suite [9.6B1.8]
 JUNOS Crypto Software Suite [9.6B1.8]
 JUNOS Packet Forwarding Engine Support (M/T Common) [9.6B1.8]
 JUNOS Packet Forwarding Engine Support (T-Series) [9.6B1.8]
 JUNOS Online Documentation [9.6B1.8]
 JUNOS Voice Services Container package [9.6B1.8]
 JUNOS Border Gateway Function package [9.6B1.8]
 JUNOS Services ACL Container package [9.6B1.8]
 JUNOS Services LL-PDF Container package [9.6B1.8]
 JUNOS Services Stateful Firewall [9.6B1.8]
 JUNOS AppId Services [9.6B1.8]
 JUNOS IDP Services [9.6B1.8]
 JUNOS Routing Software Suite [9.6B1.8]

lcc0-re1:

 Hostname: z8-lcc0-re1
 Model: t640
 JUNOS Base OS boot [9.6B1.8]
 JUNOS Base OS Software Suite [9.6B1.8]
 JUNOS Kernel Software Suite [9.6B1.8]
 JUNOS Crypto Software Suite [9.6B1.8]
 JUNOS Packet Forwarding Engine Support (M/T Common) [9.6B1.8]
 JUNOS Packet Forwarding Engine Support (T-Series) [9.6B1.8]
 JUNOS Online Documentation [9.6B1.8]
 JUNOS Voice Services Container package [9.6B1.8]
 JUNOS Border Gateway Function package [9.6B1.8]
 JUNOS Services ACL Container package [9.6B1.8]
 JUNOS Services LL-PDF Container package [9.6B1.8]
 JUNOS Services Stateful Firewall [9.6B1.8]
 JUNOS AppId Services [9.6B1.8]
 JUNOS IDP Services [9.6B1.8]
 JUNOS Routing Software Suite [9.6B1.8]
 JUNOS Installation Software [9.6B1.8]

lcc2-re0:

 Hostname: z8-lcc2-re0
 Model: t640
 JUNOS Base OS boot [9.6B1.8]
 JUNOS Base OS Software Suite [9.6B1.8]
 JUNOS Kernel Software Suite [9.6B1.8]
 JUNOS Crypto Software Suite [9.6B1.8]
 JUNOS Packet Forwarding Engine Support (M/T Common) [9.6B1.8]
 JUNOS Packet Forwarding Engine Support (T-Series) [9.6B1.8]
 JUNOS Online Documentation [9.6B1.8]
 JUNOS Voice Services Container package [9.6B1.8]
 JUNOS Border Gateway Function package [9.6B1.8]

```

JUNOS Services AACL Container package [9.6B1.8]
JUNOS Services LL-PDF Container package [9.6B1.8]
JUNOS Services Stateful Firewall [9.6B1.8]
JUNOS AppId Services [9.6B1.8]
JUNOS IDP Services [9.6B1.8]
JUNOS Routing Software Suite [9.6B1.8]

lcc2-re1:
-----
Hostname: z8-lcc2-re1
Model: t640
JUNOS Base OS boot [9.6B1.8]
JUNOS Base OS Software Suite [9.6B1.8]
JUNOS Kernel Software Suite [9.6B1.8]
JUNOS Crypto Software Suite [9.6B1.8]
JUNOS Packet Forwarding Engine Support (M/T Common) [9.6B1.8]
JUNOS Packet Forwarding Engine Support (T-Series) [9.6B1.8]
JUNOS Online Documentation [9.6B1.8]
JUNOS Voice Services Container package [9.6B1.8]
JUNOS Border Gateway Function package [9.6B1.8]
JUNOS Services AACL Container package [9.6B1.8]
JUNOS Services LL-PDF Container package [9.6B1.8]
JUNOS Services Stateful Firewall [9.6B1.8]
JUNOS AppId Services [9.6B1.8]
JUNOS IDP Services [9.6B1.8]
JUNOS Routing Software Suite [9.6B1.8]

```

Solution Different versions of the Junos OS can have incompatible message formats especially if you turn on GRES. Because the steps in the upgrade process include changing mastership, running the same version of software is recommended. For information about upgrading a routing matrix with a TX Matrix router (**scc**) and T640 (**lcc**) routers, see [“Upgrading the Software for a Routing Matrix with a TX Matrix Router” on page 59](#).

Log directly into the Routing Engine with the different Junos version and issue the CLI **request system software add** command with the appropriate Junos version. For example:

```

user@host-re1> request system software add
/var/tmp/jinstall-9.6B1.8-domestic-signed.tgz

```

When all the Routing Engines are running the same version of the Junos OS, try the upgrade again.

To log in to other Routing Engines, issue the **request routing-engine login** command in the appropriate format for your situation. Below are some examples of the version of the command you might use:

```

user@host-re1> request routing-engine login other-routing-engine
user@host-re1> request routing-engine login lcc 2 re1

```

- Related Documentation**
- [Upgrading the Software for a Routing Matrix with a TX Matrix Router on page 59](#)
 - [Troubleshooting Insufficient Space or DRAM Errors During Software Upgrade of a Routing Matrix with a TX Matrix Router on page 78](#)
 - [Overview of the Routing Matrix with a TX Matrix Router on page 15](#)

- [Example: Routing Matrix with a TX Matrix Router Configuration on page 30](#)

CHAPTER 6

Operational Commands

- `show chassis alarms`
- `show chassis craft-interface`
- `show chassis hardware`
- `show chassis fpc`
- `show chassis lccs`
- `show chassis location`
- `show chassis routing-engine`
- `show chassis sibs`
- `show route summary`
- `show system uptime`
- `show version`

show chassis alarms

List of Syntax [Syntax on page 88](#)
 [Syntax \(TX Matrix Routers\) on page 88](#)
 [Syntax \(TX Matrix Plus Routers\) on page 88](#)
 [Syntax \(MX Series Routers\) on page 88](#)
 [Syntax \(MX104, MX2010, MX2020, and MX2008 3D Universal Edge Routers\) on page 88](#)
 [Syntax \(MX10003 and MX204\) on page 88](#)
 [Syntax \(QFX Series\) on page 88](#)
 [Syntax \(OCX Series\) on page 88](#)
 [Syntax \(PTX Series Packet Transport Routers\) on page 88](#)
 [Syntax \(ACX Series Universal Access Routers\) on page 88](#)

Syntax `show chassis alarms`

Syntax (TX Matrix Routers) `show chassis alarms`
 `<lcc number | scc>`

Syntax (TX Matrix Plus Routers) `show chassis alarms`
 `<lcc number | sfc number>`

Syntax (MX Series Routers) `show chassis alarms`
 `<all-members>`
 `<local>`
 `<member member-id>`

Syntax (MX104, MX2010, MX2020, and MX2008 3D Universal Edge Routers) `show chassis alarms`
 `<satellite [slot-id slot-id]>`

Syntax (MX10003 and MX204) `show chassis alarms`

Syntax (QFX Series) `show chassis alarms`
 `<interconnect-device name>`
 `<node-device name>`

Syntax (OCX Series) `show chassis alarms`

Syntax (PTX Series Packet Transport Routers) `show chassis alarms`

Syntax (ACX Series Universal Access Routers) `show chassis alarms`

| | |
|----------------------------|--|
| Release Information | <p>Command introduced before Junos OS Release 7.4.</p> <p>Command introduced in Junos OS Release 9.0 for EX Series switches.</p> <p>sfc option introduced in Junos OS Release 9.6 for the TX Matrix Plus router.</p> <p>Command introduced in Junos OS Release 11.1 for the QFX Series.</p> <p>Command introduced in Junos OS Release 12.1 for the PTX Series Packet Transport Routers.</p> <p>Command introduced in Junos OS Release 12.2 for the ACX Series Universal Access Routers.</p> <p>Command introduced in Junos OS Release 12.3 for MX 2010 and MX2020 3D Universal Edge Routers.</p> <p>Command introduced in Junos OS Release 13.2 for MX104 3D Universal Edge Routers.</p> <p>Command introduced in Junos OS Release 14.1X53-D20 for the OCX Series.</p> <p>satellite option introduced in Junos OS Release 14.2R3 for Junos Fusion.</p> <p>Command introduced in Junos OS Release 17.2 for MX2008 3D Universal Edge Routers.</p> <p>Command introduced in Junos OS Release 17.2 for PTX10008 Routers.</p> <p>Command introduced in Junos OS Release 17.3 for MX150 Router Appliance.</p> <p>Command introduced in Junos OS Release 17.3 for MX10003 3D Universal Edge Routers.</p> <p>Command introduced in Junos OS Release 17.4 for MX204 3D Universal Edge Routers.</p> |
| Description | Display information about the conditions that have been configured to trigger alarms. |
| Options | <p>none—Display information about the conditions that have been configured to trigger alarms.</p> <p>all-members—(MX Series routers only) (Optional) Display information about alarm conditions for all the member routers of the Virtual Chassis configuration.</p> <p>interconnect-device <i>name</i>—(QFabric systems only) (Optional) Display information about alarm conditions for the Interconnect device.</p> <p>lcc <i>number</i>—(TX Matrix router and TX Matrix Plus router only) (Optional) Line-card chassis number.</p> <p>Replace <i>number</i> with the following values depending on the LCC configuration:</p> <ul style="list-style-type: none"> • 0 through 3, when T640 routers are connected to a TX Matrix router in a routing matrix. • 0 through 3, when T1600 routers are connected to a TX Matrix Plus router in a routing matrix. • 0 through 7, when T1600 routers are connected to a TX Matrix Plus router with 3D SIBs in a routing matrix. • 0, 2, 4, or 6, when T4000 routers are connected to a TX Matrix Plus router with 3D SIBs in a routing matrix. <p>local—(MX Series routers only) (Optional) Display information about alarm conditions for the local Virtual Chassis member.</p> |

member *member-id*—(MX Series routers only) (Optional) Display information about alarm conditions for the specified member of the Virtual Chassis configuration. Replace *member-id* variable with a value of 0 or 1.

node-device *name*—(QFabric systems only) (Optional) Display information about alarm conditions for the Node device.

satellite [*slot-id slot-id*]—(Junos Fusion only) (Optional) Display information about alarm conditions for the specified satellite device in a Junos Fusion, or for all satellite devices in the Junos Fusion if no satellite devices are specified.

scc—(TX Matrix router only) (Optional) Show information about the TX Matrix router (switch-card chassis).

sfc *number*—(TX Matrix Plus router only) (Optional) Show information about the respective TX Matrix Plus router, which is the switch-fabric chassis. Replace *number* variable with 0.

Additional Information Chassis alarms are preset. You cannot modify them.

You cannot clear the alarms for chassis components. Instead, you must remedy the cause of the alarm. When a chassis alarm LED is lit, it indicates that you are running the router or switch in a manner that we do not recommend.

On routers, you can manually silence external devices connected to the alarm relay contacts by pressing the alarm cutoff button, located on the craft interface. Silencing the device does not remove the alarm messages from the display (if present on the router) or extinguish the alarm LEDs. In addition, new alarms that occur after you silence an external device reactivate the external device.



NOTE: MX10003 routers do not support craft interface.

In Junos OS release 11.1 and later, alarms for fans also show the slot number of the fans in the CLI output.

In Junos OS Release 11.2 and later, the command output on EX8200 switches shows the detailed location (**Plane/FPC/PFE**) for link errors in the chassis.

In Junos OS Release 10.2 and later, an alarm is shown on T Series routers for a standby SONET Clock Generator (SCG) that is offline or absent.

You may often see the following error messages, in which only the error code is shown and no other information is provided:

```
Apr 12 08:04:10 send: red alarm set, device FPC 6, reason FPC 6 Major Errors
- Error code: 257
Apr 12 08:04:19 send: red alarm set, device FPC 1, reason FPC 1 Major Errors
- Error code: 559
```

To understand what CM_ALARM error codes mean, you need to first identify the structure of the CM Alarm codes. A CM_ALARM code has the following structure:

| Bits: | Error type: |
|-------|-------------|
| 1-31 | Major (1) |
| 0 | Minor (0) |

According to the table above, the LSB (bit 0) identifies the **Error Type** (major alarm, if the bit is set and minor alarm if the bit is unset). The rest of the bits (1 - 31) identify the actual error code.

Take an example of the following error code, which was logged on a T1600:

```
Apr 12 08:04:10 send: red alarm set, device FPC 1, reason FPC 1 Major Errors
- Error code: 559
```

First, you have to convert 559 to binary; that is **100010111**. The LSB in this case is 1, which means that this is a major alarm. After removing the LSB, you are left with **10001011**, which is equal to 279 in decimal. This is the actual error code, its meaning can be found from the following list:

| Chip Type: L Chip | Code |
|--|------|
| CMALARM_LCHIP_LOUT_DESRD_PARITY_ERR | 1 |
| CMALARM_LCHIP_LOUT_DESRD_UNINIT_ERR | 2 |
| CMALARM_LCHIP_LOUT_DESRD_ILLEGALLINK_ERR | 3 |
| CMALARM_LCHIP_LOUT_DESRD_ILLEGALSIZERR | 4 |
| CMALARM_LCHIP_LOUT_HDRF_TOERR_ERR | 5 |
| CMALARM_LCHIP_LOUT_HDRF_PARITY_ERR | 6 |
| CMALARM_LCHIP_LOUT_HDRF_UCERR_ERR | 7 |
| CMALARM_LCHIP_LOUT_NLIF_CRCDROP_ERR | 8 |
| CMALARM_LCHIP_LOUT_NLIF_CRCERR_ERR | 9 |
| CMALARM_LCHIP_UCODE_TIMEOUT_ERR | 10 |
| CMALARM_LCHIP_LIN_SRCTL_ACCT_DROP_ERR | 11 |
| CMALARM_LCHIP_LIN_SRCTL_ACCT_ADDR_SIZE_ERR | 12 |
| CMALARM_LCHIP_SRAM_PARITY_ERR | 13 |

| | |
|---|-------------|
| CMALARM_LCHIP_UCODE_OVFLW_ERR | 14 |
| CMALARM_LCHIP_LOUT_HDRF_MTU_ERR | 15 |
| <hr/> | |
| Chip Type: M Chip | Code |
| CMALARM_MCHIP_ECC_UNCORRECT_ERR | 128 |
| <hr/> | |
| Chip Type: N Chip | Code |
| CMALARM_NCHIP_RDDMA_JBUS_TIMEOUT_ERR | 256 |
| CMALARM_NCHIP_RDDMA_FIFO_OVFLW_ERR | 257 |
| CMALARM_NCHIP_RDDMA_FIFO_UNFLW_ERR | 258 |
| CMALARM_NCHIP_RDDMA_SIZE_ERR | 259 |
| CMALARM_NCHIP_RDDMA_JBUS_CRC_ERR | 260 |
| CMALARM_NCHIP_WRDMA_PKTR_ERR | 261 |
| CMALARM_NCHIP_WRDMA_PKT_CRC_ERR | 262 |
| CMALARM_NCHIP_WRDMA_JBUS_TIMEOUT_ERR | 263 |
| CMALARM_NCHIP_WRDMA_FIFO_OVFLW_ERR | 264 |
| CMALARM_NCHIP_WRDMA_FIFO_UNFLW_ERR | 265 |
| CMALARM_NCHIP_WRDMA_PKT_LEN_ERR | 266 |
| CMALARM_NCHIP_WRDMA_JBUS_CRC_ERR | 267 |
| CMALARM_NCHIP_PKTR_DMA_AGE_ERR | 268 |
| CMALARM_NCHIP_PKTR_ICELLSIG_ERR | 269 |
| CMALARM_NCHIP_PKTR_FTTL_ERR | 270 |
| CMALARM_NCHIP_RODR_OFFSET_OVFLW_ERR | 271 |
| CMALARM_NCHIP_PKTR_TMO_CELL_ERR | 272 |
| CMALARM_NCHIP_PKTR_TMO_OUTRANGE_ERR | 273 |
| CMALARM_NCHIP_PKTR_MD_REQUEST_Q_OVFLW_ERR | 274 |
| CMALARM_NCHIP_PKTR_DMA_BUFFER_OVFLW_ERR | 275 |

| | |
|-----------------------------------|-------------|
| CMALARM_NCHIP_PKTR_GRT_OVFLW_ERR | 276 |
| CMALARM_NCHIP_FRQ_ERR | 277 |
| CMALARM_NCHIP_RODR_IN_Q_OVFLW_ERR | 278 |
| CMALARM_NCHIP_DBUF_CRC_ERR | 279 |
| <hr/> | |
| Chip Type: R Chip | Code |
| CMALARM_RCHIP_SRAM_PARITY_ERR | 512 |
| <hr/> | |
| Chip Type: R Chip | Code |
| CMALARM_ICHIP_WO_DESRD_ID_ERR | 601 |
| CMALARM_ICHIP_WO_DESRD_DATA_ERR | 602 |
| CMALARM_ICHIP_WO_DESRD_OFLOW_ERR | 603 |
| CMALARM_ICHIP_WO_HDRF_UCERR_ERR | 604 |
| CMALARM_ICHIP_WO_HDRF_MTUERR_ERR | 605 |
| CMALARM_ICHIP_WO_HDRF_PARITY_ERR | 606 |
| CMALARM_ICHIP_WO_HDRF_TOERR_ERR | 607 |
| CMALARM_ICHIP_WO_IP_CRC_ERR | 608 |
| CMALARM_ICHIP_WO_IP_INTER_ERR | 609 |
| CMALARM_ICHIP_WI_WAN_TIMEOUT_ERR | 625 |
| CMALARM_ICHIP_WI_FAB_TIMEOUT_ERR | 626 |
| CMALARM_ICHIP_RLDRAM_BIST_ERR | 630 |
| CMALARM_ICHIP_SDRAM_BIST_ERR | 631 |
| CMALARM_ICHIP_RLDRAM_PARITY_ERR | 632 |
| CMALARM_ICHIP_SDRAM_UNCORRECT_ERR | 633 |
| CMALARM_ICHIP_SDRAM_CORRECT_ERR | 634 |
| CMALARM_ICHIP_FUSE_DONE_ERR | 635 |

According to the table above, the **279** error code corresponds to **CMALARM_NCHIP_DBUF_CRC_ERR**; this means that new CRC errors were seen on the NCHIP of this particular FPC, which is FPC as per the logs.

If you do not want to convert decimal to binary and vice versa, you may use the following shortcut:

For major alarms, the **Actual Error Code = (Error Code - 1)/2**, where **Error Code** is the code that you get in the log message. For example, if you get the following log:

```
Apr 12 08:04:10 send: red alarm set, device FPC 6, reason FPC 6 Major
Errors - Error code: 257
```

Actual Error Code = $(257-1)/2 = 128$. Similarly, for minor alarms, Actual Error Code = $(\text{Error Code})/2$

**Required Privilege
Level**

view

**Related
Documentation**

- *Configuring an RMON Alarm Entry and Its Attributes*
- *Chassis Conditions That Trigger Alarms*

List of Sample Output

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[show chassis alarms \(No Alarms Active\) on page 95](#)
[show chassis alarms \(Fan Tray\) on page 95](#)
[show chassis alarms \(MX150\) on page 96](#)
[show chassis alarms \(MX104 Router\) on page 96](#)
[show chassis alarms \(MX2010 Router\) on page 96](#)
[show chassis alarms \(MX2020 Router\) on page 96](#)
[show chassis alarms \(MX10003 Router\) on page 96](#)
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[show chassis alarms \(MX960, MX480, and MX240 Routers showing Major CB Failure\) on page 97](#)
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[show chassis alarms \(Backup Routing Engine\) on page 101](#)
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[show chassis alarms \(Alarms Active on the QFX Series and OCX Series Switches\) on page 101](#)
[show chassis alarms node-device \(Alarms Active on the QFabric System\) on page 101](#)
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[show chassis alarms \(Mix of PDUs Alarm on a PTX5000 Packet Transport Router with FPC2-PTX-P1A\) on page 103](#)
[show chassis alarms \(PDU Converter Failed Alarm on a PTX5000 Packet Transport Router with FPC2-PTX-P1A\) on page 103](#)
[show chassis alarms \(No Power for System Alarm on a PTX5000 Packet Transport Router with FPC2-PTX-P1A\) on page 103](#)
[show chassis alarms \(Alarms Active on an ACX2000 Universal Access Router\) on page 103](#)
[show chassis alarms \(Active Alarm to Indicate Status of the Bad SCB Clock on MX Series\) on page 104](#)
[show chassis alarms \(Alarms active on a PTX1000 Packet Transport Router\) on page 104](#)
[show chassis alarms \(MX10003 Router\) on page 104](#)

Output Fields [Table 5 on page 95](#) lists the output fields for the **show chassis alarms** command. Output fields are listed in the approximate order in which they appear.

Table 5: show chassis alarms Output Fields

| Field Name | Field Description |
|-------------|---|
| Alarm time | Date and time the alarm was first recorded. |
| Class | Severity class for this alarm: Minor or Major . |
| Description | Information about the alarm. |

Sample Output

show chassis alarms (Alarms Active)

```

user@host> show chassis alarms
3 alarms are currently active
Alarm time      Class  Description
2000-02-07 10:12:22 UTC Major fxp0: ethernet link down
2000-02-07 10:11:54 UTC Minor YELLOW ALARM - PEM 1 Removed
2000-02-07 10:11:03 UTC Minor YELLOW ALARM - Lower Fan Tray Removed

```

show chassis alarms (No Alarms Active)

```

user@host> show chassis alarms
No alarms are currently active

```

show chassis alarms (Fan Tray)

```

user@host> show chassis alarms

```

```
4 alarms currently active
Alarm time      Class Description
2010-11-11 20:27:38 UTC Major Side Fan Tray 7 Failure
2010-11-11 20:27:13 UTC Minor Side Fan Tray 7 Overspeed
2010-11-11 20:27:13 UTC Major Side Fan Tray 5 Failure
2010-11-11 20:27:13 UTC Major Side Fan Tray 0 Failure
```

show chassis alarms (MX150)

```
user@host > show chassis alarms
1 alarms currently active
Alarm time      Class Description
2016-06-04 01:49:43 PDT Major Fan Tray 1 Fan 0 failed
```

show chassis alarms (MX104 Router)

```
user@host > show chassis alarms
1 alarms currently active
Alarm time      Class Description
2013-06-05 14:43:31 IST Minor Backup RE Active
```

show chassis alarms (MX2010 Router)

```
user@host> show chassis alarms
7 alarms currently active
Alarm time      Class Description
2012-08-07 00:46:06 PDT Major Fan Tray 2 Failure
2012-08-06 18:24:36 PDT Minor Redundant feed missing for PSM 6
2012-08-06 07:41:04 PDT Minor Redundant feed missing for PSM 8
2012-08-04 02:42:06 PDT Minor Redundant feed missing for PSM 5
2012-08-03 21:14:24 PDT Minor Loss of communication with Backup RE
2012-08-03 12:26:03 PDT Minor Redundant feed missing for PSM 4
2012-08-03 10:40:18 PDT Minor Redundant feed missing for PSM 7
```

show chassis alarms (MX2020 Router)

```
user@host> show chassis alarms
1 alarms currently active
Alarm time      Class Description
2012-10-03 12:14:59 PDT Minor Plane 0 not online
```

show chassis alarms (MX10003 Router)

```
user@host> show chassis alarms

9 alarms currently active
Alarm time      Class Description
2017-07-13 21:50:31 PDT Major FPC 1 Temperature Hot
2017-07-13 21:50:04 PDT Minor FPC 1 PIC 1 Invalid port profile configuration
2017-07-13 21:49:13 PDT Minor FPC 1 PIC 0 Invalid port profile configuration
2017-07-13 21:48:54 PDT Major FPC 0 Temperature Hot
2017-07-13 21:43:57 PDT Minor PEM 5 Not Present
2017-07-13 21:43:57 PDT Minor PEM 4 Not Present
2017-07-13 21:43:54 PDT Minor CB 1 Voltage Sensor ADS7830_0x4B Sensor Failed
2017-07-13 21:43:54 PDT Minor CB 0 Voltage Sensor ADS7830_0x4B Sensor Failed
2017-07-13 21:43:31 PDT Minor Loss of communication with Backup RE
```


show chassis alarms (MX204 Router)

```
user@host> show chassis alarms

1 alarms currently active
Alarm time           Class Description
2017-11-05 22:13:03 PST Major PEM 0 Not Present
```

show chassis alarms (MX2008 Router)

```
user@host>show chassis alarms
No alarms currently active
```

show chassis alarms (MX960, MX480, and MX240 Routers showing Major CB Failure)

A major CB 0 failure alarm occurs in the event of a bad CB (unknown or mismatched CBs do not trigger this alarm in Junos Release OS 12.3R9 and later). Following GRES or recovery, if the hardware issue persists, the traffic moves to the good CB and continues. If the alarm was triggered by something transient like a power zone budget on GRES, bringing the CB back online can clear the alarm. Otherwise, replace the bad CB. Note that fabric link speed is not impacted by an offline SCB. The alarm might be raised on CB0, CB1, and CB2.

```
user@host> show chassis alarms
6 alarms currently active
Alarm time           Class Description
2014-10-31 16:49:41 EDT Major PEM 3 Not OK
2014-10-31 16:49:41 EDT Major PEM 2 Not OK
2014-10-31 16:49:31 EDT Major CB 0 Failure
2014-10-31 16:49:31 EDT Minor CB 0 Fabric Chip 0 Not Online
2014-10-31 16:49:31 EDT Minor CB 0 Fabric Chip 1 Not Online
2014-10-31 16:49:31 EDT Minor Backup RE Active
```

show chassis alarms (PTX10008 Router)

```
user@host>show chassis alarms
12 alarms currently active
Alarm time           Class Description
2017-05-09 01:38:55 PDT Minor Loss of communication with Backup RE
2017-05-05 06:49:57 PDT Major FPC 5 LCPU Temp Sensor Access Failed
2017-05-05 06:49:57 PDT Major FPC 5 PE2 Temp Sensor Hot
2017-05-05 06:49:57 PDT Major FPC 5 PE1 Temp Sensor Hot
2017-05-05 06:49:57 PDT Major FPC 5 PE0 Temp Sensor Hot
2017-05-05 06:49:57 PDT Major FPC 5 Exhaust-C Temp Sensor Hot
2017-05-05 06:49:57 PDT Major FPC 5 Exhaust-B Temp Sensor Hot
2017-05-05 06:49:57 PDT Major FPC 5 Exhaust-A Temp Sensor Hot
2017-05-05 06:49:57 PDT Major FPC 5 Intake-B Temp Sensor Access Failed
2017-05-05 06:49:57 PDT Major FPC 5 Intake-A Temp Sensor Access Failed
2017-05-05 06:49:57 PDT Major Fan Tray 0 Fan 5 running at lower speed
2017-05-05 06:49:57 PDT Major Fan Tray 0 Fan 4 running at lower speed
```

show chassis alarms (T4000 Router)

```
user@host> show chassis alarms
9 alarms currently active
Alarm time           Class Description
2007-06-02 01:41:10 UTC Minor RE 0 Not Supported
2007-06-02 01:41:10 UTC Minor CB 0 Not Supported
```

```

2007-06-02 01:41:10 UTC Minor Mixed Master and Backup RE types
2007-05-30 19:37:33 UTC Major SPMB 1 not online
2007-05-30 19:37:29 UTC Minor Front Bottom Fan Tray Absent
2007-05-30 19:37:13 UTC Major PEM 1 Input Failure
2007-05-30 19:37:13 UTC Major PEM 0 Not OK
2007-05-30 19:37:03 UTC Major PEM 0 Improper for Platform
2007-05-30 19:37:03 UTC Minor Backup RE Active

```

show chassis alarms (Unreachable Destinations Present on a T Series Router)

```

user@host> show chassis alarms
10 alarms currently active
Alarm time          Class Description
2011-08-30 18:43:53 PDT Major FPC 7 has unreachable destinations
2011-08-30 18:43:53 PDT Major FPC 5 has unreachable destinations
2011-08-30 18:43:52 PDT Major FPC 3 has unreachable destinations
2011-08-30 18:43:52 PDT Major FPC 2 has unreachable destinations
2011-08-30 18:43:52 PDT Minor SIB 0 Not Online
2011-08-30 18:43:33 PDT Minor SIB 4 Not Online
2011-08-30 18:43:28 PDT Minor SIB 3 Not Online
2011-08-30 18:43:05 PDT Minor SIB 2 Not Online
2011-08-30 18:43:28 PDT Minor SIB 1 Not Online
2011-08-30 18:43:05 PDT Major PEM 1 Not Ok

```

show chassis alarms (FPC Offline Due to Unreachable Destinations on a T Series Router)

```

user@host> show chassis alarms
10 alarms currently active
Alarm time          Class Description
2011-08-30 18:43:53 PDT Major FPC 7 offline due to unreachable destinations
2011-08-30 18:43:53 PDT Major FPC 5 offline due to unreachable destinations
2011-08-30 18:43:52 PDT Major FPC 3 offline due to unreachable destinations
2011-08-30 18:43:52 PDT Major FPC 2 offline due to unreachable destinations
2011-08-30 18:43:52 PDT Minor SIB 0 Not Online
2011-08-30 18:43:33 PDT Minor SIB 4 Not Online
2011-08-30 18:43:28 PDT Minor SIB 3 Not Online
2011-08-30 18:43:05 PDT Minor SIB 2 Not Online
2011-08-30 18:43:28 PDT Minor SIB 1 Not Online
2011-08-30 18:43:05 PDT Major PEM 1 Not Ok

```

show chassis alarms (SCG Absent on a T Series Router)

```

user@host> show chassis alarms
4 alarms currently active
Alarm time          Class Description
2011-01-23 21:42:46 PST Major SCG 0 NO EXT CLK MEAS-BKUP SCG ABS

```

show chassis alarms (Alarms Active on a TX Matrix Router)

```

user@host> show chassis alarms
scc-re0:
-----
8 alarms currently active
Alarm time          Class Description
2004-08-05 18:43:53 PDT Minor LCC 0 Minor Errors
2004-08-05 18:43:53 PDT Minor SIB 3 Not Online
2004-08-05 18:43:52 PDT Major SIB 2 Absent
2004-08-05 18:43:52 PDT Major SIB 1 Absent
2004-08-05 18:43:52 PDT Major SIB 0 Absent
2004-08-05 18:43:33 PDT Major LCC 2 Major Errors

```

```

2004-08-05 18:43:28 PDT Major LCC 0 Major Errors
2004-08-05 18:43:05 PDT Minor LCC 2 Minor Errors
lcc0-re0:

```

```

-----
5 alarms currently active

```

| Alarm time | Class | Description |
|-------------------------|-------|------------------|
| 2004-08-05 18:43:53 PDT | Minor | SIB 3 Not Online |
| 2004-08-05 18:43:49 PDT | Major | SIB 2 Absent |
| 2004-08-05 18:43:49 PDT | Major | SIB 1 Absent |
| 2004-08-05 18:43:49 PDT | Major | SIB 0 Absent |
| 2004-08-05 18:43:28 PDT | Major | PEM 0 Not OK |

```

lcc2-re0:

```

```

-----
5 alarms currently active

```

| Alarm time | Class | Description |
|-------------------------|-------|------------------|
| 2004-08-05 18:43:35 PDT | Minor | SIB 3 Not Online |
| 2004-08-05 18:43:33 PDT | Major | SIB 2 Absent |
| 2004-08-05 18:43:33 PDT | Major | SIB 1 Absent |
| 2004-08-05 18:43:33 PDT | Major | SIB 0 Absent |
| 2004-08-05 18:43:05 PDT | Minor | PEM 1 Absent |

show chassis alarms (TX Matrix Plus router with 3D SIBs)

```

user@host> show chassis alarms
sfc0-re0:

```

```

-----
Alarm time          Class  Description
2014-04-08 14:35:13 IST  Minor  FPM 0 SFC Config Size Changed
2014-04-08 14:32:58 IST  Major  Fan Tray Failure
2014-04-08 14:31:53 IST  Major  SIB F13 6 Fault
2014-04-08 14:31:43 IST  Major  SIB F13 11 Fault
2014-04-08 14:31:08 IST  Minor  Check SIB F13 12 CXP 14 Fbr Cbl
2014-04-08 14:31:08 IST  Minor  Check SIB F13 12 CXP 8 Fbr Cbl
2014-04-08 14:31:08 IST  Minor  Check SIB F13 12 CXP 3 Fbr Cbl
2014-04-08 14:31:08 IST  Major  SIB F13 12 CXP 15 fault
2014-04-08 14:31:08 IST  Minor  SIB F13 12 CXP 14 LOL
2014-04-08 14:31:08 IST  Minor  Check SIB F13 12 CXP 14
2014-04-08 14:31:08 IST  Major  SIB F13 12 CXP 10 fault
2014-04-08 14:31:08 IST  Minor  SIB F13 12 CXP 8 LOL
2014-04-08 14:31:08 IST  Minor  Check SIB F13 12 CXP 8
2014-04-08 14:31:08 IST  Major  SIB F13 12 CXP 7 fault
2014-04-08 14:31:08 IST  Major  SIB F13 12 CXP 4 fault
2014-04-08 14:31:08 IST  Minor  SIB F13 12 CXP 3 LOL
2014-04-08 14:31:08 IST  Minor  Check SIB F13 12 CXP 3
2014-04-08 14:31:08 IST  Minor  Check SIB F13 6 CXP 14 Fbr Cbl
2014-04-08 14:31:08 IST  Minor  Check SIB F13 6 CXP 12 Fbr Cbl
2014-04-08 14:31:08 IST  Minor  Check SIB F13 6 CXP 8 Fbr Cbl
2014-04-08 14:31:08 IST  Minor  Check SIB F13 6 CXP 6 Fbr Cbl
2014-04-08 14:31:08 IST  Minor  Check SIB F13 6 CXP 4 Fbr Cbl
2014-04-08 14:31:08 IST  Minor  Check SIB F13 6 CXP 2 Fbr Cbl
2014-04-08 14:31:08 IST  Minor  Check SIB F13 6 CXP 0 Fbr Cbl
2014-04-08 14:31:08 IST  Minor  SIB F13 6 CXP 14 LOL
2014-04-08 14:31:08 IST  Minor  Check SIB F13 6 CXP 14
2014-04-08 14:31:08 IST  Minor  SIB F13 6 CXP 12 LOL
2014-04-08 14:31:08 IST  Minor  Check SIB F13 6 CXP 12
2014-04-08 14:31:08 IST  Major  SIB F13 6 CXP 10 fault
2014-04-08 14:31:08 IST  Minor  SIB F13 6 CXP 8 LOL
2014-04-08 14:31:08 IST  Minor  Check SIB F13 6 CXP 8
2014-04-08 14:31:08 IST  Minor  SIB F13 6 CXP 6 LOL
2014-04-08 14:31:08 IST  Minor  Check SIB F13 6 CXP 6

```

```

2014-04-08 14:31:08 IST Minor SIB F13 6 CXP 4 LOL
2014-04-08 14:31:08 IST Minor Check SIB F13 6 CXP 4
2014-04-08 14:31:08 IST Minor SIB F13 6 CXP 2 LOL
2014-04-08 14:31:08 IST Minor Check SIB F13 6 CXP 2
2014-04-08 14:31:08 IST Minor SIB F13 6 CXP 0 LOL
2014-04-08 14:31:08 IST Minor Check SIB F13 6 CXP 0
2014-04-08 14:31:08 IST Minor SIB F13 12 CXP 14 XC HSL Link Error
2014-04-08 14:29:27 IST Minor LCC 0 Minor Errors
2014-04-08 14:28:37 IST Major LCC 0 Major Errors
2014-04-08 14:28:37 IST Major LCC 2 Major Errors
2014-04-08 14:28:37 IST Minor LCC 2 Minor Errors
2014-04-08 14:28:24 IST Major SIB F2S 4/6 Absent
2014-04-08 14:28:24 IST Major SIB F2S 4/4 Absent
2014-04-08 14:28:24 IST Major SIB F2S 4/2 Absent
2014-04-08 14:28:24 IST Major SIB F2S 4/0 Absent
2014-04-08 14:28:24 IST Major SIB F2S 3/6 Absent
2014-04-08 14:28:24 IST Major SIB F2S 3/4 Absent
2014-04-08 14:28:24 IST Major SIB F2S 3/2 Absent
2014-04-08 14:28:24 IST Major SIB F2S 3/0 Absent
2014-04-08 14:28:24 IST Major SIB F13 9 Absent
2014-04-08 14:28:24 IST Major SIB F13 8 Absent
2014-04-08 14:28:24 IST Major SIB F13 7 Absent
2014-04-08 14:28:24 IST Major SIB F13 4 Absent
2014-04-08 14:28:24 IST Major SIB F13 1 Absent
2014-04-08 14:28:22 IST Major PEM 0 Input Failure
2014-04-08 14:28:22 IST Major PEM 0 Not OK

```

lcc0-re0:

12 alarms currently active

| Alarm time | Class | Description |
|-------------------------|-------|---|
| 2014-04-08 14:36:08 IST | Minor | CB 1 M/S Switch Changed |
| 2014-04-08 14:36:08 IST | Minor | CB 1 CHASSIS ID Changed |
| 2014-04-08 14:35:43 IST | Minor | CB 0 M/S Switch Changed |
| 2014-04-08 14:35:43 IST | Minor | CB 0 CHASSIS ID Changed |
| 2014-04-08 14:29:30 IST | Minor | SIB 4 Not Online |
| 2014-04-08 14:29:30 IST | Minor | SIB 3 Not Online |
| 2014-04-08 14:29:30 IST | Minor | SIB 2 Not Online |
| 2014-04-08 14:29:24 IST | Major | Rear Fan Tray Failure |
| 2014-04-08 14:29:24 IST | Major | Front Bottom Fan Tray Improper for Platform |
| 2014-04-08 14:29:24 IST | Major | Front Top Fan Tray Improper for Platform |
| 2014-04-08 14:28:37 IST | Major | SIB 4 Absent |
| 2014-04-08 14:28:37 IST | Major | SIB 3 Absent |

lcc2-re0:

12 alarms currently active

| Alarm time | Class | Description |
|-------------------------|-------|---|
| 2014-04-08 14:36:02 IST | Minor | CB 1 M/S Switch Changed |
| 2014-04-08 14:36:02 IST | Minor | CB 1 CHASSIS ID Changed |
| 2014-04-08 14:35:42 IST | Minor | CB 0 M/S Switch Changed |
| 2014-04-08 14:34:42 IST | Minor | CB 0 CHASSIS ID Changed |
| 2014-04-08 14:29:29 IST | Minor | SIB 0 CXP 7 Unsupported Optics |
| 2014-04-08 14:29:27 IST | Major | Front Bottom Fan Tray Improper for Platform |
| 2014-04-08 14:29:27 IST | Major | Front Top Fan Tray Improper for Platform |
| 2014-04-08 14:29:25 IST | Minor | SIB 4 Not Online |
| 2014-04-08 14:29:25 IST | Minor | SIB 3 Not Online |
| 2014-04-08 14:28:47 IST | Major | PEM 0 Not OK |
| 2014-04-08 14:28:36 IST | Major | SIB 2 Absent |
| 2014-04-08 14:28:36 IST | Minor | Host 0 Boot from alternate media |

```
lcc6-re0:
```

```
-----
2 alarms currently active
Alarm time          Class Description
2013-11-06 04:03:56 PST Minor SIB 1 CXP 0 XC HSL Link Error
2013-11-06 03:49:32 PST Major PEM 1 Not OK
```

show chassis alarms (Alarms on a T4000 Router After the enhanced-mode Statement is Enabled)

To enable improved virtual private LAN service (VPLS) MAC address learning on T4000 routers, you must include the **enhanced-mode** statement at the **[edit chassis network-services]** hierarchy level and reboot the router. When router reboots, only the T4000 Type 5 FPCs are required to be present on the router. If there are any other FPCs (apart from T4000 Type 5 FPCs) on the T4000 router, such FPCs become offline, and FPC misconfiguration alarms are generated. The **show chassis alarm** command output displays FPC misconfiguration (**FPC *fpc-slot* misconfig**) as the reason for the generation of the alarms.

```
user@host> show chassis alarms
2 alarms currently active
Alarm time          Class Description
2011-10-22 10:10:47 PDT Major FPC 1 misconfig
2011-10-22 10:10:46 PDT Major FPC 0 misconfig
```

show chassis alarms (Backup Routing Engine)

```
user@host> show chassis alarms
2 alarms are currently active
Alarm time          Class Description
2005-04-07 10:12:22 PDT Minor Host 1 Boot from alternate media
2005-04-07 10:11:54 PDT Major Host 1 compact-flash missing in Boot List
```

show chassis alarms (EX Series Switch)

```
user@switch> show chassis alarms
4 alarms currently active
Alarm time          Class Description
2014-03-12 15:36:09 UTC Minor Require a Fan Tray upgrade
2014-03-12 15:00:02 UTC Major PEM 0 Input Failure
2014-03-12 15:00:02 UTC Major PEM 0 Not OK
2014-03-12 14:59:51 UTC Minor Host 1 Boot from alternate media
```

show chassis alarms (Alarms Active on the QFX Series and OCX Series Switches)

```
user@switch> show chassis alarms
1 alarms currently active
Alarm time          Class Description
2012-03-05 2:10:24 UTC Major FPC 0 PEM 0 Airflow not matching Chassis Airflow
```

show chassis alarms node-device (Alarms Active on the QFabric System)

```
user@switch> show chassis alarms node-device Test
node-device ED3694
3 alarms currently active
Alarm time          Class Description
2011-08-24 16:04:15 UTC Major Test:fte-0/1/2: Link down
```

```

2011-08-24 16:04:14 UTC Major Test:fte-0/1/0: Link down
2011-08-24 14:21:14 UTC Major Test PEM 0 is not supported/powerd

```

show chassis alarms (Alarms Active on the QFabric System)

```

user@switch> show chassis alarms
IC-1:
-----
1 alarms currently active
Alarm time          Class Description
2011-08-24 16:04:15 UTC Minor Backup RE Active

Test:
-----
3 alarms currently active
Alarm time          Class Description
2011-08-24 16:04:15 UTC Major Test:fte-0/1/2: Link down
2011-08-24 16:04:14 UTC Major Test:fte-0/1/0: Link down
2011-08-24 14:21:14 UTC Major Test PEM 0 is not supported/powerd

SNG-0:
-----

NW-NG-0:
-----
1 alarms currently active
Alarm time          Class Description
2011-08-24 15:49:27 UTC Major Test PEM 0 is not supported/powerd

```

show chassis alarms (Alarms Active on an EX8200 Switch)

```

user@switch> show chassis alarms

6 alarms currently active
Alarm time          Class Description
2010-12-02 19:15:22 UTC Major Fan Tray Failure
2010-12-02 19:15:22 UTC Major Fan Tray Failure
2010-12-02 19:15:14 UTC Minor Check CB 0 Fabric Chip 1 on Plane/FPC/PFE: 1/5/0,
1/5/1, 1/5/2, 1/5/3, 1/7/0, 1/7/1, 1/7/2, 1/7/3, 2/5/0, 2/5/1, ...
2010-12-02 19:15:14 UTC Minor Check CB 0 Fabric Chip 0 on Plane/FPC/PFE: 1/5/0,
1/5/1, 1/5/2, 1/5/3, 1/7/0, 1/7/1, 1/7/2, 1/7/3, 2/5/0, 2/5/1, ...
2010-12-02 19:14:18 UTC Major PSU 1 Output Failure
2010-12-02 19:14:18 UTC Minor Loss of communication with Backup RE

```

show chassis alarms (Alarms Active on a PTX5000 Packet Transport Router)

```

user@host> show chassis alarms

23 alarms currently active
Alarm time          Class Description
2011-07-12 16:22:05 PDT Minor No Redundant Power for Rear Chassis
2011-07-12 16:22:05 PDT Major PDU 0 PSM 1 Not OK
2011-07-12 16:21:57 PDT Minor No Redundant Power for Fan 0-2
2011-07-12 16:21:57 PDT Major PDU 0 PSM 0 Not OK
2011-07-12 15:56:06 PDT Major PDU 1 PSM 2 Not OK
2011-07-12 15:56:06 PDT Minor No Redundant Power for FPC 0-7
2011-07-12 15:56:06 PDT Major PDU 0 PSM 3 Not OK
2011-07-12 15:28:20 PDT Major PDU 0 PSM 2 Not OK
2011-07-12 15:19:14 PDT Minor Backup RE Active

```

show chassis alarms (Mix of PDUs Alarm on a PTX5000 Packet Transport Router with FPC2-PTX-P1A)

All PDUs installed on a PTX5000 router must be of the same type. The **Mix of PDUs** or **Power Manager Non Operational** alarm is raised when different types of PDUs are installed on a PTX5000 router.

```
user@host> show chassis alarms
15 alarms currently active
Alarm time          Class Description
2013-03-19 23:03:53 PDT Minor No Redundant Power
2013-03-19 23:03:48 PDT Minor Mix of PDUs
2013-03-19 23:03:47 PDT Minor PDU 1 PSM 3 Absent
2013-03-19 23:03:47 PDT Minor PDU 1 PSM 2 Absent
2013-03-19 23:03:47 PDT Minor PDU 1 PSM 1 Absent
2013-03-19 23:03:47 PDT Minor PDU 1 PSM 0 Absent
2013-03-19 23:03:46 PDT Major No CG Online
```

show chassis alarms (PDU Converter Failed Alarm on a PTX5000 Packet Transport Router with FPC2-PTX-P1A)

The **PDU Converter Failed** alarm is raised when one or more 36 V booster converter of a DC PDU fails. If two or more 36 V booster converter fails, fan trays fail and the router might get over heated. Therefore, when this alarm is raised, check the PDU and replace it, if required.

```
user@host> show chassis alarms
11 alarms currently active
Alarm time          Class Description
2013-12-11 22:14:13 PST Minor No Redundant Power for System
2013-12-11 22:14:10 PST Major PDU 0 PSM 7 Not OK
2013-12-11 22:14:10 PST Major PDU 0 PSM 6 Not OK
2013-12-11 22:14:10 PST Major PDU 0 PSM 5 Not OK
2013-12-11 22:14:10 PST Major PDU 0 PSM 4 Not OK
2013-12-11 22:14:10 PST Major PDU 0 PSM 3 Not OK
2013-12-11 22:14:10 PST Major PDU 0 PSM 2 Not OK
2013-12-11 22:14:10 PST Major PDU 0 PSM 1 Not OK
2013-12-11 22:14:10 PST Major PDU 0 PSM 0 Not OK
2013-12-11 22:14:10 PST Major PDU 0 Not OK
2013-12-11 22:14:01 PST Major PDU 0 Converter Failed
```

show chassis alarms (No Power for System Alarm on a PTX5000 Packet Transport Router with FPC2-PTX-P1A)

```
user@host> show chassis alarms
8 alarms currently active
Alarm time          Class Description
2013-11-19 01:58:41 PST Major No Power for System
2013-11-19 01:58:37 PST Major PDU 0 PSM 1 Not OK
2013-11-19 01:56:46 PST Major PDU 0 PSM 2 Not OK
2013-11-19 01:54:26 PST Major PDU 0 PSM 3 Not OK
2013-11-19 01:53:30 PST Major PDU 1 PSM 3 Not OK
2013-11-19 01:53:29 PST Major PDU 1 PSM 2 Not OK
2013-11-19 01:53:29 PST Major PDU 1 PSM 1 Not OK
2013-11-19 01:53:29 PST Major PDU 1 PSM 0 Not OK
```

show chassis alarms (Alarms Active on an ACX2000 Universal Access Router)

```
user@host> show chassis alarms
7 alarms currently active
Alarm time          Class Description
```

```
2012-05-22 11:19:09 UTC Major xe-0/3/1: Link down
2012-05-22 11:19:09 UTC Major xe-0/3/0: Link down
2012-05-22 11:19:09 UTC Major ge-0/1/7: Link down
2012-05-22 11:19:09 UTC Major ge-0/1/6: Link down
2012-05-22 11:19:09 UTC Major ge-0/1/3: Link down
2012-05-22 11:19:09 UTC Major ge-0/1/2: Link down
2012-05-22 11:19:09 UTC Major ge-0/1/1: Link down
```

show chassis alarms (Active Alarm to Indicate Status of the Bad SCB Clock on MX Series)

```
user@host> show chassis alarms
1 alarm currently active
Alarm time          Class Description
2013-08-06 07:48:35 PDT Major CB 0 19.44 MHz clock failure
```

show chassis alarms (Alarms active on a PTX1000 Packet Transport Router)

```
user@host> show chassis alarms
2 alarms currently active
Alarm time          Class Description
2004-08-10 00:55:49 UTC Major PEM 1 Not Present
2004-08-10 00:55:49 UTC Major PEM 0 Not Present
```

show chassis alarms (MX10003 Router)

If LCMD is down on the backup RE, then the following alarm is seen on the Master.

```
user@host> show chassis alarms
1 alarm currently active
Alarm time          Class Description
2017-05-09 13:26:27 PDT Major VMHost RE 1 host application failed
```

If LCMD is down on the master, then following alarms are displayed.

```
user@host> show chassis alarms
3 alarms currently active
Alarm time          Class Description
2017-05-10 14:12:21 PDT Major VMHost RE 0 host application failed
2017-05-10 14:12:16 PDT Minor LCM Peer Absent
2017-05-09 13:26:27 PDT Major VMHost RE 1 host application failed
```

If the LCMD process is crashing on the master, the system will switchover after one minute provided the backup RE LCMD connection is stable. The system will not switchover under the following conditions: if the backup RE LCMD connection is unstable or if the current master just gained mastership. When the master has just gained mastership, the switchover happens only after four minutes.

The LCM peer connection un-stable alarm is raised when the LCMD-CHASD IPC communication flaps three times within a small interval of two to three minutes. Once LCM peer connection un-stable alarm is raised, the connection status is monitored for two minutes.

```
user@host> show chassis alarms
7 alarms currently active
Alarm time          Class Description
2017-05-29 10:12:17 PDT Minor LCM Peer Connection un-stable
2017-05-29 09:04:17 PDT Minor PEM 8 Not Powered
2017-05-29 09:04:17 PDT Minor PEM 9 Not Powered
```



```

2017-05-29 09:04:17 PDT Minor PEM 7 Not Powered
2017-05-29 09:04:17 PDT Minor PEM 3 Not Powered
2017-05-29 09:04:17 PDT Minor PEM 0 Not Powered
2017-05-29 09:04:08 PDT Minor Loss of communication with Backup RE

```

If there are no more connection flaps within this two minutes time interval, the LCM peer connection un-stable alarm is cleared.

6 alarms currently active

| Alarm time | Class | Description |
|-------------------------|-------|--------------------------------------|
| 2017-05-29 09:04:17 PDT | Minor | PEM 8 Not Powered |
| 2017-05-29 09:04:17 PDT | Minor | PEM 9 Not Powered |
| 2017-05-29 09:04:17 PDT | Minor | PEM 7 Not Powered |
| 2017-05-29 09:04:17 PDT | Minor | PEM 3 Not Powered |
| 2017-05-29 09:04:17 PDT | Minor | PEM 0 Not Powered |
| 2017-05-29 09:04:08 PDT | Minor | Loss of communication with Backup RE |

A major alarm is raised even if there is on one PLL lock error, and this alarm can be cleared only through an FPC restart.

```
user@host> show chassis alarms
```

4 alarms currently active

| Alarm time | Class | Description |
|-------------------------|-------|---|
| 2017-02-16 09:06:06 PDT | Major | FPC 0 Major Errors |
| 2017-02-16 09:08:40 PDT | Major | FPC 1 Major Errors |
| 2017-02-16 09:11:47 PST | Minor | Fan Tray 3 Pair 1 Outer Fan running at over speed |
| 2017-02-16 09:11:47 PST | Minor | Fan Tray 3 Pair 1 Inner Fan running at over speed |

show chassis craft-interface

| | |
|---|--|
| List of Syntax | Syntax on page 106 Syntax (MX Series Routers) on page 106 Syntax (MX104, MX2010, MX2020, and MX2008 3D Universal Edge Routers) on page 106 Syntax (TX Matrix Routers) on page 106 Syntax (TX Matrix Plus Routers) on page 106 Syntax (ACX Series Universal Access Routers) on page 106 |
| Syntax | <code>show chassis craft-interface</code> |
| Syntax (MX Series Routers) | <code>show chassis craft-interface</code> <code><all-members></code> <code><local></code> <code><member <i>member-id</i>></code> |
| Syntax (MX104, MX2010, MX2020, and MX2008 3D Universal Edge Routers) | <code>show chassis craft-interface</code> |
| Syntax (TX Matrix Routers) | <code>show chassis craft-interface</code> <code><lcc <i>number</i> scc></code> |
| Syntax (TX Matrix Plus Routers) | <code>show chassis craft-interface</code> <code><lcc <i>number</i> sfc <i>number</i>></code> |
| Syntax (ACX Series Universal Access Routers) | <code>show chassis craft-interface</code> |
| Release Information | Command introduced before Junos OS Release 7.4. <code>sfc</code> option for the TX Matrix Plus router introduced in Junos OS Release 9.6. Command introduced in Junos OS Release 12.2 for ACX Series Universal Access Routers. Command introduced in Junos OS Release 12.3 for MX2020 3D Universal Edge Routers. Command introduced in Junos OS Release 12.3 for MX2010 3D Universal Edge Routers. Command introduced in Junos OS Release 13.2 for MX104 3D Universal Edge Routers. Command introduced in Junos OS Release 17.2 for MX2008 3D Universal Edge Routers. Command introduced in Junos OS Release 17.3 for MX150 Router Appliance. |
| Description | For routers or switches that have a display on the craft interface, show the messages that are currently displayed. On all routers except for the M20 router, you must enter this command on the master Routing Engine. |
| Options | none —(TX Matrix, TX Matrix Plus routers, MX104, MX2010, MX2020, and MX2008 routers, and ACX Series routers only) On a TX Matrix router, show messages that are currently displayed on the craft interface on the TX Matrix router and its attached T640 routers. |

On a TX Matrix Plus router, show messages that are currently displayed on the craft interface on the TX Matrix Plus router and its attached routers.

all-members—(MX Series routers only) (Optional) Display information currently on the craft interface for all members of the Virtual Chassis configuration.

lcc *number*—(TX Matrix, TX Matrix Plus routers only) (Optional) On a TX Matrix router, show messages that are currently displayed on the craft interface for a specified T640 router (line-card chassis) that is connected to the TX Matrix router. On a TX Matrix Plus router, show messages that are currently displayed on the craft interface for a specified router (line-card chassis) that is connected to the TX Matrix Plus router.

Replace *number* with the following values depending on the LCC configuration:

- 0 through 3, when T640 routers are connected to a TX Matrix router in a routing matrix.
- 0 through 3, when T1600 routers are connected to a TX Matrix Plus router in a routing matrix.
- 0 through 7, when T1600 routers are connected to a TX Matrix Plus router with 3D SIBs in a routing matrix.
- 0, 2, 4, or 6, when T4000 routers are connected to a TX Matrix Plus router with 3D SIBs in a routing matrix.

local—(MX Series routers only) (Optional) Display information currently on the craft interface for the local Virtual Chassis member.

member *member-id*—(MX Series routers only) (Optional) Display information currently on the craft interface for the specified member of the Virtual Chassis configuration. For an MX Series Virtual Chassis, replace *member-id* with a value of 0 or 1.

scc—(TX Matrix router only) (Optional) Show messages that are currently displayed on the craft interface for the TX Matrix router (switch-card chassis).

sfc *number*—(TX Matrix Plus router only) (Optional) Show messages that are currently displayed on the craft interface for the respective TX Matrix Plus router (switch-fabric chassis). Replace *number* variable with 0.

Required Privilege Level view

Related Documentation

- [clear chassis display message](#)
- [set chassis display message](#)

List of Sample Output

- [show chassis craft-interface \(M20 Router\) on page 109](#)
- [show chassis craft-interface \(M40 Router\) on page 110](#)
- [show chassis craft-interface \(M120 Router\) on page 110](#)

[show chassis craft-interface \(M160 Router\) on page 111](#)
[show chassis craft-interface \(MX150\) on page 111](#)
[show chassis craft-interface \(MX104 Router\) on page 112](#)
[show chassis craft-interface \(MX2010 Router\) on page 112](#)
[show chassis craft-interface \(MX2020 Router\) on page 113](#)
[show chassis craft-interface \(MX2008 Router\) on page 114](#)
[show chassis craft-interface \(T4000 Router\) on page 115](#)
[show chassis craft-interface \(TX Matrix Routing Matrix\) on page 116](#)
[show chassis craft-interface \(TX Matrix Plus Routing Matrix\) on page 118](#)
[show chassis craft-interface \(TX Matrix Plus router with 3D SIBs\) on page 121](#)
[show chassis craft-interface \(ACX2000 Universal Access Router\) on page 122](#)
[show chassis craft-interface \(ACX500 Router\) on page 123](#)

Output Fields Table 6 on page 108 lists the output fields for the **show chassis craft-interface** command. Output fields are listed in the approximate order in which they appear.

Table 6: show chassis craft-interface Output Fields

| Field Name | Field Description |
|--|---|
| LCD screen or FPM Display Contents | <p>Contents of the Front Panel Module display:</p> <ul style="list-style-type: none"> • router-name—Name of the router. • Up—How long the router has been operational, in days, hours, minutes, and seconds. • message—Information about the router traffic load, the power supply status, the fan status, and the temperature status. The display of this information changes every 2 seconds. If a text message has been created with the set chassis display command, this message appears on all four lines of the craft interface display. The display alternates between the text message and the standard system status messages every 2 seconds. |
| SFC Front Panel Switch Settings | <p>(TX Matrix Plus Routers)—Display the SFC front panel switch settings:</p> <p>SFC Chassis Number and Config Size are settings on physical switches located on the left side of the craft interface of the TX Matrix Plus router.</p> <ul style="list-style-type: none"> • SFC Chassis Number—This field always displays the value 00. • Config Size—The value of this field is 0 for the TX Matrix Plus router. The value of this field is 3 for TX Matrix Plus router with 3D SIBs. |
| Front Panel System LEDs | <p>(MX104, MX2010, MX2020, and MX2008 Routers) Status of the Front Panel System LEDs. A dot (.) indicates the LED is not lit. An asterisk (*) indicates the LED is lit.</p> |
| Front Panel Alarm Indicators | <p>(MX104, MX2010, MX2020, and MX2008 Routers) Status of the Front Panel Alarm indicators. A dot (.) indicates the relay is off. An asterisk (*) indicates the relay is active.</p> |
| Input Relay | <p>Status of the configured input relay ports—0 through 3. The mode is normally open or closed. The status is clear or raised.</p> |
| Output Relay | <p>Status of the configured output ports—0 or 1. The mode is normally open or closed. The status is clear or raised.</p> |

Table 6: show chassis craft-interface Output Fields (*continued*)

| Field Name | Field Description |
|---------------------------------|---|
| Front Panel FPC LEDs | (MX2010, MX2020, and MX2008 Routers) Status of the Front Panel Flexible PIC Concentrator (FPC) LEDs. A dot (.) indicates the LED is not lit. An asterisk (*) indicates the LED is lit. On MX2010 and MX2008 routers, there are 10 (0-9) FPCs LEDs. On MX2020 routers, there are 20 (0-9 and 10-19) FPCs LEDs. |
| CB LEDs | Status of the Control Board (CB) LEDs. A dot (.) indicates the LED is not lit. An asterisk (*) indicates the LED is lit. |
| PS LEDs | (MX2010, MX2020, and MX2008 Routers) Status of the Power Supply (PS) LEDs. A dot (.) indicates the LED is not lit. An asterisk (*) indicates the LED is lit. On MX2010 and MX2008 routers, there are 9 (0-8) PS LEDs. On MX2020 routers, there are 18 (0-8 and 9-17) PS LEDs. |
| PS Status | (MX104 Routers) Status of the Power Supply (PS). Green indicates that the power supply is functioning. Red indicates that the power supply is not functioning. A dot (.) indicates the LED is not lit. An asterisk (*) indicates the LED is lit. |
| FAN Tray LEDs | (MX2010, MX2020, and MX2008 Routers) Status of the Fan Tray LEDs. A dot (.) indicates the LED is not lit. An asterisk (*) indicates the LED is lit. |
| Front Panel SFB LEDs | (MX2010, MX2020, and MX2008 Routers) Status of the Front Panel Switch Fabric Boards (SFB) LEDs. A dot (.) indicates the LED is not lit. An asterisk (*) indicates the LED is lit. |
| Front Panel Chassis Info | (MX2010, MX2020, and MX2008 Routers) Information about the chassis such as the chassis number and role. User can set the chassis number in multi-chassis configurations. |
| MCS and SFM LEDs | Status of the Miscellaneous Control Subsystem (MCS) and Switching and Forwarding Module (SFM) LEDs. A dot (.) indicates the LED is not lit. An asterisk (*) indicates the LED is lit. When neither a dot nor an asterisk is displayed, there is no board in that slot. |
| SIB LEDs | Status of the Switch Interface Board (SIB) LEDs. A dot (.) indicates the LED is not lit. An asterisk (*) indicates the LED is lit. |
| SCG LEDs | Status of the SONET Clock Generator (SCG) LEDs. A dot (.) indicates the LED is not lit. An asterisk (*) indicates the LED is lit. |

Sample Output

show chassis craft-interface (M20 Router)

```

user@host> show chassis craft-interface
Red alarm:      LED off, relay off
Yellow alarm:   LED on, relay on
Host OK LED:    On
Host fail LED:  Off
FPCs           0  1  2  3
-----
Green   .   *   *.
Red     ....
LCD screen:
      +-----+
      |host      |

```

```

|1 Alarm active      |
|Y: FERF             |
|                    |
+-----+

```

show chassis craft-interface (M40 Router)

```

user@host> show chassis craft-interface
Front Panel LCD Display: enabled
Red alarm:      LED off, relay off
Yellow alarm:   LED off, relay off
Host OK LED:    On
Host Fail LED:  Off
NICs           0  1  2  3  4  5  6  7
-----
Green   *.  *.  *.  *.
Red     .....
LCD Screen:
+-----+
|host    |
|Up: 27+18:52:37|
|        |
|52.649kpps Load|
+-----+

```

show chassis craft-interface (M120 Router)

```

user@host> show chassis craft-interface
Front Panel System LEDs:
Routing Engine    0    1
-----
OK                *    .
Fail              .    .
Master            *    .

Front Panel Alarm Indicators:
-----
Red LED           *
Yellow LED        .
Major relay       *
Minor relay       .

Front Panel FPC LEDs:
FPC    0    1    2    3    4    5
-----
Red     .    .    .    .    .    .
Green   .    *    .    *    *    *

CB LEDs:
CB     0    1
-----
Amber   .    .
Green  *    *

PS LEDs:
PS     0    1
-----
Red     .    .
Green  *    *

```

```

FEB LEDs:
  FEB  0   1   2   3   4   5
-----
Red    .   .   .   .   .   .
Green  .   .   .   *   *   *
Active .   .   .   *   *   *

```

show chassis craft-interface (M160 Router)

```

user@host> show chassis craft-interface
FPM Display contents:

```

```

+-----+
|hosts          |
|Up: 1+16:46    |
|               |
|Fans OK        |
+-----+

```

Front Panel System LEDs:

```

Host    0   1
-----
OK       .   *
Fail     .   .
Master   .   *

```

Front Panel Alarm Indicators:

```

-----
Red LED   .
Yellow LED .
Major relay.
Minor relay.

```

Front Panel FPC LEDs:

```

FPC    0   1   2   3   4   5   6   7
-----
Red    .   .   .   .   .   .   .   .
Green  *   *   .   .   .   .   .   .

```

MCS and SFM LEDs:

```

MCS    0   1       SFM    0   1   2   3
-----
Amber   .           .   .
Green   .           .   .
Blue    .   *       .   *   *

```

show chassis craft-interface (MX150)

```

user@host > show chassis craft-interface
LED status for: FPC 0

```

LEDs status:

```

Alarm LED : Off
System LED: Green
Master LED: Green

```

| Interface | STATUS LED | LINK/ACTIVITY LED |
|-----------|------------|-------------------|
| ge-0/0/0 | N/A | (null) |
| lc-0/0/0 | (null) | (null) |
| ge-0/0/10 | N/A | (null) |

| | | |
|-----------|-----|--------|
| gr-0/0/10 | N/A | (null) |
| ip-0/0/10 | N/A | (null) |
| vt-0/0/10 | N/A | (null) |
| ge-0/0/11 | N/A | (null) |

show chassis craft-interface (MX104 Router)

```
user@host > show chassis craft-interface
Front Panel System LEDs:
Routing Engine    0    1
-----
OK                *    .
Fail              .    .
Master           *    .

Front Panel Alarm Indicators:
-----
Red LED          .
Yellow LED       *
Major relay      .
Minor relay      *

Input relay:
-----
Port   Mode   Status
0      Open   Clear
1      Open   Clear
2      Open   Clear
3      Open   Clear

Output relay:
-----
Port   Mode   Status
0      Open   Clear
1      Open   Clear

PS Status:
PS     0    1
-----
Red    .    .
Green  *    .
```

show chassis craft-interface (MX2010 Router)

```
user@host > show chassis craft-interface
Front Panel System LEDs:
Routing Engine    0    1
-----
OK                *    .
Fail              .    *
Master           *    .

Front Panel Alarm Indicators:
-----
Red LED          .
Yellow LED       *
Major relay      .
Minor relay      *

Front Panel FPC LEDs:
```



```

FPC    0    1    2    3    4    5    6    7    8    9
-----
Red    .    .    .    .    .    .    .    .    .    .
Green  *    *    .    .    .    .    .    .    *    *

CB LEDs:
  CB    0    1
-----
Amber  .    .
Green  *    *

PS LEDs:
  PS    0    1    2    3    4    5    6    7    8
-----
Red    .    .    .    .    .    .    .    .    .
Green  .    .    .    .    *    *    *    *    *

Fan Tray LEDs:
  FT    0    1    2    3
-----
Red    .    .    .    .
Green  *    *    *    *

Front Panel SFB LEDs:
SFB    0    1    2    3    4    5    6    7
-----
Red    .    .    .    .    .    .    .    .
Green  *    *    *    *    *    *    *    *

Front Panel Chassis Info:
Chassis Number    0x0
Chassis Role      S

```

show chassis craft-interface (MX2020 Router)

```

user@host > show chassis craft-interface
Front Panel System LEDs:
Routing Engine 0 1
-----
OK * *
Fail . .
Master * .
Front Panel Alarm Indicators:
-----
Red LED .
Yellow LED .
Major relay .
Minor relay .
Front Panel FPC LEDs:
FPC 0 1 2 3 4 5 6 7 8 9
-----
Red . . . . .
Green * * * * *
Front Panel FPC LEDs:
FPC 10 11 12 13 14 15 16 17 18 19
-----
Red . . . . .
Green * * * * *
CB LEDs:
CB 0 1

```

```

-----
Amber . .
Green * *
PS LEDs:
PS 0 1 2 3 4 5 6 7 8
-----
Red . . . . .
Green * * * * * . . * *
PS LEDs:
PS 9 10 11 12 13 14 15 16 17
-----
Red . . . . .
Green * * * * * * * *
Fan Tray LEDs:
FT 0 1 2 3
-----
Red . . . .
Green * * * *
Front Panel SFB LEDs:
SFB 0 1 2 3 4 5 6 7
-----
Red . . . . .
Green * * * * * * *
Front Panel Chassis Info:
Chassis Number 0x57
Chassis Role M

```

show chassis craft-interface (MX2008 Router)

```

user@host> show chassis craft-interface
Front Panel System LEDs:
Routing Engine    0    1
-----
OK                *    *
Fail              .    .
Master           *    .

Front Panel Alarm Indicators:
-----
Red LED          .
Yellow LED       .
Major relay      .
Minor relay      .

Front Panel FPC LEDs:
FPC    0    1    2    3    4    5    6    7    8    9
-----
Red    .    .    .    .    .    .    .    .    .    .
Green  *    *    .    .    .    .    .    *    .    .

CB LEDs:
CB    0    1
-----
Amber  .    .
Green  *    *

PS LEDs:
PS    0    1    2    3    4    5    6    7    8
-----
Red    .    .    .    .    .    .    .    .    .
Green  .    *    *    *    *    *    *    *    .

```

```

Fan Tray LEDs:
  FT   0   1
-----
Red    .   .
Green  *   *

Front Panel SFB LEDs:
SFB    0   1   2   3   4   5   6   7
-----
Red    .   .   .   .   .   .   .   .
Green  *   *   *   *   *   *   *   *

Front Panel Chassis Info:
Chassis Number    0x36
Chassis Role      M

```

show chassis craft-interface (T4000 Router)

```

user@host> show chassis craft-interface
FPM Display contents:

```

```

+-----+
|stymphalian      |
|2 Alarms active  |
|R: Front Top Fan Tra|
|Y: PEM 1 Absent  |
+-----+

```

```

Front Panel System LEDs:
Routing Engine    0   1
-----

```

```

OK           *   *
Fail         .   .
Master       *   .

```

```

Front Panel Alarm Indicators:
-----

```

```

Red LED      *
Yellow LED   *
Major relay   *
Minor relay   *

```

```

Front Panel FPC LEDs:
FPC    0   1   2   3   4   5   6   7
-----

```

```

Red    .   .   .   .   .   .   .   .
Green  *   .   .   *   .   *   *   .

```

```

CB LEDs:

```

```

CB    0   1
-----
Amber  .   .
Green  *   *
Blue   *   .

```

```

SCG LEDs:

```

```

SCG   0   1
-----
Amber  .   .
Green  *   *
Blue   *   .

```

```

SIB LEDs:
  SIB  0   1   2   3   4
-----
Red    .   .   .   .   .
Green  *   *   *   *   *

```

show chassis craft-interface (TX Matrix Routing Matrix)

```

user@host> show chassis craft-interface
scc-re0:

```

```

-----
FPM Display contents:
+-----+
|bradley          |
|8 Alarms active  |
|R: SIB 2 Absent  |
|R: SIB 1 Absent  |
+-----+

```

```

Front Panel System LEDs:
Routing Engine    0   1
-----
OK                *   .
Fail              .   .
Master            *   .

```

```

Front Panel Alarm Indicators:
-----
Red LED          *
Yellow LED       *
Major relay      *
Minor relay      *

```

```

CB LEDs:
  CB  0   1
-----

```

```

Amber. .
Green * .
Blue  * .

```

```

SIB LEDs:
  SIB  0   1   2   3   4
-----
Fail . . . . .
OK   . . . . *
Active . . . . *

```

```

lcc0-re0:

```

```

-----
FPM Display contents:
+-----+
|hybrid          |
|5 Alarms active  |
|R: SIB 2 Absent  |
|R: SIB 1 Absent  |
+-----+

```

```

Front Panel System LEDs:
Routing Engine    0   1
-----
OK                *   .

```

```

Fail          . . .
Master        * .

```

Front Panel Alarm Indicators:

```

-----
Red LED       *
Yellow LED    *
Major relay   *
Minor relay   *

```

Front Panel FPC LEDs:

```

FPC   0   1   2   3   4   5   6   7
-----

```

```

Red   . . . . .
Green * * . . .

```

CB LEDs:

```

CB   0   1
-----

```

```

Amber. .
Green * .
Blue  * .

```

SCG LEDs:

```

SCG  0   1
-----

```

```

Amber. .
Green * .
Blue  * .

```

SIB LEDs:

```

SIB  0   1   2   3   4
-----

```

```

Red   . . . . .
Green . . . . *

```

lcc2-re0:

FPM Display contents:

```

+-----+
| prius |
| 5 Alarms active |
| R: SIB 2 Absent |
| R: SIB 1 Absent |
+-----+

```

Front Panel System LEDs:

```

Routing Engine  0   1
-----

```

```

OK           * .
Fail         . . .
Master       * .

```

Front Panel Alarm Indicators:

```

-----
Red LED       *
Yellow LED    *
Major relay   *
Minor relay   *

```

Front Panel FPC LEDs:

```

FPC    0    1    2    3    4    5    6    7
-----
Red    .    .    .    .    .    .    .    .
Green  *    *    *    .    .    .    .    .

CB LEDs:
  CB    0    1
-----
Amber.  .
Green  *  .
Blue   *  .

SCG LEDs:
  SCG   0    1
-----
Amber.  .
Green  *  .
Blue   *  .

SIB LEDs:
  SIB   0    1    2    3    4
-----
Red     .    .    .    .    .
Green.  .    .    .    .    *

```

show chassis craft-interface (TX Matrix Plus Routing Matrix)

```

user@host> show chassis craft-interface
sfc0-re0:

```

```

-----
FPM Display Contents:
+-----+
|noname          |
|12 Alarms active|
|R: SIB F13 12 Absent|
|R: SIB F13 9 Absent|
+-----+

```

```

SFC Front Panel Switch Settings:
SFC Chassis Number : 00
Config Size         : 1

```

```

Front Panel System LEDs:
Routing Engine    0    1
-----
OK                *    *
Fail              .    .
Master            *    .

```

```

Front Panel Alarm Indicators:
-----
Red LED           *
Yellow LED        *
Major relay       *
Minor relay       *

```

```

Front Panel F13 SIB LEDs:
SIB    0    1    2    3    4    5    6    7    8    9    10   11   12   13   14   15
-----
Fail    .    .    .    .    .    .    .    .    .    .    .    .    .    .    .    .
OK      *    .    .    *    .    .    *    .    *    .    .    *    .    .    .    .

```

```
Active . . . * . . * . * . . * . . . .
```

PS LEDs:

```
PS 0 1
```

```
-----
Red . *
```

```
Green * .
```

Fan Tray LEDs:

```
FT 0 1 2 3 4 5
```

```
-----
Red . . . . * *
```

```
Green * * * * . .
```

CB LEDs:

```
CB 0 1
```

```
-----
Amber . .
```

```
Green * *
```

```
Blue * .
```

lcc0-re0:

FPM Display contents:

```
+-----+
|noname1          |
|1 Alarm active   |
|R: PEM 1 Not OK  |
|                 |
+-----+
```

Front Panel System LEDs:

```
Routing Engine 0 1
```

```
-----
OK                * *
```

```
Fail              . .
```

```
Master            * .
```

Front Panel Alarm Indicators:

```
-----
Red LED          *
```

```
Yellow LED      .
```

```
Major relay     *
```

```
Minor relay     .
```

Front Panel FPC LEDs:

```
FPC 0 1 2 3 4 5 6 7
```

```
-----
Red . . . . . . . .
```

```
Green . * . * * . . *
```

CB LEDs:

```
CB 0 1
```

```
-----
Amber . .
```

```
Green * *
```

```
Blue * .
```

SCG LEDs:

```
SCG 0 1
```

```

Amber . .
Green * *
Blue  * .

```

SIB LEDs:

```

SIB  0  1  2  3  4
-----
Red   .  .  .  .  .
Green *  *  *  *  *

```

lcc1-re0:

FPM Display contents:

```

+-----+
|noname2      |
|2 Alarms active|
|R: FPC 0 PIC 0 Failu|
|R: PEM 1 Not OK  |
+-----+

```

Front Panel System LEDs:

```

Routing Engine  0  1
-----
OK              *  *
Fail            .  .
Master          *  .

```

Front Panel Alarm Indicators:

```

-----
Red LED        *
Yellow LED     .
Major relay    *
Minor relay    .

```

Front Panel FPC LEDs:

```

FPC  0  1  2  3  4  5  6  7
-----
Red   .  .  .  .  .  .  .  .
Green *  *  *  .  .  *  .  .

```

CB LEDs:

```

CB  0  1
-----
Amber . .
Green * *
Blue  * .

```

SCG LEDs:

```

SCG  0  1
-----
Amber . .
Green * *
Blue  * .

```

SIB LEDs:

```

SIB  0  1  2  3  4
-----
Red   .  .  .  .  .
Green *  *  *  *  *

```


show chassis craft-interface (TX Matrix Plus router with 3D SIBs)

```
user@host> show chassis craft-interface
sfc0-re0:
```

```
-----
FPM Display Contents:
```

```
+-----+
|noname      |
|48 Alarms active |
|R: LCC 2 Major Error|
|R: LCC 0 Major Error|
+-----+
```

```
SFC Front Panel Switch Settings:
SFC Chassis Number : 00
Config Size       : 3
```

```
Front Panel System LEDs:
Routing Engine    0    1
```

```
-----
OK                *    *
Fail              .    .
Master            *    .
```

```
Front Panel Alarm Indicators:
```

```
-----
Red LED          *
Yellow LED       *
Major relay      *
Minor relay      *
```

```
Front Panel F13 SIB LEDs:
```

| SIB | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|--------|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|
| Fail | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . |
| OK | * | . | . | * | . | . | * | . | . | . | . | . | . | . | . | . |
| Active | * | . | . | * | . | . | * | . | . | . | . | . | . | . | . | . |

```
PS LEDs:
```

```
PS    0    1
-----
Red    *    .
Green  .    *
```

```
Fan Tray LEDs:
```

| FT | 0 | 1 | 2 | 3 | 4 | 5 |
|-------|---|---|---|---|---|---|
| Red | . | . | . | . | . | * |
| Green | * | * | * | * | * | . |

```
CB LEDs:
```

```
CB    0    1
-----
Amber  .    .
Green  *    *
Blue   *    .
```

```
lcc0-re0:
```

```
-----
FPM Display contents:
```

```
+-----+
```

```

|noname1          |
|14 Alarms active |
|R: PEM 1 Not OK  |
|R: FPC 7 misconfig|
+-----+

Front Panel System LEDs:
Routing Engine    0    1
-----
OK                *    *
Fail              .    .
Master           *    .

Front Panel Alarm Indicators:
-----
Red LED          *
Yellow LED       *
Major relay      *
Minor relay      *

Front Panel FPC LEDs:
FPC    0    1    2    3    4    5    6    7
-----
Red     .    .    .    .    .    .    .    .
Green   .    .    .    .    *    .    .    .

CB LEDs:
CB     0    1
-----
Amber   .    .
Green  *    *
Blue   *    .

SCG LEDs:
SCG    0    1
-----
Amber   .    .
Green  *    *
Blue   *    .

SIB LEDs:
SIB    0    1    2    3    4
-----
Red     .    .    .    .    .
Green  *    *    *    .    .

```

show chassis craft-interface (ACX2000 Universal Access Router)

```

user@host> show chassis craft-interface
Front Panel System LEDs:
Routing Engine
-----
OK                *
Fail              .

Front Panel Alarm Indicators:
-----
Red LED          .
Yellow LED       .
Major relay      .
Minor relay      .

```

```

Input relay:
-----
Port    Mode    Status
0       Open    Clear
1       Open    Clear
2       Open    Clear
3       Open    Clear

Output relay:
-----
Port    Mode    Status
0       Open    Clear
1       Open    Clear

PS Status:
  PS    0    1
-----
Red     .    .
Green  *    *

```

show chassis craft-interface (ACX500 Router)

```
user@host> show chassis craft-interface
```

```

Front Panel System LEDs:
Routing Engine
-----
OK                *
Fail              .

Front Panel Alarm Indicators:
-----
Red LED           .
Yellow LED        .
Major relay       .
Minor relay       .

Input relay:
-----
Port    Mode    Status
0       Open    Clear
1       Open    Clear
2       Open    Clear
3       Open    Clear

Output relay:
-----
Port    Mode    Status
0       Open    Clear
1       Open    Clear

PS Status:
  PS    0    1
-----
Red     .    .
Green  *    *

```

show chassis hardware

| | |
|---------------------------------------|---|
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| Syntax | <code>show chassis hardware</code> <code><detail extensive></code> <code><clei-models></code> <code><models></code> |
| Syntax (EX Series) | <code>show chassis hardware</code> <code><clei-models></code> <code><detail extensive></code> <code><models></code> <code><satellite [slot-id <i>slot-id</i> device-alias <i>alias-name</i>]></code> |
| Syntax (T4000 Router) | <code>show chassis hardware</code> <code><clei-models></code> <code><detail extensive></code> <code><models></code> |
| Syntax (TX Matrix Router) | <code>show chassis hardware</code> <code><clei-models></code> <code><detail extensive></code> <code><models></code> <code><lcc <i>number</i> scc></code> |
| Syntax (TX Matrix Plus Router) | <code>show chassis hardware</code> <code><clei-models></code> <code><detail extensive></code> <code><models></code> <code><lcc <i>number</i> sfc <i>number</i>></code> |
| Syntax (MX Series Routers) | <code>show chassis hardware</code> <code><detail extensive></code> <code><clei-models></code> <code><models></code> |

| | |
|---|---|
| | <all-members> <local> <member <i>member-id</i> > |
| Syntax (MX104, MX204, MX2010, MX2020, MX10003, and MX2008 3D Universal Edge Routers) | show chassis hardware <clei-models> <detail extensive> <models> <satellite [slot-id <i>slot-id</i> device-alias <i>alias-name</i>]> |
| Syntax (QFX Series) | show chassis hardware <detail extensive> <clei-models> <interconnect-device <i>name</i> > <node-device <i>name</i> > <models> |
| Syntax (OCX Series) | show chassis hardware <detail extensive> <clei-models> <models> |
| Syntax (PTX Series Packet Transport Routers) | show chassis hardware <detail extensive> <clei-models> <models> |
| Syntax (ACX Series Universal Access Routers) | show chassis hardware <detail extensive> <clei-models> <models> |
| Syntax (ACX5048 and ACX5096 Routers) | show chassis hardware <detail extensive> <clei-models> <models> |
| Syntax (ACX500 Routers) | show chassis hardware <detail extensive> <clei-models> <models> |
| Release Information | Command introduced before Junos OS Release 7.4. models option introduced in Junos OS Release 8.2. Command introduced in Junos OS Release 9.0 for EX Series switches. sfc option introduced in Junos OS Release 9.6 for the TX Matrix Plus router. Command introduced in Junos OS Release 11.1 for QFX Series. |

Command introduced in Junos OS Release 12.1X48 for PTX Series Packet Transport Routers.

Command introduced in Junos OS Release 12.2 for ACX Series Universal Access Routers.

Command introduced in Junos OS Release 12.3 for MX2010 and MX2020 3D Universal Edge Routers.

Information for **disk** and **usb** introduced in Junos OS Release 15.1X53-D60 for QFX10002, QFX10008, and QFX10016 switches.

Command introduced in Junos OS Release 15.1X54-D20 for ACX5048 and ACX5096 Routers.

Command introduced in Junos OS Release 17.2 for MX2008 3D Universal Edge Routers.

Command introduced in Junos OS Release 17.2 for PTX10008 Routers.

Command introduced in Junos OS Release 17.3 for MX10003 3D Universal Edge Routers.

Command introduced in Junos OS Release 17.3 for MX150 Router Appliance.

Command introduced in Junos OS Release 17.4 for MX204 Routers.

Description Display a list of all Flexible PIC Concentrators (FPCs) and PICs installed in the router or switch chassis, including the hardware version level and serial number.

In the EX Series switch command output, FPC refers to the following:

- On EX2200 switches, EX3200 switches, EX4200 standalone switches, and EX4500 switches—Refers to the switch; FPC *number* is always 0.
- On EX4200 switches in a Virtual Chassis configuration—Refers to the member of a Virtual Chassis; FPC *number* equals the member ID, from 0 through 9.
- On EX8208 and EX8216 switches—Refers to a line card; FPC *number* equals the slot number for the line card.

On QFX3500, QFX5100, and OCX Series standalone switches, and PTX1000 routers both the FPC and FPC *number* are always 0.

On T4000 Type 5 FPCs, there are no **top temperature sensor** or **bottom temperature sensor** parameters. Instead, **fan intake temperature sensor** and **fan exhaust temperature sensors** parameters are displayed.

Starting from Junos OS Release 11.4, the output of the **show chassis hardware models** operational mode command displays the enhanced midplanes FRU model numbers (CHAS-BP3-MX240-S, CHAS-BP3-MX480-S or CHAS-BP3-MX960-S) based on the router. Prior to release 11.4, the FRU model numbers are left blank when the router has enhanced midplanes. Note that the enhanced midplanes are introduced through the Junos OS Release 13.3, but can be supported on all Junos OS releases.

Starting with Junos OS Release 14.1, the output of the **show chassis hardware detail | extensive | clei-models | models** operational mode command displays the new DC power supply module (PSM) and power distribution unit (PDU) that are added to provide power to the high-density FPC (FPC2-PTX-P1A) and other components in a PTX5000 Packet Transport Router.

Options **none**—Display information about hardware. For a TX Matrix router, display information about the TX Matrix router and its attached T640 routers. For a TX Matrix Plus router, display information about the TX Matrix Plus router and its attached routers.

clei-models—(Optional) Display Common Language Equipment Identifier (CLEI) barcode and model number for orderable field-replaceable units (FRUs).

detail—(Optional) Include RAM and disk information in output.

extensive—(Optional) Display ID EEPROM information.

all-members—(MX Series routers only) (Optional) Display hardware-specific information for all the members of the Virtual Chassis configuration.

interconnect-device *name*—(QFabric systems only) (Optional) Display hardware-specific information for the Interconnect device.

lcc *number*—(TX Matrix routers and TX Matrix Plus router only) (Optional) On a TX Matrix router, display hardware information for a specified T640 router (line-card chassis) that is connected to the TX Matrix router. On a TX Matrix Plus router, display hardware information for a specified router (line-card chassis) that is connected to the TX Matrix Plus router.

Replace *number* with the following values depending on the LCC configuration:

- 0 through 3, when T640 routers are connected to a TX Matrix router in a routing matrix.
- 0 through 3, when T1600 routers are connected to a TX Matrix Plus router in a routing matrix.
- 0 through 7, when T1600 routers are connected to a TX Matrix Plus router with 3D SIBs in a routing matrix.
- 0, 2, 4, or 6, when T4000 routers are connected to a TX Matrix Plus router with 3D SIBs in a routing matrix.

local—(MX Series routers only) (Optional) Display hardware-specific information for the local Virtual Chassis members.

member *member-id*—(MX Series routers and EX Series switches) (Optional) Display hardware-specific information for the specified member of the Virtual Chassis configuration. Replace *member-id* variable with a value 0 or 1.

models—(Optional) Display model numbers and part numbers for orderable FRUs and, for components that use ID EEPROM format v2, the CLEI code.

node-device *name*—(QFabric systems only) (Optional) Display hardware-specific information for the Node device.

satellite [*slot-id slot-id* | *device-alias alias-name*]—(Junos Fusion only) (Optional) Display hardware information for the specified satellite device in a Junos Fusion, or for all satellite devices in the Junos Fusion if no satellite devices are specified.

scc—(TX Matrix router only) (Optional) Display hardware information for the TX Matrix router (switch-card chassis).

sfc number—(TX Matrix Plus router only) (Optional) Display hardware information for the TX Matrix Plus router (switch-fabric chassis). Replace *number* variable with 0.

Additional Information The **show chassis hardware detail** command now displays DIMM information for the following Routing Engines, as shown in [Table 7 on page 128](#).

Table 7: Routing Engines Displaying DIMM Information

| Routing Engines | Routers |
|-----------------------------|---------------------------------|
| RE-S-1800x2 and RE-S-1800x4 | MX240, MX480, and MX960 routers |
| RE-A-1800x2 | M120 and M320 routers |

In Junos OS Release 11.4 and later, the output for the **show chassis hardware models** operational mode command for MX Series routers display the enhanced midplanes FRU model numbers—CHAS-BP3-MX240-S, CHAS-BP3-MX480-S, or CHAS-BP3-MX960-S—based on the router. In releases before Junos OS Release 11.4, the FRU model numbers are left blank when the router has enhanced midplanes. Note that the enhanced midplanes are introduced through Junos OS Release 13.3, but can be supported on all Junos OS releases.

Starting with Junos OS Release 17.3R1, the output of the **show chassis hardware** command displays the mode in which vMX is running (performance mode or lite mode) in the part number field for the FPC. **RIOT-PERF** indicates performance mode and **RIOT-LITE** indicates lite mode.

Required Privilege Level

view

Related Documentation

- *show chassis power*

List of Sample Output

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[show chassis hardware models \(PTX5000 Packet Transport Router with FPC2-PTX-P1A\) on page 353](#)
[show chassis hardware extensive \(PTX5000 Packet Transport Router\) on page 353](#)
[show chassis hardware extensive \(PTX1000 Packet Transport Router\) on page 354](#)
[show chassis hardware extensive \(PTX5000 with Control Board 2\) on page 354](#)
[show chassis hardware \(MX Routers with Media Services Blade \[MSB\]\) on page 355](#)
[show chassis hardware extensive \(MX Routers with Media Services Blade \[MSB\]\) on page 355](#)
[show chassis hardware \(ACX5048 Router\) on page 356](#)
[show chassis hardware detail \(ACX5048 Router\) on page 357](#)
[show chassis hardware clei-models \(ACX5048 Router\) on page 357](#)
[show chassis hardware models \(ACX5048 Router\) on page 357](#)
[show chassis hardware \(ACX5096 Router\) on page 358](#)
[show chassis hardware detail \(ACX5096 Router\) on page 358](#)
[show chassis hardware clei-models \(ACX5096 Router\) on page 359](#)
[show chassis hardware models \(ACX5096 Router\) on page 359](#)
[show chassis hardware \(ACX500 Router\) on page 359](#)
[show chassis hardware detail \(ACX500 Router\) on page 360](#)
[show chassis hardware extensive \(ACX500 Router\) on page 360](#)
[show chassis hardware clei-models \(ACX500 Router\) on page 362](#)
[show chassis hardware models \(ACX500 Router\) on page 362](#)

Output Fields [Table 8 on page 133](#) lists the output fields for the **show chassis hardware** command. Output fields are listed in the approximate order in which they appear.

Table 8: show chassis hardware Output Fields

| Field Name | Field Description | Level of Output |
|--------------------|---|-----------------|
| Item | <p>Chassis component:</p> <ul style="list-style-type: none"> (EX Series switches)—Information about the chassis, Routing Engine (SRE and Routing Engine modules in EX8200 switches), power supplies, fan trays, and LCD panel. Also displays information about Flexible PIC Concentrators (FPCs) and associated Physical Interface Cards (PICs). Information about the backplane, midplane, and SIBs (SF modules) is displayed for EX8200 switches. (MX Series routers and EX Series switches)—Information about the backplane, Routing Engine, Power Entry Modules (PEMs), and fan trays. Also displays information about Flexible PIC Concentrators (FPCs) and associated Physical Interface Cards (PICs), Modular Port Concentrators (MPCs) and associated Modular Interface Cards (MICs), or Dense Port Concentrators (DPCs). MX80 routers have a single Routing Engine and a built-in Packet Forwarding Engine that attaches directly to MICs. The Packet Forwarding Engine has two “pseudo” FPCs (FPC 0 and FPC1). MX80 routers also have a Forwarding Engine Board (FEB). MX104 routers have a built-in Packet forwarding Engine and a Forwarding Engine Board (FEB). The Packet Forwarding Engine of the MX104 router has three “pseudo” FPCs (FPC0, FPC1, and FPC2). (M Series routers, except for the M320 router)—Information about the backplane; power supplies; fan trays; Routing Engine; maxicab (the connection between the Routing Engine and the backplane, for the M40 router only); SCB, SSB, SFM, or FEB; MCS and PCG (for the M160 router only); each FPC and PIC; and each fan, blower, and impeller. (M120, M320, and T Series routers)—Information about the backplane, power supplies, fan trays, midplane, FPM (craft interface), CIP, PEM, SCG, CB, FPC, PIC, SFP, SPMB, and SIB. (QFX Series)—Information about the chassis, Pseudo CB, Routing Engine, power supplies, fan trays, Interconnect devices, and Node devices. Also displays information about Flexible PIC Concentrators (FPCs) and associated Physical Interface Cards (PICs). (PTX Series)—Information about the chassis, midplane, craft interface (FPM), power distribution units (PDUs) and Power Supply Modules (PSMs), Centralized Clock Generators (CCGs), Routing Engines, Control Boards (CBs) and Switch Processor Mezzanine Boards (SPMBs), Flexible PIC Concentrators (FPCs), PICs, Switch Interface Boards (SIBs), and fan trays (vertical and horizontal). (MX2010, MX2020, and MX2008 routers)—Information about the chassis, midplane, craft interface (FPM), power midplane (PMP), Power Supply Modules (PSMs), Power Distribution Modules (PDMs), Routing Engines, Control Boards (CBs) and Switch Processor Mezzanine Boards (SPMBs), Switch Fabric Boards (SFBs), Flexible PIC Concentrators (FPCs), PICs, adapter cards (ADCs) and fan trays. (vMX routers)—Information about the chassis, midplane, Routing Engines, and Control Boards (CBs). Also displays information about Flexible PIC Concentrators (FPCs) and associated Modular Interface Cards (MICs) and Physical Interface Cards (PICs). | All levels |
| Version | Revision level of the chassis component. | All levels |
| Part number | Part number of the chassis component. | All levels |

Table 8: show chassis hardware Output Fields (*continued*)

| Field Name | Field Description | Level of Output |
|-------------------------------|---|------------------|
| Serial number | Serial number of the chassis component. The serial number of the backplane is also the serial number of the router chassis. Use this serial number when you need to contact Juniper Networks Customer Support about the router or switch chassis. | All levels |
| Assb ID or Assembly ID | (extensive keyword only) Identification number that describes the FRU hardware. | extensive |
| Assembly Version | (extensive keyword only) Version number of the FRU hardware. | extensive |
| Assembly Flags | (extensive keyword only) Flags. | extensive |
| FRU model number | (clei-models , extensive , and models keyword only) Model number of the FRU hardware component. | none specified |
| CLEI code | (clei-models and extensive keyword only) Common Language Equipment Identifier code. This value is displayed only for hardware components that use ID EEPROM format v2. This value is not displayed for components that use ID EEPROM format v1. | none specified |
| EEPROM Version | ID EEPROM version used by the hardware component: 0x00 (version 0), 0x01 (version 1), or 0x02 (version 2). | extensive |
| Description | <p>Brief description of the hardware item:</p> <ul style="list-style-type: none"> • Type of power supply. • Type of PIC. If the PIC type is not supported on the current software release, the output states Hardware Not Supported. • Type of FPC: FPC Type 1, FPC Type 2, FPC Type 3, FPC Type 4, or FPC TypeOC192. <p>On EX Series switches, a brief description of the FPC.</p> <p>The following list shows the PIM abbreviation in the output and the corresponding PIM name.</p> <ul style="list-style-type: none"> • 2x FE—Either two built-in Fast Ethernet interfaces (fixed PIM) or dual-port Fast Ethernet PIM • 4x FE—4-port Fast Ethernet ePIM • 1x GE Copper—Copper Gigabit Ethernet ePIM (one 10-Mbps, 100-Mbps, or 1000-Mbps port) • 1x GE SFP—SFP Gigabit Ethernet ePIM (one fiber port) • 2x Serial—Dual-port serial PIM • 2x T1—Dual-port T1 PIM • 2x E1—Dual-port E1 PIM • 2x CT1E1—Dual-port channelized T1/E1 PIM • 1x T3—T3 PIM (one port) • 1x E3—E3 PIM (one port) • 4x BRI S/T—4-port ISDN BRI S/T PIM • 4x BRI U—4-port ISDN BRI U PIM • 1x ADSL Annex A—ADSL 2/2+ Annex A PIM (one port, for POTS) | All levels |

Table 8: show chassis hardware Output Fields (*continued*)

| Field Name | Field Description | Level of Output |
|------------|--|-----------------|
| | <ul style="list-style-type: none"> • 1x ADSL Annex B—ADSL 2/2+ Annex B PIM (one port, for ISDN) • 2x SHDSL (ATM)—G SHDSL PIM (2-port two-wire module or 1-port four-wire module) • 1x TGM550—TGM550 Telephony Gateway Module (Avaya VoIP gateway module with one console port, two analog LINE ports, and two analog TRUNK ports) • 1x DS1 TIM510—TIM510 E1/T1 Telephony Interface Module (Avaya VoIP media module with one E1 or T1 trunk termination port and ISDN PRI backup) • 4x FXS, 4x FXO, TIM514—TIM514 Analog Telephony Interface Module (Avaya VoIP media module with four analog LINE ports and four analog TRUNK ports) • 4x BRI TIM521—TIM521 BRI Telephony Interface Module (Avaya VoIP media module with four ISDN BRI ports) • Crypto Accelerator Module—For enhanced performance of cryptographic algorithms used in IP Security (IPsec) services • MPC M16x10GE—16-port 10-Gigabit Module Port Concentrator that supports SFP+ optical transceivers. (Not on EX Series switches.) • For hosts, the Routing Engine type. • For small form-factor pluggable transceiver (SFP) modules, the type of fiber: LX, SX, LH, or T. • LCD description for EX Series switches (except EX2200 switches). • MPC2—1-port MPC2 that supports two separate slots for MICs. • MPC3E—1-port MPC3E that supports two separate slots for MICs (MIC-3D-1X100GE-CFP and MIC-3D-20GE-SFP) on MX960, MX480, and MX240 routers. The MPC3E maps one MIC to one PIC (1 MIC, 1 PIC), which differs from the mapping of legacy MPCs. • 100GBASE-LR4, pluggable CFP optics • Supports the Enhanced MX Switch Control Board with fabric redundancy and existing SCBs without fabric redundancy. • Interoperates with existing MX Series line cards, including Flexible Port Concentrators (FPC), Dense Port Concentrators (DPCs), and Modular Port Concentrators (MPCs). • MPC4E—Fixed configuration MPC4E that is available in two flavors: MPC4E-3D-32XGE-SFP and MPC4E-3D-2CGE-8XGE on MX2020, MX960, MX480, and MX240 routers. • LCD description for MX Series routers | |

Sample Output

show chassis hardware (EX8216 Switch)

```

user@host> show chassis hardware
Hardware inventory:
Item          Version  Part number  Serial number  Description
Chassis       REV 06   710-016845   BA0909120112  EX8216
Midplane      REV 06   710-020771   AX0109197723  EX8216-MP
CB 0          REV 22   710-020771   AX0109197723  EX8216-RE320
CB 1          REV 22   710-020771   AX0109197726  EX8216-RE320
Routing Engine 1  BUILTIN BUILTIN      RE-EX8216

```

| | | | | |
|-----------------|--------|------------|--------------|-----------------------|
| FPC 3 | REV 19 | 710-020683 | BC0109083125 | EX8200-48F |
| CPU | REV 13 | 710-020598 | BF0109144549 | EX8200-CPU |
| FPC 4 | REV 17 | 710-020683 | BC0108500127 | EX8200-48F |
| CPU | REV 10 | 710-020598 | BF0108460510 | EX8200-CPU |
| PIC 0 | | BUILTIN | BUILTIN | 48x 100 Base-QFX/1000 |
| Base-X | | | | |
| Xcvr 1 | REV 01 | 740-011613 | PE70V89 | SFP-SX |
| Xcvr 11 | REV 01 | 740-011613 | PE70YCE | SFP-SX |
| Xcvr 12 | REV 01 | 740-011613 | PE70VSH | SFP-SX |
| Xcvr 13 | REV 01 | 740-011613 | E08C02063 | SFP-SX |
| Xcvr 14 | REV 01 | 740-011613 | PE70VKU | SFP-SX |
| Xcvr 15 | REV 01 | 740-011613 | E08E03372 | SFP-SX |
| Xcvr 21 | REV 01 | 740-011613 | PE70VAD | SFP-SX |
| Xcvr 22 | REV 01 | 740-011613 | E08E01228 | SFP-SX |
| Xcvr 23 | REV 01 | 740-011613 | PE70VSL | SFP-SX |
| Xcvr 24 | REV 01 | 740-011613 | E08E03409 | SFP-SX |
| Xcvr 25 | REV 01 | 740-011613 | PE70VL4 | SFP-SX |
| Xcvr 26 | REV 01 | 740-011613 | PDQ4L2Z | SFP-SX |
| Xcvr 27 | REV 01 | 740-011613 | PE70WFK | SFP-SX |
| Xcvr 28 | REV 01 | 740-011782 | PBD2B5U | SFP-SX |
| Xcvr 29 | REV 01 | 740-011613 | PE70UQX | SFP-SX |
| Xcvr 30 | REV 01 | 740-011613 | PE70VL5 | SFP-SX |
| Xcvr 31 | REV 01 | 740-011613 | PE70V0F | SFP-SX |
| Xcvr 32 | REV 01 | 740-011613 | E08C02052 | SFP-SX |
| Xcvr 33 | REV 01 | 740-011613 | E08C02197 | SFP-SX |
| Xcvr 34 | REV 01 | 740-011613 | PE70V0L | SFP-SX |
| Xcvr 35 | REV 01 | 740-011613 | E08E03390 | SFP-SX |
| Xcvr 36 | REV 01 | 740-011613 | PDQ4VL9 | SFP-SX |
| Xcvr 37 | REV 01 | 740-011613 | E08E03370 | SFP-SX |
| Xcvr 38 | REV 01 | 740-011613 | E08E03362 | SFP-SX |
| Xcvr 39 | REV 01 | 740-011613 | E08C02065 | SFP-SX |
| Xcvr 40 | REV 01 | 740-011613 | E08E03405 | SFP-SX |
| Xcvr 41 | REV 01 | 740-011613 | E08E03411 | SFP-SX |
| Xcvr 43 | REV 01 | 740-011613 | E08C02171 | SFP-SX |
| Xcvr 45 | REV 01 | 740-011613 | E08E03410 | SFP-SX |
| FPC 13 | REV 16 | 710-016837 | BB0109051344 | EX8200-8XS |
| CPU | | | | |
| SIB 0 | REV 10 | 710-021613 | AY0109166244 | EX8216-SF320 |
| SIB 1 | REV 10 | 710-021613 | AY0109166357 | EX8216-SF320 |
| SIB 2 | REV 10 | 710-021613 | AY0109166362 | EX8216-SF320 |
| SIB 3 | REV 10 | 710-021613 | AY0109166338 | EX8216-SF320 |
| SIB 4 | REV 10 | 710-021613 | AY0109166350 | EX8216-SF320 |
| SIB 5 | REV 10 | 710-021613 | AY0109166365 | EX8216-SF320 |
| SIB 6 | REV 10 | 710-021613 | AY0109166361 | EX8216-SF320 |
| SIB 7 | REV 10 | 710-021613 | AY0109166399 | EX8216-SF320 |
| PSU 0 | REV 17 | 740-021466 | BG0709170003 | EX8200-AC2K |
| PSU 1 | REV 17 | 740-021466 | BG0709170004 | EX8200-AC2K |
| PSU 2 | REV 17 | 740-021466 | BG0709170020 | EX8200-AC2K |
| PSU 3 | REV 17 | 740-021466 | BG0709170017 | EX8200-AC2K |
| PSU 4 | REV 17 | 740-021466 | BG0709170008 | EX8200-AC2K |
| PSU 5 | REV 17 | 740-021466 | BG0709170018 | EX8200-AC2K |
| Top Fan Tray | | | | |
| FTC 0 | REV 4 | 760-022620 | CX1209140212 | EX8216-FT |
| FTC 1 | REV 4 | 760-022620 | CX1209140212 | EX8216-FT |
| Bottom Fan Tray | | | | |
| FTC 0 | REV 4 | 760-022620 | CX1209140211 | EX8216-FT |
| FTC 1 | REV 4 | 760-022620 | CX1209140211 | EX8216-FT |
| LCD 0 | REV 04 | 710-025742 | CE0109186919 | EX8200 LCD |

show chassis hardware clei-models (EX8216 Switch)

```

user@host> show chassis hardware clei-models
Hardware inventory:
Item          Version  Part number  CLEI code  FRU model number
Midplane      REV 08    710-016845
PSU 0         REV 05    740-023002  COUPAEAEAA EX8200-PWR-AC3KR
PSU 1         REV 05    740-023002  COUPAEAEAA EX8200-PWR-AC3KR
PSU 2         REV 05    740-023002  COUPAEAEAA EX8200-PWR-AC3KR
PSU 3         REV 05    740-023002  COUPAEAEAA EX8200-PWR-AC3KR
PSU 4         REV 05    740-023002  COUPAEAEAA EX8200-PWR-AC3KR
PSU 5         REV 05    740-023002  COUPAEAEAA EX8200-PWR-AC3KR
Top Fan Tray
Bottom Fan Tray

```

show chassis hardware clei-models (T1600 Router)

```

user@host> show chassis hardware clei-models
Hardware inventory:
Item          Version  Part number  CLEI code  FRU model number
Midplane      REV 03    710-005608
FPM Display   REV 05    710-002897
CIP           REV 06    710-002895
PEM 0         Rev 07    740-017906  IPUPAC7KTA PWR-T1600-3-80-DC-S
PEM 1         Rev 18    740-002595  PWR-T-DC-S
SCG 0         REV 15    710-003423  SCG-T-S
Routing Engine 0 REV 08    740-014082  RE-A-2000-4096-S
Routing Engine 1 REV 07    740-014082  RE-A-2000-4096-S
CB 0          REV 05    710-007655  CB-T-S
CB 1          REV 03    710-017707  CB-T-S
FPC 0         REV 07    710-013558  T640-FPC2-E2
  PIC 0       REV 01    750-010618  PB-4GE-SFP
  PIC 1       REV 06    750-001900  PB-10C48-SON-SMSR
  PIC 2       REV 14    750-001901  PB-40C12-SON-SMIR
  PIC 3       REV 07    750-001900  PB-10C48-SON-SMSR
FPC 1         REV 06    710-013553  T640-FPC1-E2
  PIC 0       REV 08    750-001072  P-1GE-SX
  PIC 1       REV 10    750-012266  PB-4GE-TYPE1-SFP-IQ2
  PIC 2       REV 22    750-005634  PB-1CHOC12SMIR-QPP
FPC 2
  PIC 0       REV 16    750-007141  PC-10GE-SFP
  PIC 1       REV 06    750-015217  PC-8GE-TYPE3-SFP-IQ2
  PIC 2       REV 05    750-004695  PC-TUNNEL
  PIC 3       REV 17    750-009553  PC-40C48-SON-SFP
FPC 3         REV 01    710-010154  T640-FPC3-E
  PIC 0       REV 07    750-012793  PC-1XGE-TYPE3-XFP-IQ2
  PIC 1       REV 25    750-007141  PC-10GE-SFP
  PIC 2       REV 17    750-009553  PC-40C48-SON-SFP
  PIC 3       REV 32    750-003700  PC-10C192-SON-VSR
FPC 4         REV 16    710-013037  T1600-FPC4-ES
  PIC 1       REV 06    750-034781  PD-1CE-CFP
FPC 5         REV 02    710-013037  T1600-FPC4-ES
  PIC 0       REV 16    750-012518  PD-40C192-SON-XFP
  PIC 1       REV 01    750-010850  PD-10C768-SON-SR
FPC 6         REV 14    710-013037  T1600-FPC4-ES
  PIC 0       REV 11    750-017405  PD-4XGE-XFP
  PIC 1       REV 13    750-017405  PD-4XGE-XFP
FPC 7         REV 09    710-007529  T640-FPC3
  PIC 0       REV 10    750-012793  PC-1XGE-TYPE3-XFP-IQ2
  PIC 1       REV 01    750-015217  PC-8GE-TYPE3-SFP-IQ2

```

| | | | |
|------------|--------|------------|----------------------|
| PIC 2 | REV 01 | 750-015217 | PC-8GE-TYPE3-SFP-IQ2 |
| PIC 3 | REV 15 | 750-009450 | PC-10C192-SON-SR2 |
| SIB 0 | REV 07 | 710-013074 | SIB-I-T1600-S |
| SIB 1 | REV 07 | 710-013074 | SIB-I-T1600-S |
| SIB 2 | REV 07 | 710-013074 | SIB-I-T1600-S |
| SIB 3 | REV 07 | 710-013074 | SIB-I-T1600-S |
| SIB 4 | REV 07 | 710-013074 | SIB-I-T1600-S |
| Fan Tray 0 | | | FANTRAY-T-S |
| Fan Tray 1 | | | FANTRAY-T-S |
| Fan Tray 2 | | | FAN-REAR-TX-T640-S |

show chassis hardware clei-models (PTX10008 Routers)

```
user@host> show chassis hardware clei-models
```

Hardware inventory:

| Item | Version | Part number | CLEI code | FRU model number |
|----------------|---------|-------------|------------|-------------------|
| Midplane | REV 27 | 750-054097 | CMMUM00ARA | QFX10008-CHAS |
| CB 0 | REV 02 | 750-068820 | CMUCAH3CTB | QFX10000-RE |
| CB 1 | REV 02 | 750-068820 | CMUCAH3CTB | QFX10000-RE |
| FPC 0 | REV 36 | 750-051354 | CMUIAM9BAA | QFX10000-36Q |
| PIC 0 | | BUILTIN | | |
| FPC 1 | REV 33 | 750-051354 | CMUIAM9BAA | QFX10000-36Q |
| PIC 0 | | BUILTIN | | |
| FPC 2 | REV 32 | 750-051357 | CMUIANABAA | QFX10000-30C |
| PIC 0 | | BUILTIN | | |
| FPC 3 | REV 35 | 750-051357 | CMUIANABAA | QFX10000-30C |
| PIC 0 | | BUILTIN | | |
| FPC 5 | REV 08 | 750-068822 | CMUIAM9BAB | QFX10000-36Q |
| PIC 0 | | BUILTIN | | |
| FPC 6 | REV 08 | 750-068822 | CMUIAM9BAB | QFX10000-36Q |
| PIC 0 | | BUILTIN | | |
| FPD Board | REV 07 | 711-054687 | | |
| Power Supply 0 | REV 02 | 740-049388 | CMUPADNBAA | QFX10000-PWR-AC |
| Power Supply 1 | REV 02 | 740-049388 | CMUPADNBAA | QFX10000-PWR-AC |
| Power Supply 2 | REV 02 | 740-049388 | CMUPADNBAA | QFX10000-PWR-AC |
| Power Supply 3 | REV 02 | 740-049388 | CMUPADNBAA | QFX10000-PWR-AC |
| Power Supply 4 | REV 02 | 740-049388 | CMUPADNBAA | QFX10000-PWR-AC |
| Power Supply 5 | REV 02 | 740-049388 | CMUPADNBAA | QFX10000-PWR-AC |
| FTC 0 | REV 14 | 750-050108 | CMUCAHZCAA | QFX10008-FAN-CTRL |
| FTC 1 | REV 14 | 750-050108 | CMUCAHZCAA | QFX10008-FAN-CTRL |
| Fan Tray 0 | REV 09 | 760-054372 | CMUCAHYCAA | QFX10008-FAN |
| Fan Tray 1 | REV 09 | 760-054372 | CMUCAHYCAA | QFX10008-FAN |
| SIB 0 | REV 24 | 750-050058 | CMUCAH0CAA | QFX10008-SF |
| SIB 1 | REV 24 | 750-050058 | CMUCAH0CAA | QFX10008-SF |
| SIB 2 | REV 24 | 750-050058 | CMUCAH0CAA | QFX10008-SF |
| SIB 3 | REV 24 | 750-050058 | CMUCAH0CAA | QFX10008-SF |
| SIB 4 | REV 24 | 750-050058 | CMUCAH0CAA | QFX10008-SF |
| SIB 5 | REV 23 | 750-050058 | CMUCAH0CAA | QFX10008-SF |

show chassis hardware clei-models (PTX10016 Routers)

```
user@host> show chassis hardware clei-models
```

Hardware inventory:

| Item | Version | Part number | CLEI code | FRU model number |
|----------|---------|-------------|------------|------------------|
| Midplane | REV 24 | 750-077138 | CMMUN00ARA | JNP10016 |
| CB 0 | REV 04 | 711-065897 | PROTOXCLEI | PROTO-ASSEMBLY |
| CB 1 | REV 05 | 711-065897 | PROTOXCLEI | PROTO-ASSEMBLY |
| FPC 2 | | BUILTIN | | |
| PIC 0 | | BUILTIN | | |
| FPC 4 | REV 35 | 750-071976 | CMUIANABAA | JNP10K-LC1101 |

| | | | | |
|----------------|--------|------------|------------|-----------------|
| PIC 0 | | BUILTIN | | |
| FPC 5 | REV 13 | 750-068822 | CMUIAM9BAC | QFX10000-36Q |
| PIC 0 | | BUILTIN | | |
| FPC 6 | REV 41 | 750-071976 | CMUIANABAB | JNP10K-LC1101 |
| PIC 0 | | BUILTIN | | |
| FPC 7 | REV 35 | 750-071976 | CMUIANABAA | JNP10K-LC1101 |
| PIC 0 | | BUILTIN | | |
| FPC 8 | REV 35 | 750-071976 | CMUIANABAA | JNP10K-LC1101 |
| PIC 0 | | BUILTIN | | |
| FPC 9 | REV 41 | 750-071976 | CMUIANABAB | JNP10K-LC1101 |
| PIC 0 | | BUILTIN | | |
| FPC 10 | REV 35 | 750-071976 | CMUIANABAA | JNP10K-LC1101 |
| PIC 0 | | BUILTIN | | |
| FPC 11 | REV 35 | 750-071976 | CMUIANABAA | JNP10K-LC1101 |
| PIC 0 | | BUILTIN | | |
| FPC 13 | REV 41 | 750-071976 | CMUIANABAB | JNP10K-LC1101 |
| PIC 0 | | BUILTIN | | |
| FPC 15 | REV 37 | 750-071976 | CMUIANABAA | JNP10K-LC1101 |
| PIC 0 | | BUILTIN | | |
| Power Supply 0 | REV 01 | 740-073147 | CMUPADPBAA | JNP10K-PWR-DC |
| Power Supply 1 | REV 01 | 740-073147 | CMUPADPBAA | JNP10K-PWR-DC |
| Power Supply 2 | REV 01 | 740-073147 | CMUPADPBAA | JNP10K-PWR-DC |
| Power Supply 3 | REV 01 | 740-073147 | CMUPADPBAA | JNP10K-PWR-DC |
| Power Supply 4 | REV 01 | 740-073147 | CMUPADPBAA | JNP10K-PWR-DC |
| Power Supply 5 | REV 01 | 740-073147 | CMUPADPBAA | JNP10K-PWR-DC |
| Power Supply 6 | REV 01 | 740-073147 | CMUPADPBAA | JNP10K-PWR-DC |
| Power Supply 7 | REV 01 | 740-073147 | CMUPADPBAA | JNP10K-PWR-DC |
| Power Supply 8 | REV 01 | 740-073147 | CMUPADPBAA | JNP10K-PWR-DC |
| Power Supply 9 | REV 01 | 740-073147 | CMUPADPBAA | JNP10K-PWR-DC |
| Fan Tray 0 | | | | QFX5100-FAN-AFO |
| Fan Tray 1 | | | | QFX5100-FAN-AFO |
| SIB 0 | REV 15 | 750-077140 | CMUCAH6CAA | JNP10016-SF |
| SIB 1 | REV 15 | 750-077140 | CMUCAH6CAA | JNP10016-SF |
| SIB 2 | REV 15 | 750-077140 | CMUCAH6CAA | JNP10016-SF |
| SIB 3 | REV 15 | 750-077140 | CMUCAH6CAA | JNP10016-SF |
| SIB 4 | REV 15 | 750-077140 | CMUCAH6CAA | JNP10016-SF |
| SIB 5 | REV 15 | 750-077140 | CMUCAH6CAA | JNP10016-SF |
| FPD Board | REV 07 | 711-054687 | | |

show chassis hardware (EX2300-C Switch)

```

user@switch> show chassis hardware
Hardware inventory:
Item          Version  Part number  Serial number  Description
Chassis
Pseudo CB 0
Routing Engine 0
FPC 0          REV 04    650-059984  HV0215410003  EX2300-C-12P
  CPU          BUILTIN   BUILTIN     12x10/100/1000 Base-T
  PIC 0        REV 04    650-059984  HV0215410003  2x10G SFP/SFP+
    Xcvr 0     REV 01    740-021309  T09K00695     SFP+-10G-LR
    Xcvr 1     REV 01    740-030658  AD1146A05JT   SFP+-10G-USR
Power Supply 0 JPSU-170W-AC

```

show chassis hardware (EX2300 Switch)

```

user@switch> show chassis hardware
Hardware inventory:
Item          Version  Part number  Serial number  Description

```

| | | | | |
|------------------|--------|------------|--------------|-------------------------|
| Chassis | | | JY0215410033 | EX2300-24P |
| Pseudo CB 0 | | | | |
| Routing Engine 0 | | BUILTIN | BUILTIN | RE-EX2300-24P |
| FPC 0 | REV 05 | 650-059968 | JY0215410033 | EX2300-24P |
| CPU | | BUILTIN | BUILTIN | FPC CPU |
| PIC 0 | REV 05 | BUILTIN | BUILTIN | 24x10/100/1000 Base-T |
| PIC 1 | REV 05 | 650-059968 | JY0215410033 | 4x10G SFP/SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | AD1125A03ES | SFP+-10G-USR |
| Xcvr 1 | REV 01 | 740-021308 | AJP0TDZ | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021309 | A9401FL | SFP+-10G-LR |
| Power Supply 0 | | | | JPSU-450W-AC-AFO |
| Fan Tray 0 (AFO) | | | | Fan Module, Airflow Out |
| Fan Tray 1 (AFO) | | | | Fan Module, Airflow Out |

show chassis hardware detail (EX4200 Switch)

```
user@host> show chassis hardware detail
```

| Hardware inventory: | | | | |
|---------------------|---------|-------------|---------------|------------------------|
| Item | Version | Part number | Serial number | Description |
| Chassis | | | BM0208327733 | EX4200-24T |
| Routing Engine 0 | REV 11 | 750-021256 | BM0208327733 | EX4200-24T, 8 POE |
| Routing Engine 0 | | | BM0208327733 | EX4200-24T, 8 POE |
| FPC 0 | REV 11 | 750-021256 | BM0208327733 | EX4200-24T, 8 POE |
| CPU | | BUILTIN | BUILTIN | FPC CPU |
| PIC 0 | | BUILTIN | BUILTIN | 24x 10/100/1000 Base-T |
| PIC 1 | REV 03B | 711-021270 | AR0208162285 | 4x GE SFP |
| BRD | REV 08 | 711-021264 | AK0208328289 | EX4200-24T, 8 POE |
| Power Supply 0 | REV 03 | 740-020957 | AT0508346354 | PS 320W AC |
| Fan Tray | | | | Fan Tray |

show chassis hardware (EX4300 Switch)

```
user@host> show chassis hardware
```

| Hardware inventory: | | | | |
|---------------------|---------|-------------|---------------|-------------------------|
| Item | Version | Part number | Serial number | Description |
| Chassis | | | PD3713160055 | EX4300-48P |
| Routing Engine 0 | REV 04 | 650-044930 | PD3713160055 | EX4300-48P |
| FPC 0 | REV 04 | 650-044930 | PD3713160055 | EX4300-48P |
| CPU | | BUILTIN | BUILTIN | FPC CPU |
| PIC 0 | REV 04 | BUILTIN | BUILTIN | 48x 10/100/1000 Base-T |
| PIC 1 | REV 04 | BUILTIN | BUILTIN | 4x 40GE |
| Power Supply 0 | REV 01 | 740-046871 | 1EDA3090026 | JPSU-1100-AC-AFO-A |
| Fan Tray 0 (AFO) | | | | Fan Module, Airflow Out |
| Fan Tray 1 (AFO) | | | | Fan Module, Airflow Out |

show chassis hardware models (EX4500 Switch)

```
user@host> show chassis hardware models
```

| Hardware inventory: | | | | |
|---------------------|---------|-------------|---------------|-------------------|
| Item | Version | Part number | Serial number | FRU model number |
| Routing Engine 0 | REV 01 | 750-035700 | GG0210271867 | EX4500-40F-FB-C |
| FPC 0 | REV 01 | 750-035700 | GG0210271867 | EX4500-40F-FB-C |
| PIC 0 | | BUILTIN | BUILTIN | EX4500-40F-FB-C |
| Power Supply 1 | REV 01 | 740-029654 | H884FS00JC09 | EX4500-PWR1-AC-FB |

show chassis hardware detail (EX9200 Switch)

```
user@switch> show chassis hardware
```

```
Hardware inventory:
```

| Item | Version | Part number | Serial number | Description |
|------------------|---------|-------------|---------------|------------------------|
| Chassis | | | JN111DA44RFB | EX9208 |
| Midplane | REV 05 | 710-017414 | TS2912 | EX9208-BP |
| FPM Board | REV 02 | 710-017254 | XN1804 | Front Panel Display |
| PEM 0 | Rev 01 | 740-022697 | QCS0906C033 | PS 1.2-1.7kW; 100-240V |
| AC in | | | | |
| PEM 1 | Rev 01 | 740-022697 | QCS0906C095 | PS 1.2-1.7kW; 100-240V |
| AC in | | | | |
| Routing Engine 0 | REV 08 | 740-031116 | 9009122883 | RE-S-EX9200-1800X4 |
| CB 0 | REV 16 | 750-031391 | CAAW4391 | EX9200-SCBEF |
| PC 0 | REV 07 | 750-049612 | CABJ9312 | EX9200 40x1G Copper |
| CPU | REV 04 | 711-038484 | CABH8268 | MPCE PMB 2G |
| MIC 0 | REV 02 | 750-049607 | CABT9623 | 40x 1GE RJ45 |
| PIC 0 | | BUILTIN | BUILTIN | 10x 1GE RJ45 |
| PIC 1 | | BUILTIN | BUILTIN | 10x 1GE RJ45 |
| PIC 2 | | BUILTIN | BUILTIN | 10x 1GE RJ45 |
| PIC 3 | | BUILTIN | BUILTIN | 10x 1GE RJ45 |
| FPC 1 | REV 10 | 710-013699 | CAAN3529 | EX9200-40x1G-SFP |
| CPU | REV 04 | 711-038484 | CAAL7608 | MPCE PMB 2G |
| MIC 0 | REV 26 | 750-028392 | CAAS5151 | 20x 1GE SFP |
| PIC 0 | | BUILTIN | BUILTIN | 10x 1GE SFP |
| PIC 1 | | BUILTIN | BUILTIN | 10x 1GE SFP |
| MIC 1 | REV 26 | 750-028392 | CAAC8006 | 20x 1GE SFP |
| PIC 2 | | BUILTIN | BUILTIN | 10x 1GE SFP |
| Xcvr 8 | REV 01 | 740-011613 | E08L03674 | SFP-SX |
| Xcvr 9 | REV 01 | 740-011613 | E08M00243 | SFP-SX |
| PIC 3 | | BUILTIN | BUILTIN | 10x 1GE SFP |
| FPC 3 | REV 10 | 710-013699 | CAAR5261 | EX9200-40x1G-SFP |
| CPU | REV 04 | 711-038484 | CAAS2118 | MPCE PMB 2G |
| MIC 0 | REV 26 | 750-028392 | CAAS5067 | 20x 1GE SFP |
| PIC 0 | | BUILTIN | BUILTIN | 10x 1GE SFP |
| Xcvr 2 | REV 01 | 740-031851 | PNA7L8U | SFP-SX |
| Xcvr 3 | REV 02 | 740-011613 | AM0943SEKGZ | SFP-SX |
| Xcvr 4 | REV 02 | 740-011613 | AM0943SEJZ9 | SFP-SX |
| PIC 1 | | BUILTIN | BUILTIN | 10x 1GE SFP |
| MIC 1 | REV 26 | 750-028392 | CAAS5132 | 20x 1GE SFP |
| PIC 2 | | BUILTIN | BUILTIN | 10x 1GE SFP |
| Xcvr 4 | REV 01 | 740-011613 | E08D02625 | SFP-SX |
| Xcvr 9 | REV 02 | 740-011613 | PJH4RD9 | SFP-SX |
| PIC 3 | | BUILTIN | BUILTIN | 10x 1GE SFP |
| Xcvr 0 | REV 01 | 740-011613 | AM0813S8YME | SFP-SX |
| Fan Tray | | | | Left Fan Tray |

show chassis hardware detail (PTX10008 Routers)

```
user@switch> show chassis hardware detail
```

```
Hardware inventory:
```

| Item | Version | Part number | Serial number | Description |
|-------------------|---------|-------------|---------------|----------------------|
| Chassis | | | DE487 | JNP10008 [PTX10008 - |
| PILOT BUILD V1.1] | | | | |
| Midplane | REV 27 | 750-054097 | ACPD4307 | Midplane 8 |
| Routing Engine 0 | | BUILTIN | BUILTIN | RE-PTX-2X00x4 |
| vtbd0 15360 MB | | | | Virtio Block Disk |
| vtbd1 15360 MB | | | | Virtio Block Disk |

| | | | | |
|------------------|-------------------|---------------|----------------|---------------------------|
| ada0 | 128 MB | QEMU | QM00002 | Virtio Block Disk |
| usb0 (addr 0.1) | EHCI root HUB 0 | Intel | | uhub0 |
| usb1 (addr 0.2) | product 0x0020 32 | vendor 0x8087 | | uhub1 |
| Routing Engine 1 | BUILTIN | BUILTIN | | RE-PTX-2X00x4 |
| vtbd0 | 15360 MB | | | Virtio Block Disk |
| vtbd1 | 15360 MB | | | Virtio Block Disk |
| ada0 | 128 MB | QEMU | QM00002 | Virtio Block Disk |
| usb0 (addr 0.1) | EHCI root HUB 0 | Intel | | uhub0 |
| usb1 (addr 0.2) | product 0x0020 32 | vendor 0x8087 | | uhub1 |
| CB 0 | REV 02 | 750-068820 | ACNZ4440 | Control Board |
| CB 1 | REV 02 | 750-068820 | ACNZ8284 | Control Board |
| FPC 0 | REV 36 | 750-051354 | ACNP4679 | LC1102 - 12C / 36Q / |
| 144X | | | | |
| CPU | | BUILTIN | BUILTIN | FPC CPU |
| PIC 0 | | BUILTIN | BUILTIN | 12x100GE/36x40GE/144x10GE |
| Xcvr 1 | REV 01 | 740-058734 | 1ECQ113834D | QSFP-100GBASE-SR4 |
| Xcvr 5 | REV 01 | 740-058734 | 1ECQ1137067 | QSFP-100GBASE-SR4 |
| Xcvr 6 | REV 01 | 740-054053 | QF3205SD | QSFP+-4X10G-SR |
| Xcvr 7 | REV 01 | 740-058734 | 1ECQ11381MP | QSFP-100GBASE-SR4 |
| Xcvr 11 | REV 01 | 740-061405 | 1ACQ110507K | QSFP-100GBASE-SR4 |
| Xcvr 13 | REV 01 | 740-058734 | 1ECQ11390ZB | QSFP-100GBASE-SR4 |
| Xcvr 17 | REV 01 | 740-058734 | 1ECQ11381M1 | QSFP-100GBASE-SR4 |
| Xcvr 19 | REV 01 | 740-058734 | 1ECQ11381JS | QSFP-100GBASE-SR4 |
| Xcvr 23 | REV 01 | 740-058734 | 1ACQ112000E | QSFP-100GBASE-SR4 |
| Xcvr 25 | REV 01 | 740-058734 | 1ECQ11381NT | QSFP-100GBASE-SR4 |
| Xcvr 28 | REV 01 | 740-054053 | QG1502WV | QSFP+-4X10G-SR |
| Xcvr 29 | REV 01 | 740-058734 | 1ACQ112000D | QSFP-100GBASE-SR4 |
| Xcvr 33 | REV 01 | 740-058734 | 1ACQ1134065 | QSFP-100GBASE-SR4 |
| Xcvr 34 | REV 01 | 740-067442 | XV20L4L | QSFP+-40G-SR4 |
| FPC 1 | REV 33 | 750-051354 | ACNX8831 | LC1102 - 12C / 36Q / |
| 144X | | | | |
| CPU | | BUILTIN | BUILTIN | FPC CPU |
| PIC 0 | | BUILTIN | BUILTIN | 12x100GE/36x40GE/144x10GE |
| Xcvr 5 | | NON-JNPR | 37700171YY0084 | QSFP-100GBASE-LR4 |
| Xcvr 25 | | NON-JNPR | GDA2017459 | QSFP-100GBASE-LR4 |
| Xcvr 29 | | NON-JNPR | GDF2008750 | QSFP-100GBASE-LR4 |
| FPC 2 | REV 32 | 750-051357 | ACPB0341 | LC1101 - 30C / 30Q / 96X |
| CPU | | BUILTIN | BUILTIN | FPC CPU |
| PIC 0 | | BUILTIN | BUILTIN | 30x100GE/30x40GE/96x10GE |
| Xcvr 0 | | NON-JNPR | 37700170YZC305 | QSFP-100GBASE-LR4 |
| Xcvr 4 | | NON-JNPR | 37700170YZC306 | QSFP-100GBASE-LR4 |
| Xcvr 9 | REV 01 | 740-054053 | QF36013S | QSFP+-4X10G-SR |
| Xcvr 12 | REV 01 | 740-067442 | XV301AU | QSFP+-40G-SR4 |
| Xcvr 14 | REV 01 | 740-043308 | UWE2CG9 | QSFP+-40G-LR4 |
| Xcvr 16 | REV 01 | 740-043308 | UWH141S | QSFP+-40G-LR4 |
| Xcvr 17 | REV 01 | 740-058734 | 1ECQ11180VH | QSFP-100GBASE-SR4 |
| Xcvr 18 | REV 01 | 740-054050 | INFJA0492237 | QSFP+-4X10G-LR |
| Xcvr 26 | REV 01 | 740-058734 | 1ACQ111803N | QSFP-100GBASE-SR4 |
| Xcvr 27 | REV 01 | 740-058734 | 1ACQ113405S | QSFP-100GBASE-SR4 |
| FPC 3 | REV 35 | 750-051357 | ACPD2186 | LC1101 - 30C / 30Q / 96X |
| CPU | | BUILTIN | BUILTIN | FPC CPU |
| PIC 0 | | BUILTIN | BUILTIN | 30x100GE/30x40GE/96x10GE |
| Xcvr 0 | REV 01 | 740-061409 | 1GCQA1470A3 | QSFP-100GBASE-LR4 |
| Xcvr 1 | REV 01 | 740-061409 | 1GCQA1470XC | QSFP-100GBASE-LR4 |
| Xcvr 7 | | NON-JNPR | FG4550500008 | QSFP-100G-CWDM4 |

| | | | | |
|----------------|--------|------------|--------------|---------------------------|
| Xcvr 24 | REV 01 | 740-058734 | 1ECQ11381LX | QSFP-100GBASE-SR4 |
| Xcvr 29 | REV 01 | 740-043308 | UWE0UYS | QSFP+-40G-LR4 |
| FPC 5 | REV 08 | 750-068822 | ACPF0057 | LC1102 - 12C / 36Q / |
| 144X | | | | |
| CPU | | BUILTIN | BUILTIN | FPC CPU |
| PIC 0 | | BUILTIN | BUILTIN | 12x100GE/36x40GE/144x10GE |
| FPC 6 | REV 08 | 750-068822 | ACPE9951 | LC1102 - 12C / 36Q / |
| 144X | | | | |
| CPU | | BUILTIN | BUILTIN | FPC CPU |
| PIC 0 | | BUILTIN | BUILTIN | 12x100GE/36x40GE/144x10GE |
| | | | | |
| Xcvr 1 | REV 01 | 740-054053 | QF3208LG | QSFP+-4X10G-SR |
| Xcvr 7 | REV 01 | 740-067442 | XV20LGN | QSFP+-40G-SR4 |
| Xcvr 8 | REV 01 | 740-067442 | XV20VMV | QSFP+-40G-SR4 |
| Xcvr 9 | REV 01 | 740-067442 | XV20KCN | QSFP+-40G-SR4 |
| Xcvr 10 | REV 01 | 740-067442 | XU504QD | QSFP+-40G-SR4 |
| Xcvr 11 | REV 01 | 740-067442 | XU504X7 | QSFP+-40G-SR4 |
| Xcvr 12 | REV 01 | 740-067442 | XU504W8 | QSFP+-40G-SR4 |
| Xcvr 16 | REV 01 | 740-032986 | QF4301JP | QSFP+-40G-SR4 |
| Xcvr 17 | REV 01 | 740-032986 | QF4303AE | QSFP+-40G-SR4 |
| Xcvr 18 | REV 01 | 740-054050 | INFJA0492400 | QSFP+-4X10G-LR |
| Xcvr 19 | REV 01 | 740-054050 | INFJA0492142 | QSFP+-4X10G-LR |
| Xcvr 24 | REV 01 | 740-032986 | QF4301KB | QSFP+-40G-SR4 |
| Xcvr 25 | REV 01 | 740-032986 | QF4303YP | QSFP+-40G-SR4 |
| Xcvr 30 | REV 01 | 740-067442 | XV300ZX | QSFP+-40G-SR4 |
| Xcvr 31 | REV 01 | 740-043308 | UWH2KBW | QSFP+-40G-LR4 |
| Xcvr 34 | REV 01 | 740-054053 | QG1501YU | QSFP+-4X10G-SR |
| FPD Board | REV 07 | 711-054687 | ACPC7142 | Front Panel Display |
| Power Supply 0 | REV 02 | 740-049388 | 1EDL62102N9 | Power Supply AC |
| Power Supply 1 | REV 02 | 740-049388 | 1EDL60300KX | Power Supply AC |
| Power Supply 2 | REV 02 | 740-049388 | 1EDL60300DL | Power Supply AC |
| Power Supply 3 | REV 02 | 740-049388 | 1EDL61701BT | Power Supply AC |
| Power Supply 4 | REV 02 | 740-049388 | 1EDL62102P7 | Power Supply AC |
| Power Supply 5 | REV 02 | 740-049388 | 1EDL62102PP | Power Supply AC |
| FTC 0 | REV 14 | 750-050108 | ACPE4038 | Fan Controller 8 |
| FTC 1 | REV 14 | 750-050108 | ACPE4032 | Fan Controller 8 |
| Fan Tray 0 | REV 09 | 760-054372 | ACPD6799 | Fan Tray 8 |
| Fan Tray 1 | REV 09 | 760-054372 | ACNZ3584 | Fan Tray 8 |
| SIB 0 | REV 24 | 750-050058 | ACPD4587 | Switch Fabric 8 |
| SIB 1 | REV 24 | 750-050058 | ACNZ0635 | Switch Fabric 8 |
| SIB 2 | REV 24 | 750-050058 | ACPD4908 | Switch Fabric 8 |
| SIB 3 | REV 24 | 750-050058 | ACNZ0617 | Switch Fabric 8 |
| SIB 4 | REV 24 | 750-050058 | ACNZ0527 | Switch Fabric 8 |
| SIB 5 | REV 23 | 750-050058 | ACNX6980 | Switch Fabric 8 |

show chassis hardware detail (PTX10016 Routers)

```
user@switch> show chassis hardware detail
```

```
Hardware inventory:
```

| Item | Version | Part number | Serial number | Description |
|------------------|-------------------|-------------|---------------|---------------------|
| Chassis | | | DH995 | JNP10016 [PTX10016] |
| Midplane | REV 22 | 750-056555 | ACPM7810 | Midplane 16 |
| Routing Engine 0 | | BUILTIN | BUILTIN | RE-PTX-2X00x4 |
| vtbd0 15360 MB | | | | Virtio Block Disk |
| vtbd1 15360 MB | | | | Virtio Block Disk |
| ada0 128 MB | QEMU | | QM00002 | Virtio Block Disk |
| usb0 (addr 0.1) | EHCI root HUB 0 | | Intel | uhub0 |
| usb1 (addr 0.2) | product 0x0020 32 | | vendor 0x8087 | uhub1 |
| Routing Engine 1 | | BUILTIN | BUILTIN | RE-PTX-2X00x4 |
| vtbd0 15360 MB | | | | Virtio Block Disk |

| | | | | |
|-----------------------------------|--------|------------|---------------|---------------------------|
| vtbd1 15360 MB | | | | Virtio Block Disk |
| ada0 128 MB QEMU | | | QM00002 | Virtio Block Disk |
| usb0 (addr 0.1) EHCI root HUB 0 | | | Intel | uhub0 |
| usb1 (addr 0.2) product 0x0020 32 | | | vendor 0x8087 | uhub1 |
| CB 0 | REV 03 | 750-068820 | ACPL7238 | Control Board |
| CB 1 | REV 03 | 750-068820 | ACPL7298 | Control Board |
| FPC 1 | REV 36 | 750-077140 | ACNP4590 | LC1102 - 12C / 36Q / |
| 144X | | | | |
| CPU | | BUILTIN | BUILTIN | FPC CPU |
| PIC 0 | | BUILTIN | BUILTIN | 12x100GE/36x40GE/144x10GE |
| Xcvr 0 | REV 01 | 740-054053 | QF3600AV | QSFP+-4X10G-SR |
| Xcvr 35 | REV 01 | 740-061405 | 1ACQ110507K | QSFP-100GBASE-SR4 |
| FPC 3 | REV 07 | 750-071975 | CAHA2224 | LC1102 - 12C / 36Q / |
| 144X | | | | |
| CPU | | BUILTIN | BUILTIN | FPC CPU |
| PIC 0 | | BUILTIN | BUILTIN | 12x100GE/36x40GE/144x10GE |
| Xcvr 0 | REV 01 | 740-054053 | QG1505YM | QSFP+-4X10G-SR |
| Xcvr 11 | | NON-JNPR | GDA2017459 | QSFP-100GBASE-LR4 |
| Xcvr 35 | | NON-JNPR | GDF2008750 | QSFP-100GBASE-LR4 |
| FPC 5 | REV 13 | 750-068822 | ACPD6501 | LC1102 - 12C / 36Q / |
| 144X | | | | |
| CPU | | BUILTIN | BUILTIN | FPC CPU |
| PIC 0 | | BUILTIN | BUILTIN | 12x100GE/36x40GE/144x10GE |
| Xcvr 1 | REV 01 | 740-058734 | 1ECQ11381LA | QSFP-100GBASE-SR4 |
| Xcvr 2 | REV 01 | 740-043308 | UWH141S | QSFP+-40G-LR4 |
| Xcvr 3 | REV 01 | 740-043308 | UWE2CG9 | QSFP+-40G-LR4 |
| FPC 6 | REV 37 | 750-077140 | ACNS2793 | LC1102 - 12C / 36Q / |
| 144X | | | | |
| CPU | | BUILTIN | BUILTIN | FPC CPU |
| PIC 0 | | BUILTIN | BUILTIN | 12x100GE/36x40GE/144x10GE |
| Xcvr 0 | REV 01 | 740-032986 | QH0400VH | QSFP+-40G-SR4 |
| Xcvr 1 | REV 01 | 740-032986 | QH0400VM | QSFP+-40G-SR4 |
| Xcvr 35 | REV 01 | 740-058734 | 1ECQ11390ZB | QSFP-100GBASE-SR4 |
| FPC 8 | REV 36 | 750-077140 | ACNP4625 | LC1102 - 12C / 36Q / |
| 144X | | | | |
| CPU | | BUILTIN | BUILTIN | FPC CPU |
| PIC 0 | | BUILTIN | BUILTIN | 12x100GE/36x40GE/144x10GE |
| Xcvr 1 | REV 01 | 740-058732 | 1AMQA14206D | QSFP-100GBASE-LR4 |
| Xcvr 10 | REV 01 | 740-032986 | QF4301KB | QSFP+-40G-SR4 |
| Xcvr 24 | REV 01 | 740-054050 | INF AJ0492244 | QSFP+-4X10G-LR |
| FPC 9 | REV 35 | 750-071976 | ACPD3055 | LC1101 - 30C / 30Q / 96X |
| CPU | | BUILTIN | BUILTIN | FPC CPU |
| PIC 0 | | BUILTIN | BUILTIN | 30x100GE/30x40GE/96x10GE |
| Xcvr 0 | | NON-JNPR | INGBT7970007 | QSFP-100GBASE-LR4 |
| Xcvr 1 | | NON-JNPR | UWQ24D9 | QSFP-100GBASE-LR4 |
| Xcvr 2 | | NON-JNPR | INGBT7970011 | QSFP-100GBASE-LR4 |
| Xcvr 3 | | NON-JNPR | UX60AF1 | QSFP-100G-CWDM4 |
| Xcvr 4 | | NON-JNPR | UX408JJ | QSFP-100GBASE-LR4 |
| Xcvr 11 | REV 01 | 740-058734 | 1ECQ113835F | QSFP-100GBASE-SR4 |
| Xcvr 18 | | NON-JNPR | Q7496 | QSFP-100G-CWDM4 |
| Xcvr 29 | REV 01 | 740-058734 | 1ECQ11380LZ | QSFP-100GBASE-SR4 |
| Power Supply 0 | REV 02 | 740-049388 | 1EDL625039E | Power Supply AC |
| Power Supply 1 | REV 02 | 740-049388 | 1EDL62503AD | Power Supply AC |
| Power Supply 2 | REV 02 | 740-049388 | 1EDL625039P | Power Supply AC |

| | | | | |
|----------------|--------|------------|-------------|---------------------|
| Power Supply 3 | REV 02 | 740-049388 | 1EDL702004E | Power Supply AC |
| Power Supply 4 | REV 02 | 740-049388 | 1EDL625039D | Power Supply AC |
| Power Supply 5 | REV 02 | 740-049388 | 1EDL63706JD | Power Supply AC |
| Power Supply 6 | REV 02 | 740-049388 | 1EDL63706JH | Power Supply AC |
| FTC 0 | REV 10 | 750-050309 | ACPM2918 | Fan Controller 16 |
| FTC 1 | REV 10 | 750-050309 | ACPE8185 | Fan Controller 16 |
| Fan Tray 0 | REV 10 | 760-077141 | ACPV7288 | Fan Tray 16 |
| Fan Tray 1 | REV 10 | 760-057901 | ACPL0546 | Fan Tray 16 |
| SIB 0 | REV 15 | 750-058270 | ACPM2804 | Switch Fabric 16 |
| SIB 1 | REV 15 | 750-058270 | ACPM2808 | Switch Fabric 16 |
| SIB 2 | REV 15 | 750-058270 | ACPL4450 | Switch Fabric 16 |
| SIB 3 | REV 15 | 750-058270 | ACPJ9834 | Switch Fabric 16 |
| SIB 4 | REV 15 | 750-058270 | ACPM2814 | Switch Fabric 16 |
| SIB 5 | REV 15 | 750-058270 | ACPL4277 | Switch Fabric 16 |
| FPD Board | REV 07 | 711-054687 | ACPL1407 | Front Panel Display |

show chassis hardware (M7i Router)

```
user@host> show chassis hardware
```

```
Hardware inventory:
```

| Item | Version | Part number | Serial number | Description |
|----------------|---------|-------------|---------------|-------------------------|
| Chassis | | | 31959 | M7i |
| Midplane | REV 02 | 710-008761 | CA0209 | M7i Midplane |
| Power Supply 0 | Rev 04 | 740-008537 | PD10272 | AC Power Supply |
| Routing Engine | REV 01 | 740-008846 | 1000396803 | RE-5.0 |
| CFEB | REV 02 | 750-009492 | CA0166 | Internet Processor IIV1 |
| FPC 0 | | | | E-FPC |
| PIC 0 | REV 04 | 750-003163 | HJ6416 | 1x G/E, 1000 BASE-SX |
| PIC 1 | REV 04 | 750-003163 | HJ6423 | 1x G/E, 1000 BASE-SX |
| PIC 2 | REV 04 | 750-003163 | HJ6421 | 1x G/E, 1000 BASE-SX |
| PIC 3 | REV 02 | 750-003163 | HJ0425 | 1x G/E, 1000 BASE-SX |
| FPC 1 | | | | E-FPC |
| PIC 2 | REV 01 | 750-009487 | HM2275 | ASP - Integrated |
| PIC 3 | REV 01 | 750-009098 | CA0142 | 2x F/E, 100 BASE-TX |

```
Hardware inventory:
```

| Item | Version | Part number | Serial number | Description |
|----------------|---------|-------------|---------------|-----------------------|
| Chassis | | | B1157 | M7i |
| Midplane | REV 05 | 710-008761 | DM0840 | M7i Midplane |
| Power Supply 0 | Rev 08 | 740-008537 | TE53755 | AC Power Supply |
| Routing Engine | REV 07 | 740-011202 | 1000736567 | RE-850 |
| CFEB | REV 09 | 750-010463 | DK6952 | Internet Processor II |
| FPC 0 | | | | E-FPC |
| PIC 0 | REV 12 | 750-012838 | DL7993 | 4x 1GE(LAN), IQ2 |
| Xcvr 0 | REV 01 | 740-011614 | PD94TDJ | SFP-LX10 |
| Xcvr 1 | REV 01 | 740-011615 | PA05EER | UNSUPPORTED |
| Xcvr 2 | REV 01 | 740-011614 | PD94THU | SFP-LX10 |
| Xcvr 3 | | NON-JNPR | PDC2E7A | SFP-LX10 |
| PIC 1 | REV 03 | 750-023116 | JT0203 | 4x CHSTM1 SDH CE SFP |
| Xcvr 0 | REV 01 | 740-012434 | AGT063832PS | SFP-SR |
| Xcvr 1 | REV 01 | 740-012434 | AGT063832LY | SFP-SR |
| Xcvr 3 | REV 01 | 740-016064 | C06J19018 | SFP-LR |
| PIC 2 | REV 15 | 750-014895 | DM5757 | MultiServices 100 |
| PIC 3 | REV 01 | 750-025390 | JW9448 | 12x T1/E1 CE |
| FPC 1 | | | | E-FPC |
| PIC 2 | | BUILTIN | BUILTIN | 1x Tunnel |
| PIC 3 | REV 09 | 750-009099 | DM0899 | 1x G/E, 1000 BASE |
| Xcvr 0 | REV 01 | 740-012434 | AGT07150HGJ | UNSUPPORTED |
| Fan Tray | | | | Rear Fan Tray |

show chassis hardware (M10 Router)

```

user@host> show chassis hardware
Hardware inventory:
Item             Version  Part number  Serial number  Description
Chassis                               1122          M10
Midplane                               S/N AC6626
Power supply A   Rev 01    740-002497   S/N LC36095    AC
Power supply B   Rev 01    740-002497   S/N LC36100    AC
Display          REV 1.2   710-001995   S/N AC6656
Host             18000005dfb3fb01  teknor
FEB              REV 01    710-001948   S/N AC6632     Internet Processor II
FPC 0
  PIC 0           REV 08    750-001072   S/N AB2485     1x G/E, 1000 BASE-SX
  PIC 1           REV 01    750-000613   S/N AA1048     1x OC-12 SONET, SMIR
FPC 1
Fan Tray 0
Fan Tray 1
FANTRAY-M10I-S
FANTRAY-M10I-S

```

show chassis hardware models (M10 Router)

```

user@host> show chassis hardware models
Hardware inventory:
Item             Version  Part number  CLEI code  FRU model number
Midplane          REV 04    710-008920
Power Supply 0    Rev 06    740-008537  PWR-M10i-M7i-AC-S
Power Supply 1    Rev 06    740-008537  PWR-M10i-M7i-AC-S
HCM 0             REV 03    710-010580  HCM-M10i-S
HCM 1             REV 03    710-010580  HCM-M10i-S
Routing Engine 0 REV 09    740-009459  RE-400-256-S
CFEB 0            REV 05    750-010465  FEB-M10i-M7i-S
FPC 0
  PIC 0           REV 10    750-002971  PE-40C3-SON-MM
  PIC 1           REV 11    750-002992  PE-4FE-TX
  PIC 2           REV 03    750-002977  PE-20C3-ATM-MM
  PIC 3           REV 08    750-005724  PE-20C3-ATM2-MM
FPC 1
  PIC 2           REV 12    750-008425  PE-AS
  PIC 3           REV 13    750-005636  PE-4CHDS3-QPP
Fan Tray 0
Fan Tray 1
FANTRAY-M10I-S
FANTRAY-M10I-S

```

show chassis hardware (M20 Router)

```

user@host> show chassis hardware
Hardware inventory:
Item             Version  Part number  Serial number  Description
Chassis                               20033        M20
Backplane          REV 07    710-001517   S/N AA7940
Power supply B     Rev 01    740-001465   S/N 000001     AC
Display          REV 02    710-001519   S/N AA9704
Host 0            98000004f8f27501  teknor
SSB slot 0        REV 01    710-001951   S/N AD5905     Internet Processor II
  SSRAM bank 0    REV 01    710-001385   S00480         2 MB
  SSRAM bank 1    REV 01    710-001385   S00490         2 MB
  SSRAM bank 2    REV 01    710-001385   S001:?         2 MB
  SSRAM bank 3    REV 01    710-001385   S00483         2 MB
SSB slot 1        N/A      N/A          N/A            Backup
FPC 1             REV 01    710-001292   S/N AB7528
  SSRAM           REV 01    710-000077   S/N 304209     1 MB

```

| | | | | |
|--------------|--------|------------|------------|-----------------------|
| SDRAM bank 0 | REV 01 | 710-000099 | S/N 000603 | 64 MB |
| SDRAM bank 1 | REV 01 | 710-000099 | S/N 000414 | 64 MB |
| PIC 0 | REV 03 | 750-000612 | S/N AB8433 | 2x OC-3 ATM, MM |
| PIC 1 | REV 01 | 750-000616 | S/N AA1168 | 1x OC-12 ATM, MM |
| PIC 2 | REV 01 | 750-000613 | S/N AA1008 | 1x OC-12 SONET, SMIR |
| PIC 3 | REV 01 | 750-002501 | S/N AD5810 | 4x E3 |
| FPC 2 | REV 01 | 710-001292 | S/N AC0119 | |
| SSRAM | REV 01 | 710-000077 | S/N 503241 | 1 MB |
| SDRAM bank 0 | REV 01 | 710-000099 | S/N 306835 | 64 MB |
| SDRAM bank 1 | REV 01 | 710-000099 | S/N 306832 | 64 MB |
| Fan Tray 0 | | | | Front Upper Fan Tray |
| Fan Tray 1 | | | | Front Middle Fan Tray |
| Fan Tray 2 | | | | Front Bottom Fan Tray |
| Fan Tray 3 | | | | Rear Fan Tray |

show chassis hardware models (M20 Router)

```
user@host> show chassis hardware models
Hardware inventory:
```

| Item | Version | Part number | CLEI code | FRU model number |
|------------------|---------|-------------|-----------|------------------|
| Backplane | REV 03 | 710-002334 | | CHAS-MP-M20-S |
| Power Supply A | REV 06 | 740-001465 | | PWR-M20-AC-S |
| Display | REV 04 | 710-001519 | | CRAFT-M20-S |
| Routing Engine 0 | REV 06 | 740-003239 | | RE-333-768-S |
| Routing Engine 1 | REV 06 | 740-003239 | | RE-333-768-S |
| SSB 0 | REV 02 | 710-001951 | | SSB-E-M20 |
| SSB 1 | N/A | N/A | | |
| FPC 0 | REV 03 | 710-003308 | | FPC-E |
| PIC 0 | REV 08 | 750-002303 | | P-4FE-TX |
| PIC 1 | REV 07 | 750-004745 | | P-2MCDSD3 |
| PIC 2 | REV 03 | 750-002965 | | PE-4CHDS3 |
| FPC 1 | REV 03 | 710-003308 | | FPC-E |
| PIC 0 | REV 03 | 750-002914 | | P-20C3-ATM-MM |
| Fan Tray 0 | | | | FANTRAY-F-M20-S |
| Fan Tray 1 | | | | FANTRAY-F-M20-S |
| Fan Tray 2 | | | | FANTRAY-F-M20-S |
| Fan Tray 3 | | | | FANTRAY-R-M20-S |

show chassis hardware (M40 Router)

```
user@host> show chassis hardware
Hardware inventory:
```

| Item | Version | Part number | Serial number | Description |
|----------------|---------|-------------|---------------|----------------------|
| Backplane | REV 02 | 710-000073 | S/N AA0053 | |
| Power supply A | Rev 2 | 740-000235 | S/N 000042 | DC |
| Maxicab | REV X1 | 710-000229 | S/N AA0139 | |
| Minicab | REV X1 | 710-000482 | S/N AA0201 | |
| Display | REV 06 | 710-000150 | S/N AA0905 | |
| Host | | | | cpv5000 |
| SCB | REV X1 | 710-000075 | S/N AA0158 | Internet Processor I |
| SSRAM bank 0 | REV 02 | 710-000077 | S/N AA2267 | 1 MB |
| SSRAM bank 1 | REV 02 | 710-000077 | S/N AA2270 | 1 MB |
| SSRAM bank 2 | REV 02 | 710-000077 | S/N AA2269 | 1 MB |
| SSRAM bank 3 | REV 02 | 710-000077 | S/N AA2268 | 1 MB |
| FPC 0 | REV 01 | 710-000175 | S/N AA0048 | |
| SSRAM | REV 01 | 710-000077 | S/N AA2333 | 1 MB |
| SDRAM bank 0 | REV 01 | 710-000099 | S/N AA2332 | 64 MB |
| SDRAM bank 1 | REV X1 | 710-000099 | S/N AA2337 | 64 MB |
| PIC 0 | REV 04 | 750-000613 | S/N aa0343 | 1x OC-12 SONET, SMIR |
| PIC 1 | REV 04 | 750-000613 | S/N AA0379 | 1x OC-12 SONET, SMIR |

| | | | | |
|--------------|--------|------------|------------|----------------------|
| PIC 2 | REV 04 | 750-000613 | S/N AA0377 | 1x OC-12 SONET, SMIR |
| PIC 3 | REV 04 | 750-000613 | S/N AA0378 | 1x Tunnel |
| FPC 2 | REV 01 | 710-000175 | S/N AA0042 | |
| SSRAM | REV 02 | 710-000077 | S/N AA2288 | 1 MB |
| SDRAM bank 0 | REV 01 | 710-000099 | S/N AA2331 | 64 MB |
| SDRAM bank 1 | REV 01 | 710-000099 | S/N AA2330 | 64 MB |
| PIC 0 | REV X1 | 750-000603 | S/N AA0143 | 4x OC-3 SONET, SMIR |
| PIC 1 | REV X1 | 750-000615 | S/N AA0149 | 4x OC-3 SONET, MM |
| PIC 2 | REV X1 | 750-000611 | S/N AA0148 | 4x OC-3 SONET, MM |
| PIC 3 | REV 04 | 750-000613 | S/N AA0330 | 1x OC-12 SONET, SMIR |
| FPC 4 | REV 01 | 710-000175 | S/N AA0050 | |
| SSRAM | REV 01 | 710-000077 | S/N AA2327 | 1 MB |
| SDRAM bank 0 | REV 01 | 710-000099 | S/N AA2329 | 64 MB |
| SDRAM bank 1 | REV 01 | 710-000099 | S/N AA2328 | 64 MB |
| PIC 0 | REV 04 | 750-000613 | S/N AA0320 | 1x OC-12 SONET, SMIR |
| PIC 2 | REV 05 | 750-000616 | S/N AA1341 | 1x OC-12 ATM, MM |
| PIC 3 | REV 08 | 750-001072 | S/N AB2462 | 1x G/E, 1000 BASE-SX |
| FPC 5 | REV 10 | 710-000175 | S/N AA7663 | |
| SSRAM | REV 01 | 710-000077 | S/N 501590 | 1 MB |
| SDRAM bank 0 | REV 01 | 710-000099 | S/N 300949 | 64 MB |
| SDRAM bank 1 | REV 01 | 710-000099 | S/N 300868 | 64 MB |
| PIC 1 | REV 01 | 750-001323 | S/N AB1670 | 1x Tunnel |

show chassis hardware (M40e Router)

```
user@host> show chassis hardware
```

| Hardware inventory: | | | | |
|---------------------|---------|-------------|------------------|-----------------------|
| Item | Version | Part number | Serial number | Description |
| Chassis | | | | m40e |
| Midplane | REV 01 | 710-005071 | AX3671 | |
| FPM CMB | REV 03 | 710-001642 | AR9074 | |
| FPM Display | REV 03 | 710-001647 | AR7331 | |
| CIP | REV 04 | 710-002649 | BB4449 | |
| PEM 0 | Rev 01 | 740-003787 | MC12364 | Power Entry Module |
| PEM 1 | Rev 01 | 740-003787 | MC12383 | Power Entry Module |
| PCG 0 | REV 07 | 710-001568 | AG1332 | |
| PCG 1 | REV 07 | 710-001568 | AR3789 | |
| Host 0 | | | 3e000007c8176601 | Present |
| MCS 0 | REV 11 | 710-001226 | AN5813 | |
| SFM 0 SPP | REV 07 | 710-001228 | AG4676 | |
| SFM 0 SPR | REV 05 | 710-002189 | AE4735 | Internet Processor II |
| SFM 1 SPP | REV 07 | 710-001228 | AP1347 | |
| SFM 1 SPR | REV 05 | 710-002189 | BE0063 | Internet Processor II |
| FPC 0 | REV 01 | 710-011725 | BE0669 | M40e-EP-FPC Type 1 |
| CPU | REV 01 | 710-004600 | BD9504 | |
| PIC 0 | REV 03 | 750-003737 | AY3991 | 4x G/E, 1000 BASE-SX |
| FPC 1 | REV 01 | 710-005197 | BD9842 | M40e-FPC Type 2 |
| CPU | REV 01 | 710-004600 | BB4869 | |
| PIC 0 | REV 07 | 750-001900 | AR8278 | 1x OC-48 SONET, SMSR |
| FPC 2 | REV 02 | 710-005197 | BD9824 | M40e-FPC Type 2 |
| CPU | REV 01 | 710-004600 | BD9531 | |
| PIC 0 | REV 03 | 750-003737 | AY3986 | 4x G/E, 1000 BASE-SX |
| FPC 4 | REV 02 | 710-005078 | BE0664 | M40e-FPC Type 1 |
| CPU | REV 01 | 710-004600 | BD9559 | |
| PIC 0 | REV 03 | 750-001894 | AG7963 | 1x G/E, 1000 BASE-SX |
| PIC 2 | REV 01 | 750-002575 | AF2472 | 4x OC-3 SONET, SMIR |
| FPC 6 | REV 02 | 710-005078 | BE0652 | M40e-FPC Type 1 |
| CPU | REV 01 | 710-004600 | BD9607 | |
| PIC 0 | REV 02 | 750-002911 | AN2286 | 4x F/E, 100 BASE-TX |
| PIC 2 | REV 01 | 750-002577 | AP6345 | 4x OC-3 SONET, MM |

show chassis hardware (M120 Router)

```

user@host> show chassis hardware
Hardware inventory:

```

| Item | Version | Part number | Serial number | Description |
|------------------|--------------------------------|-------------|---------------|-------------------------|
| Chassis | | | JN000054AC | M120 |
| Midplane | REV 01 | 710-013667 | RB4170 | M120 Midplane |
| FPM Board | REV 02 | 710-011407 | CJ9186 | M120 FPM Board |
| FPM Display | REV 02 | 710-011405 | CJ9173 | M120 FPM Display |
| FPM CIP | REV 02 | 710-011410 | CJ9221 | M120 FPM CIP |
| PEM 0 | Rev 05 | 740-011936 | RM28320 | AC Power Entry Module |
| PEM 1 | Rev 05 | 740-011936 | RM28321 | AC Power Entry Module |
| Routing Engine 0 | REV 03 | 740-014080 | 1000642883 | RE-A-1000 |
| CB 0 | REV 03 | 710-011403 | CM8346 | M120 Control Board |
| CB 1 | REV 06 | 710-011403 | CP6728 | M120 Control Board |
| FPC 1 | REV 02 | 710-015908 | CP6925 | M120 CFPC 10GE |
| PIC 0 | | BUILTIN | BUILTIN | 1x 10GE(LAN/WAN) XFP |
| Xcvr 0 | REV 01 | 740-014279 | 62E204N00007 | XFP-10G-LR |
| FPC 3 | REV 03 | 710-011393 | CJ9234 | M120 FPC Type 2 |
| PIC 0 | REV 16 | 750-008155 | NB5229 | 2x G/E IQ, 1000 BASE |
| Xcvr 0 | REV 01 | 740-011613 | P9F15JB | SFP-SX |
| Xcvr 1 | REV 01 | 740-007326 | P4Q0R9G | SFP-SX |
| PIC 1 | REV 09 | 750-007745 | CG4360 | 4x OC-3 SONET, SMIR |
| PIC 2 | REV 16 | 750-008155 | ND7787 | 2x G/E IQ, 1000 BASE |
| Xcvr 0 | REV 01 | 740-011613 | P9F12AS | SFP-SX |
| Xcvr 1 | REV 01 | 740-011613 | P9F1ALU | SFP-SX |
| PIC 3 | REV 07 | 750-011800 | JW1284 | 8x 1GE(LAN), IQ2 |
| Xcvr 0 | REV 01 | 740-011613 | P9F1AM6 | SFP-SX |
| Xcvr 6 | REV 01 | 740-011613 | P9F16NN | SFP-SX |
| Xcvr 7 | REV 01 | 740-011782 | P8C29Y7 | SFP-SX |
| Board B | REV 02 | 710-011395 | CN3754 | M120 FPC Mezz |
| FPC 4 | REV 02 | 710-011398 | CP6741 | M120 FPC Type 3 |
| PIC 0 | REV 16 | 750-007141 | NB2855 | 10x 1GE(LAN), 1000 BASE |
| Xcvr 0 | REV 01 | 740-011782 | P922A1F | SFP-SX |
| Xcvr 1 | REV 01 | 740-011782 | P922A16 | SFP-SX |
| Xcvr 2 | REV 01 | 740-011782 | P922A0U | SFP-SX |
| Xcvr 3 | REV 01 | 740-011782 | P9229UZ | SFP-SX |
| Xcvr 4 | REV 01 | 740-009029 | P11JXWP | SFP-LX |
| Xcvr 6 | REV 01 | 740-011613 | P9F1ALW | SFP-SX |
| FPC 5 | REV 01 | 710-011388 | CJ9088 | M120 FPC Type 1 |
| PIC 0 | *** Hardware Not Supported *** | | | |
| PIC 1 | REV 05 | 750-012052 | NB0410 | 1x CHOC3 IQ SONET, SMLR |
| PIC 2 | REV 01 | 750-013167 | CM3824 | 4x CHDS3 IQ |
| PIC 3 | REV 01 | 750-010240 | CB5366 | 1x G/E SFP, 1000 BASE |
| Board B | REV 01 | 710-011390 | CJ9103 | M120 FPC Mezz Board |
| FEB 3 | REV 04 | 710-011663 | CP6673 | M120 FEB |
| FEB 4 | REV 04 | 710-011663 | CJ9368 | M120 FEB |
| FEB 5 | REV 04 | 710-011663 | CJ9386 | M120 FEB |
| Fan Tray 0 | | | | Front Top Fan Tray |
| Fan Tray 1 | | | | Front Bottom Fan Tray |
| Fan Tray 2 | | | | Rear Top Fan Tray |
| Fan Tray 3 | | | | Rear Bottom Fan Tray |

show chassis hardware detail (M120 Router)

```

user@host> show chassis hardware detail
Hardware inventory:

```

| Item | Version | Part number | Serial number | Description |
|------|---------|-------------|---------------|-------------|
|------|---------|-------------|---------------|-------------|

| | | | | |
|------------------|--------------------------------|--------------------|---------------------------|-------------------------|
| Chassis | | | JN000054AC | M120 |
| Midplane | REV 01 | 710-013667 | RB4170 | M120 Midplane |
| FPM Board | REV 02 | 710-011407 | CJ9186 | M120 FPM Board |
| FPM Display | REV 02 | 710-011405 | CJ9173 | M120 FPM Display |
| FPM CIP | REV 02 | 710-011410 | CJ9221 | M120 FPM CIP |
| PEM 0 | Rev 05 | 740-011936 | RM28320 | AC Power Entry Module |
| PEM 1 | Rev 05 | 740-011936 | RM28321 | AC Power Entry Module |
| Routing Engine 0 | REV 03 | 740-014080 | 1000642883 | RE-A-1000 |
| ad0 | 248 MB | SILICONSYSTEMS INC | 256M 126CT505S0763SC00110 | Compact Flash |
| ad2 | 38154 MB | HTE541040G9SA00 | MPBBT0X2HS2E3M | Hard Disk |
| CB 0 | REV 03 | 710-011403 | CM8346 | M120 Control Board |
| CB 1 | REV 06 | 710-011403 | CP6728 | M120 Control Board |
| FPC 1 | REV 02 | 710-015908 | CP6925 | M120 CFPC 10GE |
| PIC 0 | | BUILTIN | BUILTIN | 1x 10GE(LAN/WAN) XFP |
| Xcvr 0 | REV 01 | 740-014279 | 62E204N00007 | XFP-10G-LR |
| FPC 3 | REV 03 | 710-011393 | CJ9234 | M120 FPC Type 2 |
| PIC 0 | REV 16 | 750-008155 | NB5229 | 2x G/E IQ, 1000 BASE |
| Xcvr 0 | REV 01 | 740-011613 | P9F15JB | SFP-SX |
| Xcvr 1 | REV 01 | 740-007326 | P4QOR9G | SFP-SX |
| PIC 1 | REV 09 | 750-007745 | CG4360 | 4x OC-3 SONET, SMIR |
| PIC 2 | REV 16 | 750-008155 | ND7787 | 2x G/E IQ, 1000 BASE |
| Xcvr 0 | REV 01 | 740-011613 | P9F12AS | SFP-SX |
| Xcvr 1 | REV 01 | 740-011613 | P9F1ALU | SFP-SX |
| PIC 3 | REV 07 | 750-011800 | JW1284 | 8x 1GE(LAN), IQ2 |
| Xcvr 0 | REV 01 | 740-011613 | P9F1AM6 | SFP-SX |
| Xcvr 6 | REV 01 | 740-011613 | P9F16NN | SFP-SX |
| Xcvr 7 | REV 01 | 740-011782 | P8C29Y7 | SFP-SX |
| Board B | REV 02 | 710-011395 | CN3754 | M120 FPC Mezz |
| FPC 4 | REV 02 | 710-011398 | CP6741 | M120 FPC Type 3 |
| PIC 0 | REV 16 | 750-007141 | NB2855 | 10x 1GE(LAN), 1000 BASE |
| Xcvr 0 | REV 01 | 740-011782 | P922A1F | SFP-SX |
| Xcvr 1 | REV 01 | 740-011782 | P922A16 | SFP-SX |
| Xcvr 2 | REV 01 | 740-011782 | P922A0U | SFP-SX |
| Xcvr 3 | REV 01 | 740-011782 | P9229UZ | SFP-SX |
| Xcvr 4 | REV 01 | 740-009029 | P11JXWP | SFP-LX |
| Xcvr 6 | REV 01 | 740-011613 | P9F1ALW | SFP-SX |
| FPC 5 | REV 01 | 710-011388 | CJ9088 | M120 FPC Type 1 |
| PIC 0 | *** Hardware Not Supported *** | | | |
| PIC 1 | REV 05 | 750-012052 | NB0410 | 1x CHOC3 IQ SONET, SMLR |
| PIC 2 | REV 01 | 750-013167 | CM3824 | 4x CHDS3 IQ |
| PIC 3 | REV 01 | 750-010240 | CB5366 | 1x G/E SFP, 1000 BASE |
| Board B | REV 01 | 710-011390 | CJ9103 | M120 FPC Mezz Board |
| FEB 3 | REV 04 | 710-011663 | CP6673 | M120 FEB |
| FEB 4 | REV 04 | 710-011663 | CJ9368 | M120 FEB |
| FEB 5 | REV 04 | 710-011663 | CJ9386 | M120 FEB |
| Fan Tray 0 | | | | Front Top Fan Tray |
| Fan Tray 1 | | | | Front Bottom Fan Tray |
| Fan Tray 2 | | | | Rear Top Fan Tray |
| Fan Tray 3 | | | | Rear Bottom Fan Tray |

show chassis hardware models (M120 Router)

```
user@host> show chassis hardware models
```

| Hardware inventory: | | | | |
|---------------------|---------|-------------|-----------|------------------|
| Item | Version | Part number | CLEI code | FRU model number |
| Midplane | REV 01 | 710-013667 | | |
| FPM CIP | REV 02 | 710-011410 | | CRAFT-M120-S |
| PEM 0 | Rev 05 | 740-011936 | | PWR-M120-AC-S |
| PEM 1 | Rev 05 | 740-011936 | | PWR-M120-AC-S |

| | | | |
|------------------|--------|------------|----------------------|
| Routing Engine 0 | REV 03 | 740-014080 | RE-A-1000-2048-S |
| CB 0 | REV 03 | 710-011403 | CB-M120-S |
| CB 1 | REV 06 | 710-011403 | CB-M120-S |
| FPC 1 | REV 02 | 710-015908 | M120-cFPC-1XGE-XFP |
| FPC 3 | | | |
| PIC 0 | REV 16 | 750-008155 | PB-2GE-SFP-QPP |
| PIC 1 | REV 09 | 750-007745 | PC-40C3-SON-SMIR |
| PIC 2 | REV 16 | 750-008155 | PB-2GE-SFP-QPP |
| PIC 3 | REV 07 | 750-011800 | PB-8GE-TYPE2-SFP-IQ2 |
| FPC 4 | | | |
| PIC 0 | REV 16 | 750-007141 | PC-10GE-SFP |
| FPC 5 | | | |
| PIC 1 | REV 05 | 750-012052 | PB-1CHOC3-SMIR-QPP |
| PIC 2 | REV 01 | 750-013167 | PE-4CHDS3-QPP |
| PIC 3 | REV 01 | 750-010240 | PB-1GE-SFP |
| Fan Tray 0 | | | FFANTRAY-M120-S |
| Fan Tray 1 | | | FFANTRAY-M120-S |
| Fan Tray 2 | | | RFANTRAY-M120-S |
| Fan Tray 3 | | | RFANTRAY-M120-S |

show chassis hardware (M160 Router)

```
user@host> show chassis hardware
```

| Item | Version | Part number | Serial number | Description |
|-------------|---------|-------------|------------------|----------------------|
| Chassis | | | 101 | M160 |
| Midplane | REV 02 | 710-001245 | S/N AB4107 | |
| FPM CMB | REV 01 | 710-001642 | S/N AA2911 | |
| FPM Display | REV 01 | 710-001647 | S/N AA2999 | |
| CIP | REV 02 | 710-001593 | S/N AA9563 | |
| PEM 0 | Rev 01 | 740-001243 | S/N KJ35769 | DC |
| PEM 1 | Rev 01 | 740-001243 | S/N KJ35765 | DC |
| PCG 0 | REV 01 | 710-001568 | S/N AA9794 | |
| PCG 1 | REV 01 | 710-001568 | S/N AA9804 | |
| Host 1 | | | da000004f8d57001 | teknor |
| MCS 1 | REV 03 | 710-001226 | S/N AA9777 | |
| SFM 0 SPP | REV 04 | 710-001228 | S/N AA2975 | |
| SFM 0 SPR | REV 02 | 710-001224 | S/N AA9838 | Internet Processor I |
| SFM 1 SPP | REV 04 | 710-001228 | S/N AA2860 | |
| SFM 1 SPR | REV 01 | 710-001224 | S/N AB0139 | Internet Processor I |
| FPC 0 | REV 03 | 710-001255 | S/N AA9806 | FPC Type 1 |
| CPU | REV 02 | 710-001217 | S/N AA9590 | |
| PIC 1 | REV 05 | 750-000616 | S/N AA1527 | 1x OC-12 ATM, MM |
| PIC 2 | REV 05 | 750-000616 | S/N AA1535 | 1x OC-12 ATM, MM |
| PIC 3 | REV 01 | 750-000616 | S/N AA1519 | 1x OC-12 ATM, MM |
| FPC 1 | REV 02 | 710-001611 | S/N AA9523 | FPC Type 2 |
| CPU | REV 02 | 710-001217 | S/N AA9571 | |
| PIC 0 | REV 03 | 750-001900 | S/N AA9626 | 1x STM-16 SDH, SMIR |
| PIC 1 | REV 01 | 710-002381 | S/N AD3633 | 2x G/E, 1000 BASE-SX |
| FPC 2 | | | | FPC Type OC192 |
| CPU | REV 03 | 710-001217 | S/N AB3329 | |
| PIC 0 | REV 01 | | | 1x OC-192 SM SR-2 |
| Fan Tray 0 | | | | Rear Bottom Blower |
| Fan Tray 1 | | | | Rear Top Blower |
| Fan Tray 2 | | | | Front Top Blower |
| Fan Tray 3 | | | | Front Fan Tray |

show chassis hardware models (M160 Router)

```
user@host> show chassis hardware models
```

| Hardware inventory: | | | | |
|---------------------|---------|-------------|-----------|--------------------|
| Item | Version | Part number | CLEI code | FRU model number |
| Midplane | REV 03 | 710-009120 | | CHAS-BP-M320-S |
| FPM Display | REV 02 | 710-009351 | | CRAFT-M320-S |
| CIP | REV 03 | 710-005926 | | CIP-M320-S |
| PEM 2 | Rev X4 | 740-009148 | | PWR-M-DC-S |
| PEM 3 | Rev X4 | 740-009148 | | PWR-M-DC-S |
| Routing Engine 0 | REV 02 | 740-008883 | | RE-1600-2048-S |
| Routing Engine 1 | REV 02 | 740-008883 | | RE-1600-2048-S |
| FPC 0 | REV 02 | 710-010419 | | M320-FPC1 |
| PIC 0 | REV 01 | 750-001323 | | P-TUNNEL |
| PIC 1 | REV 02 | 750-002987 | | PE-10C12-SON-SMIR |
| PIC 2 | REV 04 | 750-001894 | | PB-1GE-SX |
| PIC 3 | REV 04 | 750-001896 | | PB-10C12-SON-SMIR |
| FPC 1 | REV 02 | 710-010419 | | M320-FPC1 |
| PIC 0 | REV 04 | 750-001894 | | PB-1GE-SX |
| PIC 1 | REV 04 | 750-001894 | | PB-1GE-SX |
| PIC 3 | REV 03 | 750-001894 | | PB-1GE-SX |
| FPC 2 | REV 02 | 710-010419 | | M320-FPC1 |
| PIC 0 | REV 10 | 750-005634 | | PB-1CHOC12SMIR-QPP |
| PIC 1 | REV 10 | 750-005634 | | PB-1CHOC12SMIR-QPP |
| PIC 2 | REV 07 | 750-005634 | | PB-1CHOC12SMIR-QPP |
| PIC 3 | REV 07 | 750-005634 | | PB-1CHOC12SMIR-QPP |
| PIC 1 | REV 10 | 750-005634 | | PB-1CHOC12SMIR-QPP |
| PIC 2 | REV 07 | 750-005634 | | PB-1CHOC12SMIR-QPP |
| PIC 3 | REV 07 | 750-005634 | | PB-1CHOC12SMIR-QPP |
| FPC 3 | | | | |
| PIC 0 | REV 03 | 750-001895 | | PB-10C12-SON-MM |
| PIC 1 | REV 04 | 750-001894 | | PB-1GE-SX |
| PIC 3 | REV 04 | 750-003141 | | PB-1GE-SX-B |
| FPC 4 | REV 02 | 710-010419 | | M320-FPC1 |
| FPC 5 | REV 02 | 710-010419 | | M320-FPC1 |
| FPC 6 | REV 02 | 710-010419 | | M320-FPC1 |
| FPC 7 | | | | |
| PIC 0 | REV 15 | 750-001901 | | PB-40C12-SON-SMIR |
| PIC 1 | REV 06 | 750-001900 | | PB-10C48-SON-SMSR |
| PIC 2 | REV 07 | 750-001900 | | PB-10C48-SON-SMSR |
| PIC 3 | REV 05 | 750-003737 | | PB-4GE-SX |
| SIB 0 | REV 03 | 710-009184 | | SIB-M-S |
| SIB 1 | REV 03 | 710-009184 | | SIB-M-S |
| SIB 2 | REV 03 | 710-009184 | | SIB-M-S |
| SIB 3 | REV 03 | 710-009184 | | SIB-M-S |
| Fan Tray 0 | | | | FFANTRAY-M320-S |
| Fan Tray 1 | | | | FFANTRAY-M320-S |
| Fan Tray 2 | | | | RFANTRAY-M320-S |

show chassis hardware detail (M160 Router)

| user@host> show chassis hardware detail | | | | |
|---|---------|-------------|------------------|-------------|
| Hardware inventory: | | | | |
| Item | Version | Part number | Serial number | Description |
| Chassis | | | 101 | M160 |
| Midplane | REV 02 | 710-001245 | S/N AB4107 | |
| FPM CMB | REV 01 | 710-001642 | S/N AA2911 | |
| FPM Display | REV 01 | 710-001647 | S/N AA2999 | |
| CIP | REV 02 | 710-001593 | S/N AA9563 | |
| PEM 0 | Rev 01 | 740-001243 | S/N KJ35769 | DC |
| PEM 1 | Rev 01 | 740-001243 | S/N KJ35765 | DC |
| PCG 0 | REV 01 | 710-001568 | S/N AA9794 | |
| PCG 1 | REV 01 | 710-001568 | S/N AA9804 | |
| Host 1 | | | da000004f8d57001 | teknor |

| | | | | |
|--------------|--------|------------|------------|----------------------|
| MCS 1 | REV 03 | 710-001226 | S/N AA9777 | |
| SFM 0 SPP | REV 04 | 710-001228 | S/N AA2975 | |
| SFM 0 SPR | REV 02 | 710-001224 | S/N AA9838 | Internet Processor I |
| SSRAM bank 0 | REV 01 | 710-000077 | S/N 306456 | 1 MB |
| SSRAM bank 1 | REV 01 | 710-000077 | S/N 306474 | 1 MB |
| SSRAM bank 2 | REV 01 | 710-000077 | S/N 306388 | 1 MB |
| SSRAM bank 3 | REV 01 | 710-000077 | S/N 306392 | 1 MB |
| SFM 1 SPP | REV 04 | 710-001228 | S/N AA2860 | |
| SFM 1 SPR | REV 01 | 710-001224 | S/N AB0139 | Internet Processor I |
| SSRAM bank 0 | REV 01 | 710-000077 | S/N 302917 | 1 MB |
| SSRAM bank 1 | REV 01 | 710-000077 | S/N 302662 | 1 MB |
| SSRAM bank 2 | REV 01 | 710-000077 | S/N 302593 | 1 MB |
| SSRAM bank 3 | REV 01 | 710-000077 | S/N 100160 | 1 MB |
| FPC 0 | REV 03 | 710-001255 | S/N AA9806 | FPC Type 1 |
| CPU | REV 02 | 710-001217 | S/N AA9590 | |
| SSRAM | REV 01 | 710-000077 | S/N 302836 | 1 MB |
| SDRAM 0 | REV 01 | 710-001196 | S00141 | 32 MB |
| SDRAM 1 | REV 01 | 710-001196 | S0010; | 32 MB |
| SSRAM | REV 01 | 710-000077 | S/N 302633 | 1 MB |
| SDRAM 0 | REV 01 | 710-001196 | S00143 | 32 MB |
| SDRAM 1 | REV 01 | 710-001196 | S00115 | 32 MB |
| SSRAM | REV 01 | 710-000077 | S/N 302952 | 1 MB |
| SDRAM 0 | REV 01 | 710-001196 | S00135 | 32 MB |
| SDRAM 1 | REV 01 | 710-001196 | S001=3 | 32 MB |
| SSRAM | REV 01 | 710-000077 | S/N 302892 | 1 MB |
| SDRAM 0 | REV 01 | 710-001196 | S000?6 | 32 MB |
| SDRAM 1 | REV 01 | 710-001196 | S001=5 | 32 MB |
| PIC 1 | REV 05 | 750-000616 | S/N AA1527 | 1x OC-12 ATM, MM |
| PIC 2 | REV 05 | 750-000616 | S/N AA1535 | 1x OC-12 ATM, MM |
| PIC 3 | REV 01 | 750-000616 | S/N AA1519 | 1x OC-12 ATM, MM |
| FPC 1 | REV 02 | 710-001611 | S/N AA9523 | FPC Type 2 |
| CPU | REV 02 | 710-001217 | S/N AA9571 | |
| SSRAM | REV 01 | 710-000077 | S/N 306340 | 1 MB |
| SDRAM 0 | REV 01 | 710-001196 | S00012 | 32 MB |
| SDRAM 1 | REV 01 | 710-001196 | S0001? | 32 MB |
| SSRAM | REV 01 | 710-000077 | S/N 306454 | 1 MB |
| SDRAM 0 | REV 01 | 710-001196 | S00028 | 32 MB |
| SDRAM 1 | REV 01 | 710-001196 | S0002? | 32 MB |
| SSRAM | REV 01 | 710-000077 | S/N 306492 | 1 MB |
| SDRAM 0 | REV 01 | 710-001196 | S00015 | 32 MB |
| SDRAM 1 | REV 01 | 710-001196 | S00031 | 32 MB |
| SSRAM | REV 01 | 710-000077 | S/N 306363 | 1 MB |
| SDRAM 0 | REV 01 | 710-001196 | S00013 | 32 MB |
| SDRAM 1 | REV 01 | 710-001196 | S00032 | 32 MB |
| PIC 0 | REV 03 | 750-001900 | S/N AA9626 | 1x STM-16 SDH, SMIR |
| PIC 1 | REV 01 | 710-002381 | S/N AD3633 | 2x G/E, 1000 BASE-SX |
| FPC 2 | | | | FPC Type OC192 |
| ... SSRAM | REV 01 | 710-000077 | S/N 306466 | 1 MB |

show chassis hardware (M320 Router)

```

user@host> show chassis hardware
Hardware inventory:
Item          Version  Part number  Serial number  Description
Chassis                               67245         M320
Midplane      REV 05   710-009120   RB1202         M320 Midplane
FPM GBUS      REV 04   710-005928   HZ5697         M320 Board
FPM Display   REV 05   710-009351   HR1464         M320 FPM Display
CIP           REV 04   710-005926   HT8672         M320 CIP
PEM 0         Rev 05   740-009148   QK34208        DC Power Entry Module
PEM 1         Rev 05   740-009148   QK34262        DC Power Entry Module

```

| | | | | |
|------------------|--------|------------|--------------|-----------------------|
| PEM 2 | Rev 05 | 740-009148 | QF10449 | DC Power Entry Module |
| PEM 3 | Rev 05 | 740-009148 | QJ18257 | DC Power Entry Module |
| Routing Engine 0 | REV 06 | 740-008883 | P11123901185 | RE-4.0 |
| CB 0 | REV 07 | 710-009115 | JB2382 | M320 Control Board |
| FPC 0 | REV 02 | 710-005017 | CD9926 | M320 FPC Type 2 |
| CPU | REV 01 | 710-011659 | CJ6940 | M320 PCA SCPU |
| PIC 0 | REV 07 | 750-001900 | AT1594 | 1x OC-48 SONET, SMSR |
| PIC 1 | REV 03 | 750-001850 | HS2746 | 1x Tunnel |
| PIC 2 | REV 05 | 750-010618 | JE7117 | 4x G/E SFP, 1000 BASE |
| PIC 3 | REV 06 | 750-001900 | HE6083 | 1x OC-48 SONET, SMSR |
| FPC 2 | REV 02 | 710-005017 | CH0319 | M320 FPC Type 1 |
| CPU | REV 01 | 710-011659 | CJ6942 | M320 PCA SCPU |
| PIC 0 | REV 05 | 750-003034 | BD8705 | 4x OC-3 SONET, SMIR |
| FPC 5 | REV 02 | 710-005017 | CD9938 | M320 FPC Type 2 |
| CPU | | | | |
| FPC 7 | REV 02 | 710-005017 | CD9934 | M320 FPC Type 2 |
| CPU | | | | |
| SIB 0 | REV 09 | 710-009184 | JA6540 | M320 SIB |
| SIB 1 | REV 09 | 710-009184 | HV9511 | M320 SIB |
| SIB 2 | REV 09 | 710-009184 | HW2057 | M320 SIB |
| SIB 3 | REV 09 | 710-009184 | JA6687 | M320 SIB |
| Fan Tray 0 | | | | Front Top Fan Tray |
| Fan Tray 1 | | | | Front Bottom Fan Tray |
| Fan Tray 2 | | | | Rear Fan Tray |

show chassis hardware models (M320 Router)

```
user@host> show chassis hardware models
```

| Hardware inventory: | | | | |
|---------------------|---------|-------------|-----------|--------------------|
| Item | Version | Part number | CLEI code | FRU model number |
| Midplane | REV 03 | 710-009120 | | CHAS-BP-M320-S |
| FPM Display | REV 02 | 710-009351 | | CRAFT-M320-S |
| CIP | REV 03 | 710-005926 | | CIP-M320-S |
| PEM 2 | Rev X4 | 740-009148 | | PWR-M-DC-S |
| PEM 3 | Rev X4 | 740-009148 | | PWR-M-DC-S |
| Routing Engine 0 | REV 02 | 740-008883 | | RE-1600-2048-S |
| Routing Engine 1 | REV 02 | 740-008883 | | RE-1600-2048-S |
| FPC 0 | REV 02 | 710-010419 | | M320-FPC1 |
| PIC 0 | REV 01 | 750-001323 | | P-TUNNEL |
| PIC 1 | REV 02 | 750-002987 | | PE-10C12-SON-SMIR |
| PIC 2 | REV 04 | 750-001894 | | PB-1GE-SX |
| PIC 3 | REV 04 | 750-001896 | | PB-10C12-SON-SMIR |
| FPC 1 | REV 02 | 710-010419 | | M320-FPC1 |
| PIC 0 | REV 04 | 750-001894 | | PB-1GE-SX |
| PIC 1 | REV 04 | 750-001894 | | PB-1GE-SX |
| PIC 3 | REV 03 | 750-001894 | | PB-1GE-SX |
| FPC 2 | REV 02 | 710-010419 | | M320-FPC1 |
| PIC 0 | REV 10 | 750-005634 | | PB-1CHOC12SMIR-QPP |
| PIC 1 | REV 10 | 750-005634 | | PB-1CHOC12SMIR-QPP |
| PIC 2 | REV 07 | 750-005634 | | PB-1CHOC12SMIR-QPP |
| PIC 3 | REV 07 | 750-005634 | | PB-1CHOC12SMIR-QPP |
| PIC 1 | REV 10 | 750-005634 | | PB-1CHOC12SMIR-QPP |
| PIC 2 | REV 07 | 750-005634 | | PB-1CHOC12SMIR-QPP |
| PIC 3 | REV 07 | 750-005634 | | PB-1CHOC12SMIR-QPP |
| FPC 3 | | | | |
| PIC 0 | REV 03 | 750-001895 | | PB-10C12-SON-MM |
| PIC 1 | REV 04 | 750-001894 | | PB-1GE-SX |
| PIC 3 | REV 04 | 750-003141 | | PB-1GE-SX-B |
| FPC 4 | REV 02 | 710-010419 | | M320-FPC1 |
| FPC 5 | REV 02 | 710-010419 | | M320-FPC1 |
| FPC 6 | REV 02 | 710-010419 | | M320-FPC1 |

| | | | | |
|------------|--------|------------|--|-------------------|
| FPC 7 | | | | |
| PIC 0 | REV 15 | 750-001901 | | PB-40C12-SON-SMIR |
| PIC 1 | REV 06 | 750-001900 | | PB-10C48-SON-SMSR |
| PIC 2 | REV 07 | 750-001900 | | PB-10C48-SON-SMSR |
| PIC 3 | REV 05 | 750-003737 | | PB-4GE-SX |
| SIB 0 | REV 03 | 710-009184 | | SIB-M-S |
| SIB 1 | REV 03 | 710-009184 | | SIB-M-S |
| SIB 2 | REV 03 | 710-009184 | | SIB-M-S |
| SIB 3 | REV 03 | 710-009184 | | SIB-M-S |
| Fan Tray 0 | | | | FFANTRAY-M320-S |
| Fan Tray 1 | | | | FFANTRAY-M320-S |
| Fan Tray 2 | | | | RFANTRAY-M320-S |

show chassis hardware (MX5 Router)

```
user@host> show chassis hardware
Hardware inventory:
```

| Item | Version | Part number | Serial number | Description |
|----------------|---------|-------------|---------------|-----------------------|
| Chassis | | | E1368 | MX5-T |
| Midplane | REV 01 | 711-038215 | YF5288 | MX5-T |
| PEM 0 | Rev 04 | 740-028288 | VA01215 | AC Power Entry Module |
| PEM 1 | Rev 04 | 740-028288 | VA01218 | AC Power Entry Module |
| Routing Engine | | BUILTIN | BUILTIN | Routing Engine |
| TFEB 0 | | BUILTIN | BUILTIN | Forwarding Engine |
| Processor | | | | |
| QXM 0 | REV 05 | 711-028408 | ZA9136 | MPC QXM |
| FPC 0 | | BUILTIN | BUILTIN | MPC BUILTIN |
| MIC 0 | | BUILTIN | BUILTIN | 4x 10GE XFP |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE XFP |
| FPC 1 | | BUILTIN | BUILTIN | MPC BUILTIN |
| MIC 0 | REV 24 | 750-028392 | YX9820 | 3D 20x 1GE(LAN) SFP |
| PIC 0 | | BUILTIN | BUILTIN | 10x 1GE(LAN) SFP |
| Xcvr 0 | REV 01 | 740-031851 | AM1045SUAQ3 | SFP-SX |
| Xcvr 1 | REV 01 | 740-031851 | AM1045SUAPA | SFP-SX |
| Xcvr 2 | REV 01 | 740-031851 | AM1045SUAN7 | SFP-SX |
| Xcvr 3 | REV 01 | 740-031851 | AM1045SU91Q | SFP-SX |
| Xcvr 4 | REV 01 | 740-031851 | AM1045SUDDR | SFP-SX |
| Xcvr 9 | REV 01 | 740-011613 | AM0848SB6A1 | SFP-SX |
| PIC 1 | | BUILTIN | BUILTIN | 10x 1GE(LAN) SFP |
| Xcvr 0 | REV 01 | 740-031851 | AM1045SUANO | SFP-SX |
| Xcvr 1 | REV 01 | 740-011613 | AS0812S0719 | SFP-SX |
| Xcvr 2 | REV 01 | 740-011613 | AM0821SA121 | SFP-SX |
| Xcvr 3 | REV 01 | 740-011613 | PF21K21 | SFP-SX |
| Xcvr 4 | REV 01 | 740-011613 | AM0848SB69Z | SFP-SX |
| Xcvr 5 | REV 01 | 740-011782 | P9POXV3 | SFP-SX |
| Xcvr 6 | REV 01 | 740-011613 | AM0812S8WJN | SFP-SX |
| Xcvr 7 | REV 01 | 740-011613 | PAM3G9Q | SFP-SX |
| Xcvr 8 | REV 01 | 740-011613 | AM0848SB4A6 | SFP-SX |
| Xcvr 9 | REV 01 | 740-011782 | P9MOU37 | SFP-SX |
| MIC 1 | REV 20 | 750-028380 | ZG2657 | 3D 2x 10GE XFP |
| PIC 2 | | BUILTIN | BUILTIN | 1x 10GE XFP |
| PIC 3 | | BUILTIN | BUILTIN | 1x 10GE XFP |
| Fan Tray | | | | Fan Tray |

show chassis hardware (MX10 Router)

```
user@host> show chassis hardware
Hardware inventory:
```

| Item | Version | Part number | Serial number | Description |
|---------|---------|-------------|---------------|-------------|
| Chassis | | | E1372 | MX10-T |

| | | | | |
|----------------|--------|------------|-------------|-----------------------|
| Midplane | REV 01 | 711-038211 | YF5285 | MX10-T |
| PEM 0 | Rev 04 | 740-028288 | VB01678 | AC Power Entry Module |
| Routing Engine | | BUILTIN | BUILTIN | Routing Engine |
| TFEB 0 | | BUILTIN | BUILTIN | Forwarding Engine |
| Processor | | | | |
| QXM 0 | REV 05 | 711-028408 | ZA9053 | MPC QXM |
| FPC 0 | | BUILTIN | BUILTIN | MPC BUILTIN |
| MIC 0 | | BUILTIN | BUILTIN | 4x 10GE XFP |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE XFP |
| FPC 1 | | BUILTIN | BUILTIN | MPC BUILTIN |
| MIC 0 | REV 24 | 750-028392 | YX9436 | 3D 20x 1GE(LAN) SFP |
| PIC 0 | | BUILTIN | BUILTIN | 10x 1GE(LAN) SFP |
| Xcvr 0 | REV 01 | 740-031851 | AM1107SUFQW | SFP-SX |
| PIC 1 | | BUILTIN | BUILTIN | 10x 1GE(LAN) SFP |
| Fan Tray | | | | Fan Tray |

show chassis hardware (MX40 Router)

user@host> show chassis hardware

Hardware inventory:

| Item | Version | Part number | Serial number | Description |
|----------------|---------|-------------|---------------|-----------------------|
| Chassis | | | E1367 | MX40-T |
| Midplane | REV 01 | 711-038211 | YF5284 | MX40-T |
| PEM 0 | Rev 04 | 740-028288 | VB01680 | AC Power Entry Module |
| PEM 1 | Rev 04 | 740-028288 | VB01700 | AC Power Entry Module |
| Routing Engine | | BUILTIN | BUILTIN | Routing Engine |
| TFEB 0 | | BUILTIN | BUILTIN | Forwarding Engine |
| Processor | | | | |
| QXM 0 | REV 05 | 711-028408 | ZA9048 | MPC QXM |
| FPC 0 | | BUILTIN | BUILTIN | MPC BUILTIN |
| MIC 0 | | BUILTIN | BUILTIN | 4x 10GE XFP |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE XFP |
| Xcvr 0 | REV 01 | 740-014279 | M7067UPP | XFP-10G-LR |
| Xcvr 1 | | NON-JNPR | K9J02UN | XFP-10G-LR |
| FPC 1 | | BUILTIN | BUILTIN | MPC BUILTIN |
| MIC 0 | REV 24 | 750-028392 | YX3504 | 3D 20x 1GE(LAN) SFP |
| PIC 0 | | BUILTIN | BUILTIN | 10x 1GE(LAN) SFP |
| Xcvr 0 | REV 01 | 740-011613 | AM0812S8WTE | SFP-SX |
| Xcvr 1 | REV 01 | 740-011613 | PFA6KV2 | SFP-SX |
| Xcvr 2 | REV 01 | 740-031851 | AM1045SUDDM | SFP-SX |
| Xcvr 3 | REV 01 | 740-011613 | PD63C7M | SFP-SX |
| Xcvr 4 | REV 01 | 740-011613 | PD63DJY | SFP-SX |
| Xcvr 5 | REV 02 | 740-011613 | AA0950STLL9 | SFP-SX |
| Xcvr 6 | REV 01 | 740-011782 | PAR1YHC | SFP-SX |
| Xcvr 7 | REV 01 | 740-011782 | P9POXXL | SFP-SX |
| Xcvr 8 | REV 01 | 740-011613 | PD63D95 | SFP-SX |
| Xcvr 9 | REV 01 | 740-031851 | AM1045SU9B8 | SFP-SX |
| PIC 1 | | BUILTIN | BUILTIN | 10x 1GE(LAN) SFP |
| Xcvr 0 | REV 01 | 740-011613 | PF21L3Z | SFP-SX |
| Xcvr 1 | REV 01 | 740-031851 | AM1045SU7M9 | SFP-SX |
| Xcvr 2 | REV 01 | 740-031851 | AM1045SUAPT | SFP-SX |
| Xcvr 3 | REV 01 | 740-011613 | PFF2BZH | SFP-SX |
| Xcvr 4 | REV 01 | 740-031851 | AM1045SUDDN | SFP-SX |
| Xcvr 5 | REV 01 | 740-031851 | AM1039S00ZR | SFP-SX |
| Xcvr 6 | REV 01 | 740-031851 | AM1045SUD6Y | SFP-SX |
| Xcvr 8 | REV 01 | 740-011613 | PFM1QBS | SFP-SX |
| Xcvr 9 | REV 01 | 740-011613 | PFF2E25 | SFP-SX |
| MIC 1 | REV 01 | 750-021130 | KG4391 | 3D 2x 10GE XFP |
| PIC 2 | | BUILTIN | BUILTIN | 1x 10GE XFP |
| Xcvr 0 | REV 01 | 740-011571 | C645XJ04G | XFP-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 1x 10GE XFP |

| | | | |
|----------|----------|-----------|------------|
| Xcvr 0 | NON-JNPR | CA49BK0AE | XFP-10G-SR |
| Fan Tray | | | Fan Tray |

show chassis hardware (Fixed MX80 Router)

```
user@host> show chassis hardware
Hardware inventory:
Item          Version  Part number  Serial number  Description
Chassis                               MX80-48T
Midplane                               MX80-48T
Routing Engine                               Routing Engine
FEB 0                               Forwarding Engine Board
FPC 0                               MPC BUILTIN
  MIC 0                               4x 10GE XFP
    PIC 0                               4x 10GE XFP
      Xcvr 0                               XFP-10G-LR
        Xcvr 1 REV 01 740-014279 6XE931N00202 XFP-10G-LR
        Xcvr 2 REV 01 740-014289 C715XU05F    XFP-10G-SR
        Xcvr 3 REV 01 740-014289 C650XU0EP    XFP-10G-SR
FPC 1                               MPC BUILTIN
  MIC 0 REV 01 711-029399 JR6981    12x 1GE(LAN) RJ45
    PIC 0                               12x 1GE(LAN) RJ45
    PIC 1                               12x 1GE(LAN) RJ45
  MIC 1 REV 01 711-029399 JR6981    12x 1GE(LAN) RJ45
    PIC 2                               12x 1GE(LAN) RJ45
    PIC 3                               12x 1GE(LAN) RJ45
Fan Tray                               Fan Tray
```

show chassis hardware (Modular MX80 Router)

```
user@host> show chassis hardware
Hardware inventory:
Item          Version  Part number  Serial number  Description
Chassis                               MX80
Midplane REV 02 711-031594 JR7084    MX80
PEM 0 Rev 01 740-028288 000018    AC Power Entry Module
Routing Engine                               Routing Engine
FEB 0                               Forwarding Engine Board

  QXM 0 REV 05 711-028408 JR7041    MPC QXM
FPC 0                               MPC BUILTIN
  MIC 0                               4x 10GE XFP
    PIC 0                               4x 10GE XFP
FPC 1                               MPC BUILTIN
  MIC 0 REV 02 750-028380 JR6598    3D 2x 10GE XFP
    PIC 0                               1x 10GE XFP
      Xcvr 0 REV 01 740-014289 T07M86365 XFP-10G-SR
        PIC 1                               1x 10GE XFP
          Xcvr 0 REV 01 740-014289 T07M71094 XFP-10G-SR
            MIC 1 REV 02 750-028380 JG8548    3D 2x 10GE XFP
              PIC 2                               1x 10GE XFP
                Xcvr 0 REV 02 740-014289 T08L86302 XFP-10G-SR
                  PIC 3                               1x 10GE XFP
                    Xcvr 0 REV 02 740-014289 C810XU0BA XFP-10G-SR
Fan Tray                               Fan Tray
```

show chassis hardware (MX150)

```
user@host> show chassis hardware
```

Hardware inventory:

| Item | Version | Part number | Serial number | Description |
|--------------------|----------|-------------|---------------|------------------------|
| Chassis | | | DD2316AF0078 | MX150 |
| Midplane | REV 04 | 650-066113 | DD2316AF0078 | MX150 |
| Power Supply 0 | | | | RE-VMX |
| Routing Engine 0 | | | | VMX SCB |
| CB 0 | | | | VMX SCB |
| CB 1 | | | | Virtual FPC |
| FPC 0 | | | | |
| CPU | Rev. 1.0 | RIOT | BUILTIN | |
| MIC 0 | | | | Virtual |
| PIC 0 | | BUILTIN | BUILTIN | Virtual |
| Xcvr 10 | REV 02 | 740-013111 | A331846 | SFP-T |
| Xcvr 11 | REV 02 | 740-013111 | C248517 | SFP-T |
| Fan Tray 0 | | | | fan-ctrl-0 0, Front to |
| Back Airflow - AFO | | | | |
| Fan Tray 1 | | | | fan-ctrl-0 1, Front to |
| Back Airflow - AFO | | | | |

show chassis hardware models (MX150)

user@host> show chassis hardware models

Hardware inventory:

| Item | Version | Part number | Serial number | FRU model number |
|-------------------|---------|-------------|---------------|------------------|
| Midplane | REV 04 | 650-066113 | DD2316AF0163 | MX150 |
| Fan Tray 0 | | | | Assy,Sub,Fan |
| Tray,AFO,Opus-AFO | | | | |
| Fan Tray 1 | | | | Assy,Sub,Fan |
| Tray,AFO,Opus-AFO | | | | |

show chassis hardware (MX104 Router)

user@host> show chassis hardware

Hardware inventory:

| Item | Version | Part number | Serial number | Description |
|------------------|---------|-------------|---------------|-----------------------|
| Chassis | | | G3503 | MX104 |
| Midplane | REV 28 | 750-044219 | CAAX5741 | MX104 |
| PEM 0 | REV 03 | 740-045933 | 1H072500016 | AC Power Entry Module |
| PEM 1 | REV 03 | 740-045932 | 1H073050017 | DC Power Entry Module |
| Routing Engine 0 | REV 20 | 750-044228 | CAAY7935 | RE-MX-104 |
| Routing Engine 1 | REV 13 | 750-044228 | CAAM6380 | RE-MX-104 |
| AFEB 0 | | BUILTIN | BUILTIN | Forwarding Engine |
| Processor | | | | |
| FPC 0 | | BUILTIN | BUILTIN | MPC BUILTIN |
| FPC 1 | | BUILTIN | BUILTIN | MPC BUILTIN |
| MIC 0 | REV 15 | 750-036132 | CAAF7948 | 2x0C12/8x0C3 CC-CE |
| PIC 0 | | BUILTIN | BUILTIN | 2x0C12/8x0C3 CC-CE |
| Xcvr 0 | REV 01 | 740-011615 | PCQ0U2J | SFP-IR |
| Xcvr 1 | REV 01 | 740-016068 | PJL7A6G | SFP-SR |
| Xcvr 2 | REV 01 | 740-016068 | PJL7A5J | SFP-SR |
| Xcvr 3 | REV 01 | 740-016065 | PJN5HPZ | SFP-SR |
| Xcvr 4 | REV 01 | 740-029122 | PKB38TL | SFP-LR |
| Xcvr 5 | REV 01 | 740-011787 | P6A107G | SFP-LR |
| Xcvr 6 | REV 01 | 740-029122 | PKB38TR | SFP-LR |
| Xcvr 7 | REV 01 | 740-011787 | PBKONK3 | SFP-LR |
| MIC 1 | | | | |
| FPC 2 | | BUILTIN | BUILTIN | MPC BUILTIN |
| MIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | B10F00465 | SFP+-10G-SR |

| | | | | |
|------------|--------|------------|-----------|-------------|
| Xcvr 1 | REV 01 | 740-031980 | B10F00461 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | B10G01545 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | B10G01385 | SFP+-10G-SR |
| Fan Tray 0 | REV 02 | 711-049570 | CAAX6538 | Fan Tray |

show chassis hardware detail (MX104 Router)

```

user@host> show chassis hardware detail
Hardware inventory:
Item          Version  Part number  Serial number  Description
Chassis                               G3503         MX104
Midplane      REV 28   750-044219   CAAX5741      MX104
PEM 0         REV 03   740-045933   1H072500016   AC Power Entry Module
PEM 1         REV 03   740-045932   1H073050017   DC Power Entry Module
Routing Engine 0 REV 20   750-044228   CAAY7935      RE-MX-104
  da0 7836 MB ATP IG eUSB SSD Nand Flash 0
  usb0 (addr 1) EHCI root hub 0 Freescale uhub0
  usb0 (addr 2) USB2513Bi 9491 SMSC uhub1
  usb0 (addr 3) ATP IG eUSB SSD 44801 ATP Electronics umass0
Routing Engine 1 REV 13   750-044228   CAAM6380      RE-MX-104
  da0 7836 MB ATP IG eUSB SSD Nand Flash 0
AFEB 0                               BUILTIN       BUILTIN       Forwarding Engine
Processor
FPC 0                               BUILTIN       BUILTIN       MPC BUILTIN
FPC 1                               BUILTIN       BUILTIN       MPC BUILTIN
  MIC 0 REV 15   750-036132   CAAF7948      2x0C12/8x0C3 CC-CE
  PIC 0                               BUILTIN       BUILTIN       2x0C12/8x0C3 CC-CE
    Xcvr 0 REV 01   740-011615   PCQ0U2J      SFP-IR
    Xcvr 1 REV 01   740-016068   PjL7A6G      SFP-SR
    Xcvr 2 REV 01   740-016068   PjL7A5J      SFP-SR
    Xcvr 3 REV 01   740-016065   PjN5HPZ      SFP-SR
    Xcvr 4 REV 01   740-029122   PKB38TL      SFP-LR
    Xcvr 5 REV 01   740-011787   P6A107G      SFP-LR
    Xcvr 6 REV 01   740-029122   PKB38TR      SFP-LR
    Xcvr 7 REV 01   740-011787   PBKONK3      SFP-LR
  MIC 1
FPC 2                               BUILTIN       BUILTIN       MPC BUILTIN
  MIC 0                               BUILTIN       BUILTIN       4x 10GE(LAN) SFP+
  PIC 0                               BUILTIN       BUILTIN       4x 10GE(LAN) SFP+
    Xcvr 0 REV 01   740-031980   B10F00465    SFP+-10G-SR
    Xcvr 1 REV 01   740-031980   B10F00461    SFP+-10G-SR
    Xcvr 2 REV 01   740-031980   B10G01545    SFP+-10G-SR
    Xcvr 3 REV 01   740-031980   B10G01385    SFP+-10G-SR
Fan Tray 0 REV 02   711-049570   CAAX6538     Fan Tray

```

show chassis hardware detail (MX480 Packet Transport Router with details of virtual disk size)

```

user@host> show chassis hardware detail
Hardware inventory:
Item          Version  Part number  Serial number  Description
Chassis                               JN122FFD9AFB  MX480
Midplane      REV 05   710-017414   ACRB8882      MX480 Midplane
FPM Board     REV 02   710-017254   CADF7623      Front Panel Display
PEM 0         Rev 07   740-017343   QCS1128A0TY   DC Power Entry Module
PEM 1         Rev 07   740-017343   QCS1128A0JM   DC Power Entry Module
Routing Engine 0 REV 07   750-054758   CADG2028      RE-S-2X00x6
  vtbd0 15361 MB Virtio Block Disk
  vtbd1 15360 MB Virtio Block Disk
  ada0 511 MB QEMU HARDDISK QM00002 Emulated IDE Disk
  usb0 (addr 1) UHCI root HUB 0 Intel uhub0

```

| | | | | |
|------------------|-----------------|---------------|----------|------------------------|
| Routing Engine 1 | REV 00 | 750-054758 | | RE-S-2X00x6 |
| vtbd0 | 15361 MB | | | Virtio Block Disk |
| vtbd1 | 15360 MB | | | Virtio Block Disk |
| ada0 | 511 MB | QEMU HARDDISK | QM00002 | Emulated IDE Disk |
| usb0 (addr 1) | UHCI root HUB 0 | | Intel | uhub0 |
| CB 0 | REV 01 | 750-055976 | CACS1837 | Enhanced MX SCB 2 |
| CB 1 | REV 01 | 750-055976 | CADD9894 | Enhanced MX SCB 2 |
| Xcvr 1 | REV 01 | 740-031980 | AP41KCL | SFP+-10G-SR |
| FPC 0 | REV 09 | 750-049040 | CACX1759 | LOAD MPC Type 2 |
| CPU | REV 10 | 711-035209 | CACP9324 | HMPC PMB 2G |
| FPC 4 | REV 28 | 750-037355 | CACY8384 | MPC4E 3D 2CGE+8XGE |
| CPU | REV 10 | 711-035209 | CACX0428 | HMPC PMB 2G |
| Fan Tray | | | | Enhanced Left Fan Tray |

show chassis hardware extensive (MX104 Router)

```

user@host> show chassis hardware extensive
Hardware inventory:
Item          Version  Part number  Serial number  Description
Chassis
Jedec Code:   0x7fb0          EEPROM Version: 0x02      MX104
S/N:          750-044219      G3503
Assembly ID:  0x0560          Assembly Version: 00.00
Date:         00-00-0000      Assembly Flags:  0x00
ID: MX104
Board Information Record:
Address 0x00: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
I2C Hex Data:
Address 0x00: 7f b0 02 ff 05 60 00 00 00 00 00 00 00 00 00 00
Address 0x10: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x20: 47 33 35 30 33 00 00 00 00 00 00 00 00 00 00 00
Address 0x30: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x40: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x70: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Midplane
Jedec Code:   0x7fb0          EEPROM Version: 0x02      MX104
P/N:          750-044219      S/N:          CAAX5741
Assembly ID:  0x0560          Assembly Version: 01.28
Date:         03-27-2013      Assembly Flags: 0x00
Version:      REV 28          CLEI Code:     PROTOXCLEI
ID: MX104          FRU Model Number: PROTO-ASSEMBLY
Board Information Record:
Address 0x00: ad 01 08 00 b0 a8 6e a7 f8 00 ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 05 60 01 1c 52 45 56 20 32 38 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 34 34 32 31 39 00 00
Address 0x20: 53 2f 4e 20 43 41 41 58 35 37 34 31 00 1b 03 07
Address 0x30: dd ff ff ff ad 01 08 00 b0 a8 6e a7 f8 00 ff ff
Address 0x40: ff ff ff ff 01 50 52 4f 54 4f 58 43 4c 45 49 50
Address 0x50: 52 4f 54 4f 2d 41 53 53 45 4d 42 4c 59 00 00 00
Address 0x60: 00 00 00 00 00 00 41 30 30 ff ff ff ff ff ff ff
Address 0x70: ff ff ff c2 47 33 35 30 33 00 00 00 00 00 00 00
PEM 0
Jedec Code:   0x7fb0          EEPROM Version: 0x02      AC Power Entry Module
P/N:          740-045933      S/N:          1H072500016
Assembly ID:  0x0475          Assembly Version: 00.03
Date:         12-14-2012      Assembly Flags: 0x00
Version:      REV 03          CLEI Code:     IPUPAJ9KAA
ID: AC Power Entry Module    FRU Model Number: PWR-AMX1100-AC-S

```


Board Information Record:

Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff 02 02 00 ff

I2C Hex Data:

Address 0x00: 7f b0 02 ff 04 75 00 03 52 45 56 20 30 33 00 00

Address 0x10: 00 00 00 00 37 34 30 2d 30 34 35 39 33 33 00 00

Address 0x20: 31 48 30 37 32 35 30 30 30 31 36 00 00 0e 0c 07

Address 0x30: dc 30 43 ff ff ff ff ff ff ff ff ff ff ff ff ff

Address 0x40: 02 02 00 ff 01 49 50 55 50 41 4a 39 4b 41 41 50

Address 0x50: 57 52 2d 41 4d 58 31 31 30 30 2d 41 43 2d 53 00

Address 0x60: 00 00 00 00 00 00 41 30 30 ff ff ff ff ff ff ff

Address 0x70: ff ff ff 70 ff ff ff ff ff ff ff ff ff ff ff ff

PEM 1 REV 03 740-045932 1H073050017 DC Power Entry Module

Jedec Code: 0x7fb0 EEPROM Version: 0x02

P/N: 740-045932 S/N: 1H073050017

Assembly ID: 0x0476 Assembly Version: 00.03

Date: 01-30-2013 Assembly Flags: 0x00

Version: REV 03 CLEI Code: IPUPAJ8KAA

ID: DC Power Entry Module FRU Model Number: PWR-AMX1100-DC-S

Board Information Record:

Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff 02 02 00 ff

I2C Hex Data:

Address 0x00: 7f b0 02 ff 04 76 00 03 52 45 56 20 30 33 00 00

Address 0x10: 00 00 00 00 37 34 30 2d 30 34 35 39 33 32 00 00

Address 0x20: 31 48 30 37 33 30 35 30 30 31 37 00 00 1e 01 07

Address 0x30: dd 30 44 ff ff ff ff ff ff ff ff ff ff ff ff ff

Address 0x40: 02 02 00 ff 01 49 50 55 50 41 4a 38 4b 41 41 50

Address 0x50: 57 52 2d 41 4d 58 31 31 30 30 2d 44 43 2d 53 00

Address 0x60: 00 00 00 00 00 00 41 30 30 ff ff ff ff ff ff ff

Address 0x70: ff ff ff 72 ff ff ff ff ff ff ff ff ff ff ff ff

Routing Engine 0 REV 20 750-044228 CAAY7935 RE-MX-104

Jedec Code: 0x7fb0 EEPROM Version: 0x02

P/N: 750-044228 S/N: CAAY7935

Assembly ID: 0x0b81 Assembly Version: 01.20

Date: 03-18-2013 Assembly Flags: 0x00

Version: REV 20 CLEI Code: PROTOXCLEI

ID: RE-MX-104 FRU Model Number: PROTO-ASSEMBLY

Board Information Record:

Address 0x00: ad 01 00 08 b0 a8 6e a6 fc 10 ff ff ff ff ff ff

I2C Hex Data:

Address 0x00: 7f b0 02 fe 0b 81 01 14 52 45 56 20 32 30 00 00

Address 0x10: 00 00 00 00 37 35 30 2d 30 34 34 32 32 38 00 00

Address 0x20: 53 2f 4e 20 43 41 41 59 37 39 33 35 00 12 03 07

Address 0x30: dd ff ff ff ad 01 00 08 b0 a8 6e a6 fc 10 ff ff

Address 0x40: ff ff ff ff 01 50 52 4f 54 4f 58 43 4c 45 49 50

Address 0x50: 52 4f 54 4f 2d 41 53 53 45 4d 42 4c 59 00 00 00

Address 0x60: 00 00 00 00 00 00 41 30 30 ff ff ff ff ff ff ff

Address 0x70: ff ff ff c2 ff ff ff ff ff ff ff ff ff ff ff ff

da0 7836 MB ATP IG eUSB SSD Nand Flash 0

usb0 (addr 1) EHCI root hub 0 Freescale uhub0

usb0 (addr 2) USB2513Bi 9491 SMSC uhub1

usb0 (addr 3) ATP IG eUSB SSD 44801 ATP Electronics umass0

Routing Engine 1 REV 13 750-044228 CAAM6380 RE-MX-104

Jedec Code: 0x7fb0 EEPROM Version: 0x02

P/N: 750-044228 S/N: CAAM6380

Assembly ID: 0x0b81 Assembly Version: 01.13

Date: 09-17-2012 Assembly Flags: 0x00

Version: REV 13 CLEI Code: PROTOXCLEI

ID: RE-MX-104 FRU Model Number: PROTO-ASSEMBLY

Board Information Record:

Address 0x00: ad 01 00 08 64 87 88 27 08 18 ff ff ff ff ff ff

I2C Hex Data:

```

Address 0x00: 7f b0 02 fe 0b 81 01 0d 52 45 56 20 31 33 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 34 34 32 32 38 00 00
Address 0x20: 53 2f 4e 20 43 41 41 4d 36 33 38 30 00 11 09 07
Address 0x30: dc ff ff ff ad 01 00 08 64 87 88 27 08 18 ff ff
Address 0x40: ff ff ff ff 01 50 52 4f 54 4f 58 43 4c 45 49 50
Address 0x50: 52 4f 54 4f 2d 41 53 53 45 4d 42 4c 59 00 00 00
Address 0x60: 00 00 00 00 00 00 41 30 30 ff ff ff ff ff ff ff
Address 0x70: ff ff ff c2 ff ff ff ff ff ff ff ff ff ff ff ff
da0      7836 MB  ATP IG  eUSB SSD                      Nand Flash 0
AFEB 0                                BUILTIN          BUILTIN          Forwarding Engine
Processor
FPC 0                                BUILTIN          BUILTIN          MPC BUILTIN
FPC 1                                BUILTIN          BUILTIN          MPC BUILTIN
MIC 0              REV 15    750-036132    CAAF7948          2xOC12/8xOC3 CC-CE
Jedec Code:      0x7fb0                EEPROM Version:    0x02
P/N:              750-036132            S/N:              CAAF7948
Assembly ID:     0x0a1a                Assembly Version:  01.15
Date:            07-03-2012            Assembly Flags:    0x00
Version:         REV 15                CLEI Code:        IP9IAM2DAA
ID: 2xOC12/8xOC3 CC-CE                FRU Model Number: MIC-3D-80C3-20C12-ATM
Board Information Record:
Address 0x00: 12 01 05 03 05 ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 0a 1a 01 0f 52 45 56 20 31 35 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 33 36 31 33 32 00 00
Address 0x20: 53 2f 4e 20 43 41 41 46 37 39 34 38 00 03 07 07
Address 0x30: dc ff ff ff 12 01 05 03 05 ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 49 50 39 49 41 4d 32 44 41 41 4d
Address 0x50: 49 43 2d 33 44 2d 38 4f 43 33 2d 32 4f 43 31 32
Address 0x60: 2d 41 54 4d 00 00 41 00 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff e3 c0 02 a3 9c 00 00 00 00 0a 60 00 00
PIC 0                                BUILTIN          BUILTIN          2xOC12/8xOC3 CC-CE
Xcvr 0      REV 01    740-011615    PCQOU2J          SFP-IR
Xcvr 1      REV 01    740-016068    PJJL7A6G        SFP-SR
Xcvr 2      REV 01    740-016068    PJJL7A5J        SFP-SR
Xcvr 3      REV 01    740-016065    PJN5HPZ         SFP-SR
Xcvr 4      REV 01    740-029122    PKB38TL         SFP-LR
Xcvr 5      REV 01    740-011787    P6A107G         SFP-LR
Xcvr 6      REV 01    740-029122    PKB38TR         SFP-LR
Xcvr 7      REV 01    740-011787    PBKONK3         SFP-LR
MIC 1
FPC 2                                BUILTIN          BUILTIN          MPC BUILTIN
MIC 0                                BUILTIN          BUILTIN          4x 10GE(LAN) SFP+
Jedec Code:      0x0000                EEPROM Version:    0x00
P/N:              BUILTIN              S/N:              BUILTIN
Assembly ID:     0x0a60                Assembly Version:  00.00
Date:            00-00-0000            Assembly Flags:    0x00
ID: 4x 10GE(LAN) SFP+
Board Information Record:
Address 0x00: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
I2C Hex Data:
Address 0x00: 00 00 00 00 0a 60 00 00 00 00 00 00 00 00 00 00
Address 0x10: 00 00 00 00 42 55 49 4c 54 49 4e 00 4d 58 43 00
Address 0x20: 42 55 49 4c 54 49 4e 00 4d 58 43 00 00 00 00 00
Address 0x30: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x40: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x70: 00 00 00 00 c0 02 a5 04 7f b0 02 ff 0a 1a 01 0f
PIC 0                                BUILTIN          BUILTIN          4x 10GE(LAN) SFP+
Xcvr 0      REV 01    740-031980    B10F00465        SFP+-10G-SR

```

```

Xcvr 1      REV 01  740-031980  B10F00461      SFP+-10G-SR
Xcvr 2      REV 01  740-031980  B10G01545      SFP+-10G-SR
Xcvr 3      REV 01  740-031980  B10G01385      SFP+-10G-SR
Fan Tray 0  REV 02  711-049570  CAAX6538       Fan Tray
Jedec Code: 0x7fb0      EEPROM Version: 0x02
P/N:        711-049570  S/N:          CAAX6538
Assembly ID: 0x0b82     Assembly Version: 01.02
Date:       03-01-2013  Assembly Flags: 0x00
Version:    REV 02     CLEI Code:    PROTOXCLEI
ID: Fan Tray          FRU Model Number: PROTO-ASSEMBLY
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 0b 82 01 02 52 45 56 20 30 32 00 00
Address 0x10: 00 00 00 00 37 31 31 2d 30 34 39 35 37 30 00 00
Address 0x20: 53 2f 4e 20 43 41 41 58 36 35 33 38 00 01 03 07
Address 0x30: dd ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 50 52 4f 54 4f 58 43 4c 45 49 50
Address 0x50: 52 4f 54 4f 2d 41 53 53 45 4d 42 4c 59 00 00 00
Address 0x60: 00 00 00 00 00 00 41 30 30 ff ff ff ff ff ff ff
Address 0x70: ff ff ff c2 ff ff ff ff ff ff ff ff ff ff ff ff

```

show chassis hardware extensive (PTX10008 Router)

```

user@host> show chassis hardware extensive
Hardware inventory:
Item              Version  Part number  Serial number  Description
Chassis                               DE487        JNP10008 [PTX10008 -
PILOT BUILD V1.1]
Jedec Code: 0x7fb0      EEPROM Version: 0x02
                               S/N:          DE487
Assembly ID: 0x0566     Assembly Version: 01.27
Date:       08-08-2016  Assembly Flags: 0x00
                               CLEI Code:    CMMUM00ARA
ID: JNP10008          FRU Model Number: QFX10008-CHAS
Board Information Record:
Address 0x00: ad 01 08 00 30 b6 4f e9 74 c4 ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 05 66 01 1b 00 45 56 20 32 37 00 00
Address 0x10: 00 00 00 00 00 35 30 2d 30 35 34 30 39 37 00 00
Address 0x20: 44 45 34 38 37 00 00 00 00 00 00 00 08 08 07
Address 0x30: e0 ff ff ff ad 01 08 00 30 b6 4f e9 74 c4 ff ff
Address 0x40: ff ff ff ff 01 43 4d 4d 55 4d 30 30 41 52 41 51
Address 0x50: 46 58 31 30 30 30 38 2d 43 48 41 53 00 00 00 00
Address 0x60: 00 00 00 00 00 00 41 44 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff 63 44 45 34 38 37 00 00 00 00 00 00 00
Midplane          REV 27  750-054097  ACPD4307      Midplane 8
Jedec Code: 0x7fb0      EEPROM Version: 0x02
P/N:        750-054097  S/N:          ACPD4307
Assembly ID: 0x0be3     Assembly Version: 01.27
Date:       08-08-2016  Assembly Flags: 0x00
Version:    REV 27     CLEI Code:    CMMUM00ARA
ID: QFX10008 Midplane  FRU Model Number: QFX10008-CHAS
Board Information Record:
Address 0x00: ad 01 08 00 30 b6 4f e9 74 c4 ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 0b e3 01 1b 52 45 56 20 32 37 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 35 34 30 39 37 00 00
Address 0x20: 53 2f 4e 20 41 43 50 44 34 33 30 37 00 08 08 07
Address 0x30: e0 ff ff ff ad 01 08 00 30 b6 4f e9 74 c4 ff ff
Address 0x40: ff ff ff ff 01 43 4d 4d 55 4d 30 30 41 52 41 51

```

```

Address 0x50: 46 58 31 30 30 30 38 2d 43 48 41 53 00 00 00 00
Address 0x60: 00 00 00 00 00 00 41 44 00 ff ff ff ff ff ff
Address 0x70: ff ff ff 63 44 45 34 38 37 00 00 00 00 00 00 00
Routing Engine 0          BUILTIN          BUILTIN          RE-PTX-2X00x4
vtbd0 15360 MB
vtbd1 15360 MB
ada0 128 MB QEMU
usb0 (addr 0.1) EHCI root HUB 0 Intel uhub0
usb1 (addr 0.2) product 0x0020 32 vendor 0x8087 uhub1
Routing Engine 1          BUILTIN          BUILTIN          RE-PTX-2X00x4
vtbd0 15360 MB
vtbd1 15360 MB
ada0 128 MB QEMU
usb0 (addr 0.1) EHCI root HUB 0 Intel uhub0
usb1 (addr 0.2) product 0x0020 32 vendor 0x8087 uhub1
CB 0          REV 02 750-068820 ACNZ4440 Control Board
Jedec Code: 0x7fb0 EEPROM Version: 0x02
P/N: 750-068820 S/N: ACNZ4440
Assembly ID: 0x0b9d Assembly Version: 01.02
Date: 06-13-2016 Assembly Flags: 0x00
Version: REV 02 CLEI Code: CMUCAH3CTB
ID: Control Board FRU Model Number: QFX10000-RE
Board Information Record:
Address 0x00: ad 01 00 10 84 c1 c1 54 10 be ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 0b 9d 01 02 52 45 56 20 30 32 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 36 38 38 32 30 00 00
Address 0x20: 53 2f 4e 20 41 43 4e 5a 34 34 34 30 00 0d 06 07
Address 0x30: e0 ff ff ff ad 01 00 10 84 c1 c1 54 10 be ff ff
Address 0x40: ff ff ff ff 01 43 4d 55 43 41 48 33 43 54 42 51
Address 0x50: 46 58 31 30 30 30 30 2d 52 45 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 42 41 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff db ff ff ff ff ff ff ff ff ff ff ff ff
CB 1          REV 02 750-068820 ACNZ8284 Control Board
Jedec Code: 0x7fb0 EEPROM Version: 0x02
P/N: 750-068820 S/N: ACNZ8284
Assembly ID: 0x0b9d Assembly Version: 01.02
Date: 06-27-2016 Assembly Flags: 0x00
Version: REV 02 CLEI Code: CMUCAH3CTB
ID: Control Board FRU Model Number: QFX10000-RE
Board Information Record:
Address 0x00: ad 01 00 10 84 c1 c1 e5 b1 46 ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 0b 9d 01 02 52 45 56 20 30 32 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 36 38 38 32 30 00 00
Address 0x20: 53 2f 4e 20 41 43 4e 5a 38 32 38 34 00 1b 06 07
Address 0x30: e0 ff ff ff ad 01 00 10 84 c1 c1 e5 b1 46 ff ff
Address 0x40: ff ff ff ff 01 43 4d 55 43 41 48 33 43 54 42 51
Address 0x50: 46 58 31 30 30 30 30 2d 52 45 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 42 41 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff db ff ff ff ff ff ff ff ff ff ff ff ff
FPC 0          REV 36 750-051354 ACNP4679 LC1102 - 12C / 36Q /
144X
Jedec Code: 0x7fb0 EEPROM Version: 0x02
P/N: 750-051354 S/N: ACNP4679
Assembly ID: 0x0be7 Assembly Version: 01.36
Date: 11-11-2016 Assembly Flags: 0x00
Version: REV 36 CLEI Code: CMUIAM9BAA
ID: ULC-36Q-12Q28 FRU Model Number: QFX10000-36Q
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff

```

I2C Hex Data:

```

Address 0x00: 7f b0 02 ff 0b e7 01 24 52 45 56 20 33 36 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 35 31 33 35 34 00 00
Address 0x20: 53 2f 4e 20 41 43 4e 50 34 36 37 39 00 0b 0b 07
Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 43 4d 55 49 41 4d 39 42 41 41 51
Address 0x50: 46 58 31 30 30 30 30 2d 33 36 51 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 42 45 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff fe ff ff ff ff ff ff ff ff ff ff ff ff
CPU          BUILTIN      BUILTIN      FPC CPU

```

```

Jedec Code: 0x7fb0      EEPROM Version: 0x02
P/N:        BUILTIN    S/N:        BUILTIN
Assembly ID: 0xf020    Assembly Version: 02.17
Date:       04-19-2012 Assembly Flags: 0x00

```

Board Information Record:

```
Address 0x00: ad 01 01 04 ac 4b c8 1d f7 b6 ff ff ff ff ff ff
```

I2C Hex Data:

```

Address 0x00: 7f b0 02 ff f0 20 02 11 00 e0 3c fa 09 00 70 87
Address 0x10: 09 38 bb ff 42 55 49 4c 54 49 4e 00 00 e0 3c fa
Address 0x20: 42 55 49 4c 54 49 4e 00 42 55 49 4c 00 13 04 07
Address 0x30: dc ff ff ff ad 01 01 04 ac 4b c8 1d f7 b6 ff ff
Address 0x40: ff ff ff ff 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 45 00 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff f3 50 36 36 36 36 00 00 00 00 00 00 00
PIC 0          BUILTIN      BUILTIN      12x100GE/36x40GE/144x10GE

```

```

Jedec Code: 0x7fb0      EEPROM Version: 0x02
P/N:        BUILTIN    S/N:        BUILTIN
Assembly ID: 0xf050    Assembly Version: 02.17
Date:       04-19-2012 Assembly Flags: 0x00

```

Board Information Record:

```
Address 0x00: ad 01 01 04 ac 4b c8 1d f7 b6 ff ff ff ff ff ff
```

I2C Hex Data:

```

Address 0x00: 7f b0 02 ff f0 50 02 11 00 00 00 00 07 0a 20 45
Address 0x10: 6c 61 70 73 42 55 49 4c 54 49 4e 00 25 73 3a 20
Address 0x20: 42 55 49 4c 54 49 4e 00 25 73 3a 20 00 13 04 07
Address 0x30: dc ff ff ff ad 01 01 04 ac 4b c8 1d f7 b6 ff ff
Address 0x40: ff ff ff ff 01 00 00 00 00 00 00 00 00 00 00 00
Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 45 00 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff f3 55 55 55 55 55 55 55 55 55 55 55 55

```

```

Xcvr 1      REV 01      740-058734      1ECQ113834D      QSFP-100GBASE-SR4
Xcvr 5      REV 01      740-058734      1ECQ1137067      QSFP-100GBASE-SR4
Xcvr 6      REV 01      740-054053      QF3205SD         QSFP+-4X10G-SR
Xcvr 7      REV 01      740-058734      1ECQ11381MP      QSFP-100GBASE-SR4
Xcvr 11     REV 01      740-061405      1ACQ110507K      QSFP-100GBASE-SR4
Xcvr 13     REV 01      740-058734      1ECQ11390ZB      QSFP-100GBASE-SR4
Xcvr 17     REV 01      740-058734      1ECQ11381M1      QSFP-100GBASE-SR4
Xcvr 19     REV 01      740-058734      1ECQ11381JS      QSFP-100GBASE-SR4
Xcvr 23     REV 01      740-058734      1ACQ112000E      QSFP-100GBASE-SR4
Xcvr 25     REV 01      740-058734      1ECQ11381NT      QSFP-100GBASE-SR4
Xcvr 28     REV 01      740-054053      QG1502WV         QSFP+-4X10G-SR
Xcvr 29     REV 01      740-058734      1ACQ112000D      QSFP-100GBASE-SR4
Xcvr 33     REV 01      740-058734      1ACQ1134065      QSFP-100GBASE-SR4
Xcvr 34     REV 01      740-067442      XV20L4L          QSFP+-40G-SR4
FPC 1      REV 33      750-051354      ACNX8831         LC1102 - 12C / 36Q /
144X

```

```

Jedec Code: 0x7fb0      EEPROM Version: 0x02
P/N:        750-051354  S/N:        ACNX8831
Assembly ID: 0x0be7    Assembly Version: 01.33

```

Date: 06-03-2016 Assembly Flags: 0x00
 Version: REV 33 CLEI Code: CMUIAM9BAA
 ID: ULC-36Q-12Q28 FRU Model Number: QFX10000-36Q

Board Information Record:

Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff

I2C Hex Data:

Address 0x00: 7f b0 02 ff 0b e7 01 21 52 45 56 20 33 33 00 00
 Address 0x10: 00 00 00 00 37 35 30 2d 30 35 31 33 35 34 00 00
 Address 0x20: 53 2f 4e 20 41 43 4e 58 38 38 33 31 00 03 06 07
 Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff
 Address 0x40: ff ff ff ff 01 43 4d 55 49 41 4d 39 42 41 41 51
 Address 0x50: 46 58 31 30 30 30 30 2d 33 36 51 00 00 00 00 00
 Address 0x60: 00 00 00 00 00 00 42 42 00 ff ff ff ff ff ff
 Address 0x70: ff ff ff fb ff ff ff ff ff ff ff ff ff ff ff
 CPU BUILTIN BUILTIN FPC CPU

Jedec Code: 0x7fb0 EEPROM Version: 0x02
 P/N: BUILTIN S/N: BUILTIN
 Assembly ID: 0xf020 Assembly Version: 02.17
 Date: 04-19-2012 Assembly Flags: 0x00

Board Information Record:

Address 0x00: ad 01 01 04 ac 4b c8 1d f7 b6 ff ff ff ff ff ff

I2C Hex Data:

Address 0x00: 7f b0 02 ff f0 20 02 11 00 20 3e fa 09 00 10 8a
 Address 0x10: 09 38 bb ff 42 55 49 4c 54 49 4e 00 00 20 3e fa
 Address 0x20: 42 55 49 4c 54 49 4e 00 42 55 49 4c 00 13 04 07
 Address 0x30: dc ff ff ff ad 01 01 04 ac 4b c8 1d f7 b6 ff ff
 Address 0x40: ff ff ff ff 00 00 00 00 00 00 00 00 00 00 00 00
 Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
 Address 0x60: 00 00 00 00 00 00 45 00 00 ff ff ff ff ff ff
 Address 0x70: ff ff ff f3 50 36 36 36 36 00 00 00 00 00 00 00
 PIC 0 BUILTIN BUILTIN 12x100GE/36x40GE/144x10GE

Jedec Code: 0x7fb0 EEPROM Version: 0x02
 P/N: BUILTIN S/N: BUILTIN
 Assembly ID: 0xf050 Assembly Version: 02.17
 Date: 04-19-2012 Assembly Flags: 0x00

Board Information Record:

Address 0x00: ad 01 01 04 ac 4b c8 1d f7 b6 ff ff ff ff ff ff

I2C Hex Data:

Address 0x00: 7f b0 02 ff f0 50 02 11 00 00 00 00 07 0a 20 45
 Address 0x10: 6c 61 70 73 42 55 49 4c 54 49 4e 00 25 73 3a 20
 Address 0x20: 42 55 49 4c 54 49 4e 00 25 73 3a 20 00 13 04 07
 Address 0x30: dc ff ff ff ad 01 01 04 ac 4b c8 1d f7 b6 ff ff
 Address 0x40: ff ff ff ff 01 00 00 00 00 00 00 00 00 00 00 00
 Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
 Address 0x60: 00 00 00 00 00 00 45 00 00 ff ff ff ff ff ff
 Address 0x70: ff ff ff f3 55 55 55 55 55 55 55 55 55 55 55
 Xcvr 5 NON-JNPR 37700171YY0084 QSFP-100GBASE-LR4
 Xcvr 25 NON-JNPR GDA2017459 QSFP-100GBASE-LR4
 Xcvr 29 NON-JNPR GDF2008750 QSFP-100GBASE-LR4
 FPC 2 REV 32 750-051357 ACPB0341 LC1101 - 30C / 30Q / 96X

Jedec Code: 0x7fb0 EEPROM Version: 0x02
 P/N: 750-051357 S/N: ACPB0341
 Assembly ID: 0x0be8 Assembly Version: 01.32
 Date: 06-04-2016 Assembly Flags: 0x00
 Version: REV 32 CLEI Code: CMUIANABAA
 ID: ULC-30Q28 FRU Model Number: QFX10000-30C

Board Information Record:

Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff

I2C Hex Data:

```

Address 0x00: 7f b0 02 ff 0b e8 01 20 52 45 56 20 33 32 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 35 31 33 35 37 00 00
Address 0x20: 53 2f 4e 20 41 43 50 42 30 33 34 31 00 04 06 07
Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 43 4d 55 49 41 4e 41 42 41 41 51
Address 0x50: 46 58 31 30 30 30 30 2d 33 30 43 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 41 42 00 ff ff ff ff ff ff
Address 0x70: ff ff ff ef ff ff ff ff ff ff ff ff ff ff ff
CPU          BUILTIN      BUILTIN      FPC CPU
Jedec Code:  0x7fb0          EEPROM Version: 0x02
P/N:         BUILTIN        S/N:          BUILTIN
Assembly ID: 0xf020          Assembly Version: 02.17
Date:        04-19-2012      Assembly Flags: 0x00
Board Information Record:
Address 0x00: ad 01 01 04 ac 4b c8 1d f7 b6 ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff f0 20 02 11 00 00 67 00 0a 00 b0 8c
Address 0x10: 09 38 bb ff 42 55 49 4c 54 49 4e 00 00 00 67 00
Address 0x20: 42 55 49 4c 54 49 4e 00 42 55 49 4c 00 13 04 07
Address 0x30: dc ff ff ff ad 01 01 04 ac 4b c8 1d f7 b6 ff ff
Address 0x40: ff ff ff ff 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 45 00 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff f3 50 36 36 36 36 00 00 00 00 00 00 00
PIC 0          BUILTIN      BUILTIN      30x100GE/30x40GE/96x10GE

Jedec Code:  0x7fb0          EEPROM Version: 0x02
P/N:         BUILTIN        S/N:          BUILTIN
Assembly ID: 0xf050          Assembly Version: 02.17
Date:        04-19-2012      Assembly Flags: 0x00
Board Information Record:
Address 0x00: ad 01 01 04 ac 4b c8 1d f7 b6 ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff f0 50 02 11 00 00 00 00 07 0a 20 45
Address 0x10: 6c 61 70 73 42 55 49 4c 54 49 4e 00 25 73 3a 20
Address 0x20: 42 55 49 4c 54 49 4e 00 25 73 3a 20 00 13 04 07
Address 0x30: dc ff ff ff ad 01 01 04 ac 4b c8 1d f7 b6 ff ff
Address 0x40: ff ff ff ff 01 00 00 00 00 00 00 00 00 00 00 00
Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 45 00 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff f3 de ad be ef de ad be ef de ad be ef
Xcvr 0          NON-JNPR      37700170YZC305    QSFP-100GBASE-LR4
Xcvr 4          NON-JNPR      37700170YZC306    QSFP-100GBASE-LR4
Xcvr 9          REV 01        740-054053         QF36013S          QSFP+-4X10G-SR
Xcvr 12         REV 01        740-067442         XV301AU           QSFP+-40G-SR4
Xcvr 14         REV 01        740-043308         UWE2CG9           QSFP+-40G-LR4
Xcvr 16         REV 01        740-043308         UWH141S           QSFP+-40G-LR4
Xcvr 17         REV 01        740-058734         1ECQ11180VH       QSFP-100GBASE-SR4
Xcvr 18         REV 01        740-054050         INF AJ0492237      QSFP+-4X10G-LR
Xcvr 26         REV 01        740-058734         1ACQ111803N       QSFP-100GBASE-SR4
Xcvr 27         REV 01        740-058734         1ACQ113405S       QSFP-100GBASE-SR4
FPC 3          REV 35        750-051357         ACPD2186          LC1101 - 30C / 30Q / 96X

Jedec Code:  0x7fb0          EEPROM Version: 0x02
P/N:         750-051357      S/N:          ACPD2186
Assembly ID: 0x0be8          Assembly Version: 01.35
Date:        09-21-2016      Assembly Flags: 0x00
Version:     REV 35          CLEI Code:     CMUIANABAA
ID: ULC-30Q28                FRU Model Number: QFX10000-30C
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff

```

I2C Hex Data:

Address 0x00: 7f b0 02 ff 0b e8 01 23 52 45 56 20 33 35 00 00
 Address 0x10: 00 00 00 00 37 35 30 2d 30 35 31 33 35 37 00 00
 Address 0x20: 53 2f 4e 20 41 43 50 44 32 31 38 36 00 15 09 07
 Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff
 Address 0x40: ff ff ff ff 01 43 4d 55 49 41 4e 41 42 41 41 51
 Address 0x50: 46 58 31 30 30 30 30 2d 33 30 43 00 00 00 00 00
 Address 0x60: 00 00 00 00 00 00 41 44 00 ff ff ff ff ff ff ff
 Address 0x70: ff ff ff f1 ff ff ff ff ff ff ff ff ff ff ff ff
 CPU BUILTIN BUILTIN FPC CPU

Jedec Code: 0x7fb0 EEPROM Version: 0x02
 P/N: BUILTIN S/N: BUILTIN
 Assembly ID: 0xf020 Assembly Version: 02.17
 Date: 04-19-2012 Assembly Flags: 0x00

Board Information Record:

Address 0x00: ad 01 01 04 ac 4b c8 1d f7 b6 ff ff ff ff ff ff

I2C Hex Data:

Address 0x00: 7f b0 02 ff f0 20 02 11 00 80 70 fa 09 00 50 8f
 Address 0x10: 09 38 bb ff 42 55 49 4c 54 49 4e 00 00 80 70 fa
 Address 0x20: 42 55 49 4c 54 49 4e 00 42 55 49 4c 00 13 04 07
 Address 0x30: dc ff ff ff ad 01 01 04 ac 4b c8 1d f7 b6 ff ff
 Address 0x40: ff ff ff ff 00 00 00 00 00 00 00 00 00 00 00 00
 Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
 Address 0x60: 00 00 00 00 00 00 45 00 00 ff ff ff ff ff ff ff
 Address 0x70: ff ff ff f3 50 36 36 36 36 00 00 00 00 00 00 00
 PIC 0 BUILTIN BUILTIN 30x100GE/30x40GE/96x10GE

Jedec Code: 0x7fb0 EEPROM Version: 0x02
 P/N: BUILTIN S/N: BUILTIN
 Assembly ID: 0xf050 Assembly Version: 02.17
 Date: 04-19-2012 Assembly Flags: 0x00

Board Information Record:

Address 0x00: ad 01 01 04 ac 4b c8 1d f7 b6 ff ff ff ff ff ff

I2C Hex Data:

Address 0x00: 7f b0 02 ff f0 50 02 11 00 00 00 00 07 0a 20 45
 Address 0x10: 6c 61 70 73 42 55 49 4c 54 49 4e 00 25 73 3a 20
 Address 0x20: 42 55 49 4c 54 49 4e 00 25 73 3a 20 00 13 04 07
 Address 0x30: dc ff ff ff ad 01 01 04 ac 4b c8 1d f7 b6 ff ff
 Address 0x40: ff ff ff ff 01 00 00 00 00 00 00 00 00 00 00 00
 Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
 Address 0x60: 00 00 00 00 00 00 45 00 00 ff ff ff ff ff ff ff
 Address 0x70: ff ff ff f3 55 55 55 55 55 55 55 55 55 55 55 55
 Xcvr 0 REV 01 740-061409 1GCQA1470A3 QSFP-100GBASE-LR4
 Xcvr 1 REV 01 740-061409 1GCQA1470XC QSFP-100GBASE-LR4
 Xcvr 7 NON-JNPR FG4550500008 QSFP-100G-CWDM4
 Xcvr 24 REV 01 740-058734 1ECQ11381LX QSFP-100GBASE-SR4
 Xcvr 29 REV 01 740-043308 UWE0UYS QSFP+-40G-LR4
 FPC 5 REV 08 750-068822 ACPF0057 LC1102 - 12C / 36Q / 144X

Jedec Code: 0x7fb0 EEPROM Version: 0x02
 P/N: 750-068822 S/N: ACPF0057
 Assembly ID: 0x0be7 Assembly Version: 01.08
 Date: 09-01-2016 Assembly Flags: 0x00
 Version: REV 08 CLEI Code: CMUIAM9BAB
 ID: ULC-36Q-12Q28 FRU Model Number: QFX10000-36Q

Board Information Record:

Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff

I2C Hex Data:

Address 0x00: 7f b0 02 ff 0b e7 01 08 52 45 56 20 30 38 00 00
 Address 0x10: 00 00 00 00 37 35 30 2d 30 36 38 38 32 32 00 00
 Address 0x20: 53 2f 4e 20 41 43 50 46 30 30 35 37 00 01 09 07


```

Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 43 4d 55 49 41 4d 39 42 41 42 51
Address 0x50: 46 58 31 30 30 30 30 2d 33 36 51 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 42 45 00 ff ff ff ff ff ff
Address 0x70: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
CPU          BUILTIN          BUILTIN          FPC CPU
Jedec Code:  0x7fb0          EEPROM Version: 0x02
P/N:         BUILTIN        S/N:         BUILTIN
Assembly ID: 0xf020        Assembly Version: 02.17
Date:        04-19-2012    Assembly Flags: 0x00
Board Information Record:
Address 0x00: ad 01 01 04 ac 4b c8 1d f7 b6 ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff f0 20 02 11 00 00 3d fa 09 00 90 94
Address 0x10: 09 38 bb ff 42 55 49 4c 54 49 4e 00 00 00 3d fa
Address 0x20: 42 55 49 4c 54 49 4e 00 42 55 49 4c 00 13 04 07
Address 0x30: dc ff ff ff ad 01 01 04 ac 4b c8 1d f7 b6 ff ff
Address 0x40: ff ff ff ff 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 45 00 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff f3 50 36 36 36 36 00 00 00 00 00 00 00
PIC 0          BUILTIN          BUILTIN          12x100GE/36x40GE/144x10GE

Jedec Code:  0x7fb0          EEPROM Version: 0x02
P/N:         BUILTIN        S/N:         BUILTIN
Assembly ID: 0xf050        Assembly Version: 02.17
Date:        04-19-2012    Assembly Flags: 0x00
Board Information Record:
Address 0x00: ad 01 01 04 ac 4b c8 1d f7 b6 ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff f0 50 02 11 00 00 00 00 07 0a 20 45
Address 0x10: 6c 61 70 73 42 55 49 4c 54 49 4e 00 25 73 3a 20
Address 0x20: 42 55 49 4c 54 49 4e 00 25 73 3a 20 00 13 04 07
Address 0x30: dc ff ff ff ad 01 01 04 ac 4b c8 1d f7 b6 ff ff
Address 0x40: ff ff ff ff 01 00 00 00 00 00 00 00 00 00 00 00
Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 45 00 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff f3 55 55 55 55 55 55 55 55 55 55 55 55
FPC 6          REV 08    750-068822    ACPE9951          LC1102 - 12C / 36Q /
144X
Jedec Code:  0x7fb0          EEPROM Version: 0x02
P/N:         750-068822    S/N:         ACPE9951
Assembly ID: 0x0be7        Assembly Version: 01.08
Date:        09-01-2016    Assembly Flags: 0x00
Version:     REV 08        CLEI Code:   CMUIAM9BAB
ID: ULC-36Q-12Q28        FRU Model Number: QFX10000-36Q
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 0b e7 01 08 52 45 56 20 30 38 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 36 38 38 32 32 00 00
Address 0x20: 53 2f 4e 20 41 43 50 45 39 39 35 31 00 01 09 07
Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 43 4d 55 49 41 4d 39 42 41 42 51
Address 0x50: 46 58 31 30 30 30 30 2d 33 36 51 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 42 45 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
CPU          BUILTIN          BUILTIN          FPC CPU
Jedec Code:  0x7fb0          EEPROM Version: 0x02
P/N:         BUILTIN        S/N:         BUILTIN
Assembly ID: 0xf020        Assembly Version: 02.17

```

```

Date:          04-19-2012          Assembly Flags:    0x00
Board Information Record:
Address 0x00: ad 01 01 04 ac 4b c8 1d f7 b6 ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff f0 20 02 11 00 c0 3e fa 09 00 30 97
Address 0x10: 09 38 bb ff 42 55 49 4c 54 49 4e 00 00 c0 3e fa
Address 0x20: 42 55 49 4c 54 49 4e 00 42 55 49 4c 00 13 04 07
Address 0x30: dc ff ff ff ad 01 01 04 ac 4b c8 1d f7 b6 ff ff
Address 0x40: ff ff ff ff 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 45 00 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff f3 50 36 36 36 36 00 00 00 00 00 00 00
PIC 0          BUILTIN          BUILTIN          12x100GE/36x40GE/144x10GE

```

```

Jedec Code:    0x7fb0          EEPROM Version:    0x02
P/N:          BUILTIN          S/N:          BUILTIN
Assembly ID:   0xf050          Assembly Version: 02.17
Date:         04-19-2012      Assembly Flags:    0x00
Board Information Record:
Address 0x00: ad 01 01 04 ac 4b c8 1d f7 b6 ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff f0 50 02 11 00 00 00 00 07 0a 20 45
Address 0x10: 6c 61 70 73 42 55 49 4c 54 49 4e 00 25 73 3a 20
Address 0x20: 42 55 49 4c 54 49 4e 00 25 73 3a 20 00 13 04 07
Address 0x30: dc ff ff ff ad 01 01 04 ac 4b c8 1d f7 b6 ff ff
Address 0x40: ff ff ff ff 01 00 00 00 00 00 00 00 00 00 00 00
Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 45 00 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff f3 55 55 55 55 55 55 55 55 55 55 55 55
Xcvr 1        REV 01    740-054053    QF3208LG        QSFP+-4X10G-SR
Xcvr 7        REV 01    740-067442    XV20LGN         QSFP+-40G-SR4
Xcvr 8        REV 01    740-067442    XV20VMV         QSFP+-40G-SR4
Xcvr 9        REV 01    740-067442    XV20KCN         QSFP+-40G-SR4
Xcvr 10       REV 01    740-067442    XU504QD         QSFP+-40G-SR4
Xcvr 11       REV 01    740-067442    XU504X7         QSFP+-40G-SR4
Xcvr 12       REV 01    740-067442    XU504W8         QSFP+-40G-SR4
Xcvr 16       REV 01    740-032986    QF4301JP        QSFP+-40G-SR4
Xcvr 17       REV 01    740-032986    QF4303AE        QSFP+-40G-SR4
Xcvr 18       REV 01    740-054050    INF4J0492400    QSFP+-4X10G-LR
Xcvr 19       REV 01    740-054050    INF4J0492142    QSFP+-4X10G-LR
Xcvr 24       REV 01    740-032986    QF4301KB        QSFP+-40G-SR4
Xcvr 25       REV 01    740-032986    QF4303YP        QSFP+-40G-SR4
Xcvr 30       REV 01    740-067442    XV300ZX         QSFP+-40G-SR4
Xcvr 31       REV 01    740-043308    UWH2KBW         QSFP+-40G-LR4
Xcvr 34       REV 01    740-054053    QG1501YU        QSFP+-4X10G-SR
FPD Board     REV 07    711-054687    ACPC7142        Front Panel Display

```

```

Jedec Code:    0x7fb0          EEPROM Version:    0x01
P/N:          711-054687      S/N:          ACPC7142
Assembly ID:   0x0bf2          Assembly Version: 01.07
Date:         07-22-2016      Assembly Flags:    0x00
Version:      REV 07
ID: QFX10000 FPD

```

```

Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 01 ff 0b f2 01 07 52 45 56 20 30 37 00 00
Address 0x10: 00 00 00 00 37 31 31 2d 30 35 34 36 38 37 00 00
Address 0x20: 53 2f 4e 20 41 43 50 43 37 31 34 32 00 16 07 07
Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x50: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff

```

```

Address 0x60: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x70: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Power Supply 0  REV 02  740-049388  1EDL62102N9  Power Supply AC
Jedec Code: 0x7fb0  EEPROM Version: 0x02
P/N: 740-049388  S/N: 1EDL62102N9
Assembly ID: 0x0483  Assembly Version: 01.02
Date: 05-25-2016  Assembly Flags: 0x00
Version: REV 02  CLEI Code: CMUPADNBAA
ID: QFX10000 AC  FRU Model Number: QFX10000-PWR-AC
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 04 83 01 02 52 45 56 20 30 32 00 00
Address 0x10: 00 00 00 00 37 34 30 2d 30 34 39 33 38 38 00 00
Address 0x20: 31 45 44 4c 36 32 31 30 32 4e 39 00 00 19 05 07
Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 43 4d 55 50 41 44 4e 42 41 41 51
Address 0x50: 46 58 31 30 30 30 30 2d 50 57 52 2d 41 43 00 00
Address 0x60: 00 00 00 00 00 00 01 30 31 ff ff ff ff ff ff ff
Address 0x70: ff ff ff dc ff ff ff ff ff ff ff ff ff ff ff ff
Power Supply 1  REV 02  740-049388  1EDL60300KX  Power Supply AC
Jedec Code: 0x7fb0  EEPROM Version: 0x02
P/N: 740-049388  S/N: 1EDL60300KX
Assembly ID: 0x0483  Assembly Version: 01.02
Date: 01-20-2016  Assembly Flags: 0x00
Version: REV 02  CLEI Code: CMUPADNBAA
ID: QFX10000 AC  FRU Model Number: QFX10000-PWR-AC
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 04 83 01 02 52 45 56 20 30 32 00 00
Address 0x10: 00 00 00 00 37 34 30 2d 30 34 39 33 38 38 00 00
Address 0x20: 31 45 44 4c 36 30 33 30 30 4b 58 00 00 14 01 07
Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 43 4d 55 50 41 44 4e 42 41 41 51
Address 0x50: 46 58 31 30 30 30 30 2d 50 57 52 2d 41 43 00 00
Address 0x60: 00 00 00 00 00 00 01 30 31 ff ff ff ff ff ff ff
Address 0x70: ff ff ff dc ff ff ff ff ff ff ff ff ff ff ff ff
Power Supply 2  REV 02  740-049388  1EDL60300DL  Power Supply AC
Jedec Code: 0x7fb0  EEPROM Version: 0x02
P/N: 740-049388  S/N: 1EDL60300DL
Assembly ID: 0x0483  Assembly Version: 01.02
Date: 01-20-2016  Assembly Flags: 0x00
Version: REV 02  CLEI Code: CMUPADNBAA
ID: QFX10000 AC  FRU Model Number: QFX10000-PWR-AC
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 04 83 01 02 52 45 56 20 30 32 00 00
Address 0x10: 00 00 00 00 37 34 30 2d 30 34 39 33 38 38 00 00
Address 0x20: 31 45 44 4c 36 30 33 30 30 44 4c 00 00 14 01 07
Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 43 4d 55 50 41 44 4e 42 41 41 51
Address 0x50: 46 58 31 30 30 30 30 2d 50 57 52 2d 41 43 00 00
Address 0x60: 00 00 00 00 00 00 01 30 31 ff ff ff ff ff ff ff
Address 0x70: ff ff ff dc ff ff ff ff ff ff ff ff ff ff ff ff
Power Supply 3  REV 02  740-049388  1EDL61701BT  Power Supply AC
Jedec Code: 0x7fb0  EEPROM Version: 0x02
P/N: 740-049388  S/N: 1EDL61701BT
Assembly ID: 0x0483  Assembly Version: 01.02
Date: 05-01-2016  Assembly Flags: 0x00

```

```

Version:      REV 02          CLEI Code:      CMUPADNBAA
ID: QFX10000 AC          FRU Model Number:  QFX10000-PWR-AC
Board Information Record:
  Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
  Address 0x00: 7f b0 02 ff 04 83 01 02 52 45 56 20 30 32 00 00
  Address 0x10: 00 00 00 00 37 34 30 2d 30 34 39 33 38 38 00 00
  Address 0x20: 31 45 44 4c 36 31 37 30 31 42 54 00 00 01 05 07
  Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff
  Address 0x40: ff ff ff ff 01 43 4d 55 50 41 44 4e 42 41 41 51
  Address 0x50: 46 58 31 30 30 30 30 2d 50 57 52 2d 41 43 00 00
  Address 0x60: 00 00 00 00 00 00 01 30 31 ff ff ff ff ff ff ff
  Address 0x70: ff ff ff dc ff ff ff ff ff ff ff ff ff ff ff ff
Power Supply 4  REV 02  740-049388  1EDL62102P7  Power Supply AC
Jedec Code:  0x7fb0          EEPROM Version:  0x02
P/N:         740-049388      S/N:         1EDL62102P7
Assembly ID: 0x0483          Assembly Version: 01.02
Date:        05-25-2016      Assembly Flags:  0x00
Version:     REV 02          CLEI Code:      CMUPADNBAA
ID: QFX10000 AC          FRU Model Number:  QFX10000-PWR-AC
Board Information Record:
  Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
  Address 0x00: 7f b0 02 ff 04 83 01 02 52 45 56 20 30 32 00 00
  Address 0x10: 00 00 00 00 37 34 30 2d 30 34 39 33 38 38 00 00
  Address 0x20: 31 45 44 4c 36 32 31 30 32 50 37 00 00 19 05 07
  Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff
  Address 0x40: ff ff ff ff 01 43 4d 55 50 41 44 4e 42 41 41 51
  Address 0x50: 46 58 31 30 30 30 30 2d 50 57 52 2d 41 43 00 00
  Address 0x60: 00 00 00 00 00 00 01 30 31 ff ff ff ff ff ff ff
  Address 0x70: ff ff ff dc ff ff ff ff ff ff ff ff ff ff ff ff
Power Supply 5  REV 02  740-049388  1EDL62102PP  Power Supply AC
Jedec Code:  0x7fb0          EEPROM Version:  0x02
P/N:         740-049388      S/N:         1EDL62102PP
Assembly ID: 0x0483          Assembly Version: 01.02
Date:        05-25-2016      Assembly Flags:  0x00
Version:     REV 02          CLEI Code:      CMUPADNBAA
ID: QFX10000 AC          FRU Model Number:  QFX10000-PWR-AC
Board Information Record:
  Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
  Address 0x00: 7f b0 02 ff 04 83 01 02 52 45 56 20 30 32 00 00
  Address 0x10: 00 00 00 00 37 34 30 2d 30 34 39 33 38 38 00 00
  Address 0x20: 31 45 44 4c 36 32 31 30 32 50 50 00 00 19 05 07
  Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff
  Address 0x40: ff ff ff ff 01 43 4d 55 50 41 44 4e 42 41 41 51
  Address 0x50: 46 58 31 30 30 30 30 2d 50 57 52 2d 41 43 00 00
  Address 0x60: 00 00 00 00 00 00 01 30 31 ff ff ff ff ff ff ff
  Address 0x70: ff ff ff dc ff ff ff ff ff ff ff ff ff ff ff ff
FTC 0          REV 14  750-050108  ACPE4038  Fan Controller 8
Jedec Code:  0x7fb0          EEPROM Version:  0x02
P/N:         750-050108      S/N:         ACPE4038
Assembly ID: 0x0bee          Assembly Version: 01.14
Date:        09-27-2016      Assembly Flags:  0x00
Version:     REV 14          CLEI Code:      CMUCAHZCAA
ID: QFX10000 FTC          FRU Model Number:  QFX10008-FAN-CTRL
Board Information Record:
  Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
  Address 0x00: 7f b0 02 ff 0b ee 01 0e 52 45 56 20 31 34 00 00
  Address 0x10: 00 00 00 00 37 35 30 2d 30 35 30 31 30 38 00 00

```

```

Address 0x20: 53 2f 4e 20 41 43 50 45 34 30 33 38 00 1b 09 07
Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 43 4d 55 43 41 48 5a 43 41 41 51
Address 0x50: 46 58 31 30 30 30 38 2d 46 41 4e 2d 43 54 52 4c
Address 0x60: 00 00 00 00 00 00 41 44 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff 98 ff ff ff ff ff ff ff ff ff ff ff ff
Fan Tray 1          REV 14    750-050108    ACPE4032          Fan Controller 8
Jedec Code: 0x7fb0          EEPROM Version: 0x02
P/N:        750-050108      S/N:          ACPE4032
Assembly ID: 0x0bee          Assembly Version: 01.14
Date:       09-27-2016      Assembly Flags: 0x00
Version:    REV 14          CLEI Code:    CMUCAHZCAA
ID: QFX10000 FTC            FRU Model Number: QFX10008-FAN-CTRL
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 0b ee 01 0e 52 45 56 20 31 34 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 35 30 31 30 38 00 00
Address 0x20: 53 2f 4e 20 41 43 50 45 34 30 33 32 00 1b 09 07
Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 43 4d 55 43 41 48 5a 43 41 41 51
Address 0x50: 46 58 31 30 30 30 38 2d 46 41 4e 2d 43 54 52 4c
Address 0x60: 00 00 00 00 00 00 41 44 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff 98 ff ff ff ff ff ff ff ff ff ff ff ff
Fan Tray 0          REV 09    760-054372    ACPD6799          Fan Tray 8
Jedec Code: 0x7fb0          EEPROM Version: 0x02
P/N:        760-054372      S/N:          ACPD6799
Assembly ID: 0x0bf0          Assembly Version: 01.09
Date:       09-28-2016      Assembly Flags: 0x00
Version:    REV 09          CLEI Code:    CMUCAHYCAA
ID: QFX10008 FHB            FRU Model Number: QFX10008-FAN
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 0b f0 01 09 52 45 56 20 30 39 00 00
Address 0x10: 00 00 00 00 37 36 30 2d 30 35 34 33 37 32 00 00
Address 0x20: 53 2f 4e 20 41 43 50 44 36 37 39 39 00 1c 09 07
Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 43 4d 55 43 41 48 59 43 41 41 51
Address 0x50: 46 58 31 30 30 30 38 2d 46 41 4e 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 41 00 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff f1 ff ff ff ff ff ff ff ff ff ff ff ff
Fan Tray 1          REV 09    760-054372    ACNZ3584          Fan Tray 8
Jedec Code: 0x7fb0          EEPROM Version: 0x02
P/N:        760-054372      S/N:          ACNZ3584
Assembly ID: 0x0bf0          Assembly Version: 01.09
Date:       08-30-2016      Assembly Flags: 0x00
Version:    REV 09          CLEI Code:    CMUCAHYCAA
ID: QFX10008 FHB            FRU Model Number: QFX10008-FAN
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 0b f0 01 09 52 45 56 20 30 39 00 00
Address 0x10: 00 00 00 00 37 36 30 2d 30 35 34 33 37 32 00 00
Address 0x20: 53 2f 4e 20 41 43 4e 5a 33 35 38 34 00 1e 08 07
Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 43 4d 55 43 41 48 59 43 41 41 51
Address 0x50: 46 58 31 30 30 30 38 2d 46 41 4e 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 41 00 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff f1 ff ff ff ff ff ff ff ff ff ff ff ff
SIB 0              REV 24    750-050058    ACPD4587          Switch Fabric 8

```

```

Jedec Code: 0x7fb0      EEPROM Version: 0x02
P/N: 750-050058        S/N: ACPD4587
Assembly ID: 0x0bec     Assembly Version: 01.24
Date: 06-19-2016       Assembly Flags: 0x00
Version: REV 24        CLEI Code: CMUCAHOCAA
ID: QFX10008 SIB      FRU Model Number: QFX10008-SF
Board Information Record:
  Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
  Address 0x00: 7f b0 02 ff 0b ec 01 18 52 45 56 20 32 34 00 00
  Address 0x10: 00 00 00 00 37 35 30 2d 30 35 30 30 35 38 00 00
  Address 0x20: 53 2f 4e 20 41 43 50 44 34 35 38 37 00 13 06 07
  Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
  Address 0x40: ff ff ff ff 01 43 4d 55 43 41 48 30 43 41 41 51
  Address 0x50: 46 58 31 30 30 30 38 2d 53 46 00 00 00 00 00 00
  Address 0x60: 00 00 00 00 00 00 41 45 00 ff ff ff ff ff ff ff
  Address 0x70: ff ff ff d1 00 00 00 00 00 00 00 00 00 00 00 00
SIB 1      REV 24      750-050058      ACNZ0635      Switch Fabric 8
Jedec Code: 0x7fb0      EEPROM Version: 0x02
P/N: 750-050058        S/N: ACNZ0635
Assembly ID: 0x0bec     Assembly Version: 01.24
Date: 06-06-2016       Assembly Flags: 0x00
Version: REV 24        CLEI Code: CMUCAHOCAA
ID: QFX10008 SIB      FRU Model Number: QFX10008-SF
Board Information Record:
  Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
  Address 0x00: 7f b0 02 ff 0b ec 01 18 52 45 56 20 32 34 00 00
  Address 0x10: 00 00 00 00 37 35 30 2d 30 35 30 30 35 38 00 00
  Address 0x20: 53 2f 4e 20 41 43 4e 5a 30 36 33 35 00 06 06 07
  Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
  Address 0x40: ff ff ff ff 01 43 4d 55 43 41 48 30 43 41 41 51
  Address 0x50: 46 58 31 30 30 30 38 2d 53 46 00 00 00 00 00 00
  Address 0x60: 00 00 00 00 00 00 41 45 00 ff ff ff ff ff ff ff
  Address 0x70: ff ff ff d1 00 00 00 00 00 00 00 00 00 00 00 00
SIB 2      REV 24      750-050058      ACPD4908      Switch Fabric 8
Jedec Code: 0x7fb0      EEPROM Version: 0x02
P/N: 750-050058        S/N: ACPD4908
Assembly ID: 0x0bec     Assembly Version: 01.24
Date: 07-12-2016       Assembly Flags: 0x00
Version: REV 24        CLEI Code: CMUCAHOCAA
ID: QFX10008 SIB      FRU Model Number: QFX10008-SF
Board Information Record:
  Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
  Address 0x00: 7f b0 02 ff 0b ec 01 18 52 45 56 20 32 34 00 00
  Address 0x10: 00 00 00 00 37 35 30 2d 30 35 30 30 35 38 00 00
  Address 0x20: 53 2f 4e 20 41 43 50 44 34 39 30 38 00 0c 07 07
  Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
  Address 0x40: ff ff ff ff 01 43 4d 55 43 41 48 30 43 41 41 51
  Address 0x50: 46 58 31 30 30 30 38 2d 53 46 00 00 00 00 00 00
  Address 0x60: 00 00 00 00 00 00 41 45 00 ff ff ff ff ff ff ff
  Address 0x70: ff ff ff d1 00 00 00 00 00 00 00 00 00 00 00 00
SIB 3      REV 24      750-050058      ACNZ0617      Switch Fabric 8
Jedec Code: 0x7fb0      EEPROM Version: 0x02
P/N: 750-050058        S/N: ACNZ0617
Assembly ID: 0x0bec     Assembly Version: 01.24
Date: 06-07-2016       Assembly Flags: 0x00
Version: REV 24        CLEI Code: CMUCAHOCAA
ID: QFX10008 SIB      FRU Model Number: QFX10008-SF
Board Information Record:

```

```

Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 0b ec 01 18 52 45 56 20 32 34 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 35 30 30 35 38 00 00
Address 0x20: 53 2f 4e 20 41 43 4e 5a 30 36 31 37 00 07 06 07
Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 43 4d 55 43 41 48 30 43 41 41 51
Address 0x50: 46 58 31 30 30 30 38 2d 53 46 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 41 45 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff d1 00 00 00 00 00 00 00 00 00 00 00 00
SIB 4          REV 24    750-050058    ACNZ0527          Switch Fabric 8
Jedec Code:    0x7fb0          EEPROM Version:    0x02
P/N:          750-050058          S/N:          ACNZ0527
Assembly ID:   0x0bec          Assembly Version: 01.24
Date:         06-06-2016        Assembly Flags:  0x00
Version:      REV 24          CLEI Code:      CMUCAHOCAA
ID: QFX10008 SIB          FRU Model Number: QFX10008-SF
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 0b ec 01 18 52 45 56 20 32 34 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 35 30 30 35 38 00 00
Address 0x20: 53 2f 4e 20 41 43 4e 5a 30 35 32 37 00 06 06 07
Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 43 4d 55 43 41 48 30 43 41 41 51
Address 0x50: 46 58 31 30 30 30 38 2d 53 46 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 41 45 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff d1 00 00 00 00 00 00 00 00 00 00 00 00
SIB 5          REV 23    750-050058    ACNX6980          Switch Fabric 8
Jedec Code:    0x7fb0          EEPROM Version:    0x02
P/N:          750-050058          S/N:          ACNX6980
Assembly ID:   0x0bec          Assembly Version: 01.23
Date:         05-16-2016        Assembly Flags:  0x00
Version:      REV 23          CLEI Code:      CMUCAHOCAA
ID: QFX10008 SIB          FRU Model Number: QFX10008-SF
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 0b ec 01 17 52 45 56 20 32 33 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 35 30 30 35 38 00 00
Address 0x20: 53 2f 4e 20 41 43 4e 58 36 39 38 30 00 10 05 07
Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 43 4d 55 43 41 48 30 43 41 41 51
Address 0x50: 46 58 31 30 30 30 38 2d 53 46 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 41 42 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff ce 00 00 00 00 00 00 00 00 00 00 00 00

```

show chassis hardware extensive (PTX10016 Router)

```
user@host> show chassis hardware extensive
```

Hardware inventory:

| Item | Version | Part number | Serial number | Description |
|---------------------------|------------|-------------|-------------------|---------------------|
| Chassis | | | DH995 | JNP10016 [PTX10016] |
| Jedec Code: | 0x7fb0 | | EEPROM Version: | 0x02 |
| | | | S/N: | DH995 |
| Assembly ID: | 0x0566 | | Assembly Version: | 01.22 |
| Date: | 02-16-2017 | | Assembly Flags: | 0x00 |
| | | | CLEI Code: | CMMUN00ARA |
| ID: | JNP10016 | | FRU Model Number: | QFX10016-CHAS |
| Board Information Record: | | | | |

```

Address 0x00: ad 01 10 00 44 aa 50 ab 1b b6 ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 05 66 01 16 00 45 56 20 32 32 00 00
Address 0x10: 00 00 00 00 00 35 30 2d 30 35 36 35 35 35 00 00
Address 0x20: 44 48 39 39 35 00 00 00 00 00 00 00 10 02 07
Address 0x30: e1 ff ff ff ad 01 10 00 44 aa 50 ab 1b b6 ff ff
Address 0x40: ff ff ff ff 01 43 4d 4d 55 4e 30 30 41 52 41 51
Address 0x50: 46 58 31 30 30 31 36 2d 43 48 41 53 00 00 00 00
Address 0x60: 00 00 00 00 00 00 32 41 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff 51 44 48 39 39 35 00 00 00 00 00 00 00
Midplane REV 22 750-056555 ACPM7810 Midplane 16
Jedec Code: 0x7fb0 EEPROM Version: 0x02
P/N: 750-056555 S/N: ACPM7810
Assembly ID: 0x0be4 Assembly Version: 01.22
Date: 02-16-2017 Assembly Flags: 0x00
Version: REV 22 CLEI Code: CMMUN00ARA
ID: QFX10016 Midplane FRU Model Number: QFX10016-CHAS
Board Information Record:
Address 0x00: ad 01 10 00 44 aa 50 ab 1b b6 ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 0b e4 01 16 52 45 56 20 32 32 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 35 36 35 35 35 00 00
Address 0x20: 53 2f 4e 20 41 43 50 4d 37 38 31 30 00 10 02 07
Address 0x30: e1 ff ff ff ad 01 10 00 44 aa 50 ab 1b b6 ff ff
Address 0x40: ff ff ff ff 01 43 4d 4d 55 4e 30 30 41 52 41 51
Address 0x50: 46 58 31 30 30 31 36 2d 43 48 41 53 00 00 00 00
Address 0x60: 00 00 00 00 00 00 32 41 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff 51 44 48 39 39 35 00 00 00 00 00 00 00
Routing Engine 0 BUILTIN BUILTIN RE-PTX-2X00x4
vtbd0 15360 MB Virtio Block Disk
vtbd1 15360 MB Virtio Block Disk
ada0 128 MB QEMU QM00002 Virtio Block Disk
usb0 (addr 0.1) EHCI root HUB 0 Intel uhub0
usb1 (addr 0.2) product 0x0020 32 vendor 0x8087 uhub1
Routing Engine 1 BUILTIN BUILTIN RE-PTX-2X00x4
vtbd0 15360 MB Virtio Block Disk
vtbd1 15360 MB Virtio Block Disk
ada0 128 MB QEMU QM00002 Virtio Block Disk
usb0 (addr 0.1) EHCI root HUB 0 Intel uhub0
usb1 (addr 0.2) product 0x0020 32 vendor 0x8087 uhub1
CB 0 REV 03 750-068820 ACPL7238 Control Board
Jedec Code: 0x7fb0 EEPROM Version: 0x02
P/N: 750-068820 S/N: ACPL7238
Assembly ID: 0x0b9d Assembly Version: 01.03
Date: 03-15-2017 Assembly Flags: 0x00
Version: REV 03 CLEI Code: CMUCAH3CTB
ID: Control Board FRU Model Number: QFX10000-RE
Board Information Record:
Address 0x00: ad 01 00 10 e8 b6 c2 46 aa 29 ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 0b 9d 01 03 52 45 56 20 30 33 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 36 38 38 32 30 00 00
Address 0x20: 53 2f 4e 20 41 43 50 4c 37 32 33 38 00 0f 03 07
Address 0x30: e1 ff ff ff ad 01 00 10 e8 b6 c2 46 aa 29 ff ff
Address 0x40: ff ff ff ff 01 43 4d 55 43 41 48 33 43 54 42 51
Address 0x50: 46 58 31 30 30 30 30 2d 52 45 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 42 41 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff db ff ff ff ff ff ff ff ff ff ff ff ff
CB 1 REV 03 750-068820 ACPL7298 Control Board
Jedec Code: 0x7fb0 EEPROM Version: 0x02
P/N: 750-068820 S/N: ACPL7298

```



```

Assembly ID: 0x0b9d      Assembly Version: 01.03
Date:          03-15-2017  Assembly Flags: 0x00
Version:       REV 03     CLEI Code:      CMUCAH3CTB
ID: Control Board      FRU Model Number: QFX10000-RE

```

Board Information Record:

```
Address 0x00: ad 01 00 10 e8 b6 c2 46 99 b9 ff ff ff ff ff ff
```

I2C Hex Data:

```

Address 0x00: 7f b0 02 ff 0b 9d 01 03 52 45 56 20 30 33 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 36 38 38 32 30 00 00
Address 0x20: 53 2f 4e 20 41 43 50 4c 37 32 39 38 00 0f 03 07
Address 0x30: e1 ff ff ff ad 01 00 10 e8 b6 c2 46 99 b9 ff ff
Address 0x40: ff ff ff ff 01 43 4d 55 43 41 48 33 43 54 42 51
Address 0x50: 46 58 31 30 30 30 30 2d 52 45 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 42 41 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff db ff ff ff ff ff ff ff ff ff ff ff ff

```

```

FPC 1          REV 36    750-077140    ACNP4590          LC1102 - 12C / 36Q /
144X

```

```

Jedec Code: 0x7fb0      EEPROM Version: 0x02
P/N:          750-077140  S/N:          ACNP4590
Assembly ID: 0x0be7      Assembly Version: 01.36
Date:          10-17-2016  Assembly Flags: 0x00
Version:       REV 36     CLEI Code:      CMUIAM9BAA
ID: ULC-36Q-12Q28      FRU Model Number: QFX10000-36Q

```

Board Information Record:

```
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
```

I2C Hex Data:

```

Address 0x00: 7f b0 02 ff 0b e7 01 24 52 45 56 20 33 36 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 37 37 31 34 30 00 00
Address 0x20: 53 2f 4e 20 41 43 4e 50 34 35 39 30 00 11 0a 07
Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 43 4d 55 49 41 4d 39 42 41 41 51
Address 0x50: 46 58 31 30 30 30 30 2d 33 36 51 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 42 45 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff fe ff ff ff ff ff ff ff ff ff ff ff ff

```

```

CPU          BUILTIN      BUILTIN      FPC CPU

```

```

Jedec Code: 0x7fb0      EEPROM Version: 0x02
P/N:          BUILTIN    S/N:          BUILTIN
Assembly ID: 0xf020      Assembly Version: 02.17
Date:          04-19-2012  Assembly Flags: 0x00

```

Board Information Record:

```
Address 0x00: ad 01 01 04 ac 4b c8 1d f7 b6 ff ff ff ff ff ff
```

I2C Hex Data:

```

Address 0x00: 7f b0 02 ff f0 20 02 11 00 40 36 bd 09 40 25 32
Address 0x10: 09 e8 ba ff 42 55 49 4c 54 49 4e 00 00 40 36 bd
Address 0x20: 42 55 49 4c 54 49 4e 00 42 55 49 4c 00 13 04 07
Address 0x30: dc ff ff ff ad 01 01 04 ac 4b c8 1d f7 b6 ff ff
Address 0x40: ff ff ff ff 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 45 00 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff f3 50 36 36 36 36 00 00 00 00 00 00 00

```

```

PIC 0          BUILTIN      BUILTIN      12x100GE/36x40GE/144x10GE

```

```

Jedec Code: 0x7fb0      EEPROM Version: 0x02
P/N:          BUILTIN    S/N:          BUILTIN
Assembly ID: 0xf050      Assembly Version: 02.17
Date:          04-19-2012  Assembly Flags: 0x00

```

Board Information Record:

```
Address 0x00: ad 01 01 04 ac 4b c8 1d f7 b6 ff ff ff ff ff ff
```

I2C Hex Data:

```

Address 0x00: 7f b0 02 ff f0 50 02 11 00 00 00 00 07 0a 20 45
Address 0x10: 6c 61 70 73 42 55 49 4c 54 49 4e 00 25 73 3a 20

```

```

Address 0x20: 42 55 49 4c 54 49 4e 00 25 73 3a 20 00 13 04 07
Address 0x30: dc ff ff ff ad 01 01 04 ac 4b c8 1d f7 b6 ff ff
Address 0x40: ff ff ff ff 01 00 00 00 00 00 00 00 00 00 00 00
Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 45 00 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff f3 55 55 55 55 55 55 55 55 55 55 55 55
Xcvr 0      REV 01    740-054053    QF3600AV      QSFP+-4X10G-SR
Xcvr 35     REV 01    740-061405    1ACQ110507K   QSFP-100GBASE-SR4
FPC 3       REV 07    750-071975    CAHA2224      LC1102 - 12C / 36Q /
144X
Jedec Code: 0x7fb0      EEPROM Version: 0x02
P/N:         750-071975 S/N:         CAHA2224
Assembly ID: 0x0be7     Assembly Version: 01.07
Date:        01-17-2017 Assembly Flags: 0x00
Version:     REV 07     CLEI Code:    PROTOXCLEI
ID: ULC-36Q-12Q28      FRU Model Number: PROTO-ASSEMBLY
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 0b e7 01 07 52 45 56 20 30 37 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 37 31 39 37 35 00 00
Address 0x20: 53 2f 4e 20 43 41 48 41 32 32 32 34 00 11 01 07
Address 0x30: e1 ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 50 52 4f 54 4f 58 43 4c 45 49 50
Address 0x50: 52 4f 54 4f 2d 41 53 53 45 4d 42 4c 59 00 00 00
Address 0x60: 00 00 00 00 00 00 41 30 30 ff ff ff ff ff ff ff
Address 0x70: ff ff ff c2 ff ff ff ff ff ff ff ff ff ff ff ff
CPU          BUILTIN      BUILTIN      FPC CPU
Jedec Code: 0x7fb0      EEPROM Version: 0x02
P/N:         BUILTIN    S/N:         BUILTIN
Assembly ID: 0xf020     Assembly Version: 02.17
Date:        04-19-2012 Assembly Flags: 0x00
Board Information Record:
Address 0x00: ad 01 01 04 ac 4b c8 1d f7 b6 ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff f0 20 02 11 00 60 b6 be 09 c0 cf 38
Address 0x10: 09 e8 ba ff 42 55 49 4c 54 49 4e 00 00 60 b6 be
Address 0x20: 42 55 49 4c 54 49 4e 00 42 55 49 4c 00 13 04 07
Address 0x30: dc ff ff ff ad 01 01 04 ac 4b c8 1d f7 b6 ff ff
Address 0x40: ff ff ff ff 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x50: 00 00 00 00 00 00 45 00 00 ff ff ff ff ff ff ff
Address 0x60: 00 00 00 00 00 00 45 00 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff f3 50 36 36 36 36 00 00 00 00 00 00 00
PIC 0          BUILTIN      BUILTIN      12x100GE/36x40GE/144x10GE

Jedec Code: 0x7fb0      EEPROM Version: 0x02
P/N:         BUILTIN    S/N:         BUILTIN
Assembly ID: 0xf050     Assembly Version: 02.17
Date:        04-19-2012 Assembly Flags: 0x00
Board Information Record:
Address 0x00: ad 01 01 04 ac 4b c8 1d f7 b6 ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff f0 50 02 11 00 00 00 07 0a 20 45
Address 0x10: 6c 61 70 73 42 55 49 4c 54 49 4e 00 25 73 3a 20
Address 0x20: 42 55 49 4c 54 49 4e 00 25 73 3a 20 00 13 04 07
Address 0x30: dc ff ff ff ad 01 01 04 ac 4b c8 1d f7 b6 ff ff
Address 0x40: ff ff ff ff 01 00 00 00 00 00 00 00 00 00 00 00
Address 0x50: 00 00 00 00 00 00 45 00 00 ff ff ff ff ff ff ff
Address 0x60: 00 00 00 00 00 00 45 00 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff f3 55 55 55 55 55 55 55 55 55 55 55 55
Xcvr 0      REV 01    740-054053    QG1505YM      QSFP+-4X10G-SR

```

```

Xcvr 11          NON-JNPR      GDA2017459      QSFP-100GBASE-LR4
Xcvr 35          NON-JNPR      GDF2008750      QSFP-100GBASE-LR4
FPC 5            REV 13        750-068822      ACPD6501        LC1102 - 12C / 36Q /
144X
Jedec Code:      0x7fb0          EEPROM Version:  0x02
P/N:             750-068822      S/N:            ACPD6501
Assembly ID:     0x0be7          Assembly Version: 01.13
Date:            06-29-2017      Assembly Flags:  0x00
Version:         REV 13          CLEI Code:       CMUIAM9BAC
ID: ULC-36Q-12Q28              FRU Model Number: QFX10000-36Q
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 0b e7 01 0d 52 45 56 20 31 33 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 36 38 38 32 32 00 00
Address 0x20: 53 2f 4e 20 41 43 50 44 36 35 30 31 00 1d 06 07
Address 0x30: e1 ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 43 4d 55 49 41 4d 39 42 41 43 51
Address 0x50: 46 58 31 30 30 30 30 2d 33 36 51 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 43 41 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff fd ff ff ff ff ff ff ff ff ff ff ff ff
CPU          BUILTIN          BUILTIN          FPC CPU
Jedec Code:      0x7fb0          EEPROM Version:  0x02
P/N:             BUILTIN          S/N:            BUILTIN
Assembly ID:     0xf020          Assembly Version: 02.17
Date:            04-19-2012      Assembly Flags:  0x00
Board Information Record:
Address 0x00: ad 01 01 04 ac 4b c8 1d f7 b6 ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff f0 20 02 11 00 c0 c6 bc 09 c0 ca 40
Address 0x10: 09 e8 ba ff 42 55 49 4c 54 49 4e 00 00 c0 c6 bc
Address 0x20: 42 55 49 4c 54 49 4e 00 42 55 49 4c 00 13 04 07
Address 0x30: dc ff ff ff ad 01 01 04 ac 4b c8 1d f7 b6 ff ff
Address 0x40: ff ff ff ff 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 45 00 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff f3 50 36 36 36 36 00 00 00 00 00 00 00
PIC 0          BUILTIN          BUILTIN          12x100GE/36x40GE/144x10GE

Jedec Code:      0x7fb0          EEPROM Version:  0x02
P/N:             BUILTIN          S/N:            BUILTIN
Assembly ID:     0xf050          Assembly Version: 02.17
Date:            04-19-2012      Assembly Flags:  0x00
Board Information Record:
Address 0x00: ad 01 01 04 ac 4b c8 1d f7 b6 ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff f0 50 02 11 00 00 00 00 07 0a 20 45
Address 0x10: 6c 61 70 73 42 55 49 4c 54 49 4e 00 25 73 3a 20
Address 0x20: 42 55 49 4c 54 49 4e 00 25 73 3a 20 00 13 04 07
Address 0x30: dc ff ff ff ad 01 01 04 ac 4b c8 1d f7 b6 ff ff
Address 0x40: ff ff ff ff 01 00 00 00 00 00 00 00 00 00 00 00
Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 45 00 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff f3 55 55 55 55 55 55 55 55 55 55 55 55
Xcvr 1          REV 01          740-058734      1ECQ11381LA      QSFP-100GBASE-SR4
Xcvr 2          REV 01          740-043308      UWH141S          QSFP+-40G-LR4
Xcvr 3          REV 01          740-043308      UWE2CG9          QSFP+-40G-LR4
FPC 6            REV 37        750-077140      ACNS2793         LC1102 - 12C / 36Q /
144X
Jedec Code:      0x7fb0          EEPROM Version:  0x02
P/N:             750-077140      S/N:            ACNS2793

```

```

Assembly ID: 0x0be7      Assembly Version: 01.37
Date:          03-25-2017    Assembly Flags: 0x00
Version:       REV 37       CLEI Code:      CMUIAM9BAA
ID: ULC-36Q-12Q28        FRU Model Number: QFX10000-36Q
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 0b e7 01 25 52 45 56 20 33 37 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 37 37 31 34 30 00 00
Address 0x20: 53 2f 4e 20 41 43 4e 53 32 37 39 33 00 19 03 07
Address 0x30: e1 ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 43 4d 55 49 41 4d 39 42 41 41 51
Address 0x50: 46 58 31 30 30 30 30 2d 33 36 51 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 42 45 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff fe ff ff ff ff ff ff ff ff ff ff ff ff
CPU          BUILTIN      BUILTIN      FPC CPU
Jedec Code: 0x7fb0      EEPROM Version: 0x02
P/N:         BUILTIN    S/N:         BUILTIN
Assembly ID: 0xf020      Assembly Version: 02.17
Date:        04-19-2012  Assembly Flags: 0x00
Board Information Record:
Address 0x00: ad 01 01 04 ac 4b c8 1d f7 b6 ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff f0 20 02 11 00 a0 e6 d4 09 00 bd 43
Address 0x10: 09 e8 ba ff 42 55 49 4c 54 49 4e 00 00 a0 e6 d4
Address 0x20: 42 55 49 4c 54 49 4e 00 42 55 49 4c 00 13 04 07
Address 0x30: dc ff ff ff ad 01 01 04 ac 4b c8 1d f7 b6 ff ff
Address 0x40: ff ff ff ff 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 45 00 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff f3 50 36 36 36 36 00 00 00 00 00 00 00
PIC 0          BUILTIN      BUILTIN      12x100GE/36x40GE/144x10GE

Jedec Code: 0x7fb0      EEPROM Version: 0x02
P/N:         BUILTIN    S/N:         BUILTIN
Assembly ID: 0xf050      Assembly Version: 02.17
Date:        04-19-2012  Assembly Flags: 0x00
Board Information Record:
Address 0x00: ad 01 01 04 ac 4b c8 1d f7 b6 ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff f0 50 02 11 00 00 00 00 07 0a 20 45
Address 0x10: 6c 61 70 73 42 55 49 4c 54 49 4e 00 25 73 3a 20
Address 0x20: 42 55 49 4c 54 49 4e 00 25 73 3a 20 00 13 04 07
Address 0x30: dc ff ff ff ad 01 01 04 ac 4b c8 1d f7 b6 ff ff
Address 0x40: ff ff ff ff 01 00 00 00 00 00 00 00 00 00 00 00
Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 45 00 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff f3 55 55 55 55 55 55 55 55 55 55 55 55
Xcvr 0      REV 01      740-032986  QH0400VH      QSFP+-40G-SR4
Xcvr 1      REV 01      740-032986  QH0400VM      QSFP+-40G-SR4
Xcvr 35     REV 01      740-058734  1ECQ11390ZB   QSFP-100GBASE-SR4
FPC 8       REV 36      750-077140  ACNP4625      LC1102 - 12C / 36Q /
144X
Jedec Code: 0x7fb0      EEPROM Version: 0x02
P/N:         750-077140  S/N:         ACNP4625
Assembly ID: 0x0be7      Assembly Version: 01.36
Date:        10-17-2016  Assembly Flags: 0x00
Version:     REV 36      CLEI Code:    CMUIAM9BAA
ID: ULC-36Q-12Q28        FRU Model Number: QFX10000-36Q
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff

```

I2C Hex Data:

Address 0x00: 7f b0 02 ff 0b e7 01 24 52 45 56 20 33 36 00 00
 Address 0x10: 00 00 00 00 37 35 30 2d 30 37 37 31 34 30 00 00
 Address 0x20: 53 2f 4e 20 41 43 4e 50 34 36 32 35 00 11 0a 07
 Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff
 Address 0x40: ff ff ff ff 01 43 4d 55 49 41 4d 39 42 41 41 51
 Address 0x50: 46 58 31 30 30 30 30 2d 33 36 51 00 00 00 00 00
 Address 0x60: 00 00 00 00 00 00 42 45 00 ff ff ff ff ff ff ff
 Address 0x70: ff ff ff fe ff ff ff ff ff ff ff ff ff ff ff
 CPU BUILTIN BUILTIN FPC CPU

Jedec Code: 0x7fb0 EEPROM Version: 0x02
 P/N: BUILTIN S/N: BUILTIN
 Assembly ID: 0xf020 Assembly Version: 02.17
 Date: 04-19-2012 Assembly Flags: 0x00

Board Information Record:

Address 0x00: ad 01 01 04 ac 4b c8 1d f7 b6 ff ff ff ff ff ff

I2C Hex Data:

Address 0x00: 7f b0 02 ff f0 20 02 11 00 c0 e6 d4 09 40 59 4a
 Address 0x10: 09 e8 ba ff 42 55 49 4c 54 49 4e 00 00 c0 e6 d4
 Address 0x20: 42 55 49 4c 54 49 4e 00 42 55 49 4c 00 13 04 07
 Address 0x30: dc ff ff ff ad 01 01 04 ac 4b c8 1d f7 b6 ff ff
 Address 0x40: ff ff ff ff 00 00 00 00 00 00 00 00 00 00 00 00
 Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
 Address 0x60: 00 00 00 00 00 00 45 00 00 ff ff ff ff ff ff ff
 Address 0x70: ff ff ff f3 50 36 36 36 36 00 00 00 00 00 00 00
 PIC 0 BUILTIN BUILTIN 12x100GE/36x40GE/144x10GE

Jedec Code: 0x7fb0 EEPROM Version: 0x02
 P/N: BUILTIN S/N: BUILTIN
 Assembly ID: 0xf050 Assembly Version: 02.17
 Date: 04-19-2012 Assembly Flags: 0x00

Board Information Record:

Address 0x00: ad 01 01 04 ac 4b c8 1d f7 b6 ff ff ff ff ff ff

I2C Hex Data:

Address 0x00: 7f b0 02 ff f0 50 02 11 00 00 00 00 07 0a 20 45
 Address 0x10: 6c 61 70 73 42 55 49 4c 54 49 4e 00 25 73 3a 20
 Address 0x20: 42 55 49 4c 54 49 4e 00 25 73 3a 20 00 13 04 07
 Address 0x30: dc ff ff ff ad 01 01 04 ac 4b c8 1d f7 b6 ff ff
 Address 0x40: ff ff ff ff 01 00 00 00 00 00 00 00 00 00 00 00
 Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
 Address 0x60: 00 00 00 00 00 00 45 00 00 ff ff ff ff ff ff ff
 Address 0x70: ff ff ff f3 55 55 55 55 55 55 55 55 55 55 55 55

Xcvr 1 REV 01 740-058732 1AMQA14206D QSFP-100GBASE-LR4
 Xcvr 10 REV 01 740-032986 QF4301KB QSFP+-40G-SR4
 Xcvr 24 REV 01 740-054050 INFJA0492244 QSFP+-4X10G-LR
 FPC 9 REV 35 750-071976 ACPD3055 LC1101 - 30C / 30Q / 96X

Jedec Code: 0x7fb0 EEPROM Version: 0x02
 P/N: 750-071976 S/N: ACPD3055
 Assembly ID: 0x0be8 Assembly Version: 01.35
 Date: 05-26-2016 Assembly Flags: 0x00
 Version: REV 35 CLEI Code: CMUIANABAA
 ID: ULC-30Q28 FRU Model Number: JNP10K-LC1101

Board Information Record:

Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff

I2C Hex Data:

Address 0x00: 7f b0 02 ff 0b e8 01 23 52 45 56 20 33 35 00 00
 Address 0x10: 00 00 00 00 37 35 30 2d 30 37 31 39 37 36 00 00
 Address 0x20: 53 2f 4e 20 41 43 50 44 33 30 35 35 00 1a 05 07
 Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff
 Address 0x40: ff ff ff ff 01 43 4d 55 49 41 4e 41 42 41 41 4a

```

Address 0x50: 4e 50 31 30 4b 2d 4c 43 31 31 30 31 00 00 00 00
Address 0x60: 00 00 00 00 00 00 41 42 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff ef ff ff ff ff ff ff ff ff ff ff ff ff
CPU          BUILTIN          BUILTIN          FPC CPU
Jedec Code:  0x7fb0          EEPROM Version: 0x02
P/N:         BUILTIN        S/N:         BUILTIN
Assembly ID: 0xf020        Assembly Version: 02.17
Date:        04-19-2012    Assembly Flags: 0x00
Board Information Record:
Address 0x00: ad 01 01 04 ac 4b c8 1d f7 b6 ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff f0 20 02 11 00 20 e7 d4 09 00 a6 4d
Address 0x10: 09 e8 ba ff 42 55 49 4c 54 49 4e 00 00 20 e7 d4
Address 0x20: 42 55 49 4c 54 49 4e 00 42 55 49 4c 00 13 04 07
Address 0x30: dc ff ff ff ad 01 01 04 ac 4b c8 1d f7 b6 ff ff
Address 0x40: ff ff ff ff 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 45 00 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff f3 50 36 36 36 36 00 00 00 00 00 00 00
PIC 0          BUILTIN          BUILTIN          30x100GE/30x40GE/96x10GE

Jedec Code:  0x7fb0          EEPROM Version: 0x02
P/N:         BUILTIN        S/N:         BUILTIN
Assembly ID: 0xf050        Assembly Version: 02.17
Date:        04-19-2012    Assembly Flags: 0x00
Board Information Record:
Address 0x00: ad 01 01 04 ac 4b c8 1d f7 b6 ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff f0 50 02 11 00 00 00 07 0a 20 45
Address 0x10: 6c 61 70 73 42 55 49 4c 54 49 4e 00 25 73 3a 20
Address 0x20: 42 55 49 4c 54 49 4e 00 25 73 3a 20 00 13 04 07
Address 0x30: dc ff ff ff ad 01 01 04 ac 4b c8 1d f7 b6 ff ff
Address 0x40: ff ff ff ff 01 00 00 00 00 00 00 00 00 00 00 00
Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 45 00 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff f3 55 55 55 55 55 55 55 55 55 55 55 55
Xcvr 0          NON-JNPR      INGBT7970007      QSFP-100GBASE-LR4
Xcvr 1          NON-JNPR      UWQ24D9          QSFP-100GBASE-LR4
Xcvr 2          NON-JNPR      INGBT7970011     QSFP-100GBASE-LR4
Xcvr 3          NON-JNPR      UX60AF1          QSFP-100G-CWDM4
Xcvr 4          NON-JNPR      UX408JJ          QSFP-100GBASE-LR4
Xcvr 11         REV 01       740-058734       1ECQ113835F      QSFP-100GBASE-SR4
Xcvr 18         NON-JNPR      Q7496            QSFP-100G-CWDM4
Xcvr 29         REV 01       740-058734       1ECQ11380LZ      QSFP-100GBASE-SR4
Power Supply 0  REV 02       740-049388       1EDL625039E      Power Supply AC
Jedec Code:  0x7fb0          EEPROM Version: 0x02
P/N:         740-049388      S/N:         1EDL625039E
Assembly ID: 0x0483        Assembly Version: 01.02
Date:        06-19-2016    Assembly Flags: 0x00
Version:     REV 02         CLEI Code:     CMUPADNBAA
ID: QFX10000 AC           FRU Model Number: QFX10000-PWR-AC
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 04 83 01 02 52 45 56 20 30 32 00 00
Address 0x10: 00 00 00 00 37 34 30 2d 30 34 39 33 38 38 00 00
Address 0x20: 31 45 44 4c 36 32 35 30 33 39 45 00 00 13 06 07
Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 43 4d 55 50 41 44 4e 42 41 41 51
Address 0x50: 46 58 31 30 30 30 2d 50 57 52 2d 41 43 00 00
Address 0x60: 00 00 00 00 00 00 01 30 31 ff ff ff ff ff ff ff

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Address 0x70: ff ff ff dc ff ff ff ff ff ff ff ff ff ff ff ff
Power Supply 1  REV 02  740-049388  1EDL62503AD  Power Supply AC
Jedec Code: 0x7fb0      EEPROM Version: 0x02
P/N: 740-049388      S/N: 1EDL62503AD
Assembly ID: 0x0483    Assembly Version: 01.02
Date: 06-19-2016      Assembly Flags: 0x00
Version: REV 02      CLEI Code: CMUPADNBAA
ID: QFX10000 AC      FRU Model Number: QFX10000-PWR-AC
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 04 83 01 02 52 45 56 20 30 32 00 00
Address 0x10: 00 00 00 00 37 34 30 2d 30 34 39 33 38 38 00 00
Address 0x20: 31 45 44 4c 36 32 35 30 33 41 44 00 00 13 06 07
Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 43 4d 55 50 41 44 4e 42 41 41 51
Address 0x50: 46 58 31 30 30 30 30 2d 50 57 52 2d 41 43 00 00
Address 0x60: 00 00 00 00 00 00 01 30 31 ff ff ff ff ff ff ff ff
Address 0x70: ff ff ff dc ff ff ff ff ff ff ff ff ff ff ff ff
Power Supply 2  REV 02  740-049388  1EDL625039P  Power Supply AC
Jedec Code: 0x7fb0      EEPROM Version: 0x02
P/N: 740-049388      S/N: 1EDL625039P
Assembly ID: 0x0483    Assembly Version: 01.02
Date: 06-19-2016      Assembly Flags: 0x00
Version: REV 02      CLEI Code: CMUPADNBAA
ID: QFX10000 AC      FRU Model Number: QFX10000-PWR-AC
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 04 83 01 02 52 45 56 20 30 32 00 00
Address 0x10: 00 00 00 00 37 34 30 2d 30 34 39 33 38 38 00 00
Address 0x20: 31 45 44 4c 36 32 35 30 33 39 50 00 00 13 06 07
Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 43 4d 55 50 41 44 4e 42 41 41 51
Address 0x50: 46 58 31 30 30 30 30 2d 50 57 52 2d 41 43 00 00
Address 0x60: 00 00 00 00 00 00 01 30 31 ff ff ff ff ff ff ff ff
Address 0x70: ff ff ff dc ff ff ff ff ff ff ff ff ff ff ff ff
Power Supply 3  REV 02  740-049388  1EDL702004E  Power Supply AC
Jedec Code: 0x7fb0      EEPROM Version: 0x02
P/N: 740-049388      S/N: 1EDL702004E
Assembly ID: 0x0483    Assembly Version: 01.02
Date: 01-18-2017      Assembly Flags: 0x00
Version: REV 02      CLEI Code: CMUPADNBAA
ID: QFX10000 AC      FRU Model Number: QFX10000-PWR-AC
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 04 83 01 02 52 45 56 20 30 32 00 00
Address 0x10: 00 00 00 00 37 34 30 2d 30 34 39 33 38 38 00 00
Address 0x20: 31 45 44 4c 37 30 32 30 30 34 45 00 00 12 01 07
Address 0x30: e1 ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 43 4d 55 50 41 44 4e 42 41 41 51
Address 0x50: 46 58 31 30 30 30 30 2d 50 57 52 2d 41 43 00 00
Address 0x60: 00 00 00 00 00 00 01 30 31 ff ff ff ff ff ff ff ff
Address 0x70: ff ff ff dc ff ff ff ff ff ff ff ff ff ff ff ff
Power Supply 4  REV 02  740-049388  1EDL625039D  Power Supply AC
Jedec Code: 0x7fb0      EEPROM Version: 0x02
P/N: 740-049388      S/N: 1EDL625039D
Assembly ID: 0x0483    Assembly Version: 01.02
Date: 06-19-2016      Assembly Flags: 0x00
Version: REV 02      CLEI Code: CMUPADNBAA

```

```

ID: QFX10000 AC                      FRU Model Number: QFX10000-PWR-AC
Board Information Record:
  Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
  Address 0x00: 7f b0 02 ff 04 83 01 02 52 45 56 20 30 32 00 00
  Address 0x10: 00 00 00 00 37 34 30 2d 30 34 39 33 38 38 00 00
  Address 0x20: 31 45 44 4c 36 32 35 30 33 39 44 00 00 13 06 07
  Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff
  Address 0x40: ff ff ff ff 01 43 4d 55 50 41 44 4e 42 41 41 51
  Address 0x50: 46 58 31 30 30 30 30 2d 50 57 52 2d 41 43 00 00
  Address 0x60: 00 00 00 00 00 00 01 30 31 ff ff ff ff ff ff ff
  Address 0x70: ff ff ff dc ff ff ff ff ff ff ff ff ff ff ff ff
Power Supply 5  REV 02  740-049388  1EDL63706JD  Power Supply AC
Jedec Code: 0x7fb0          EEPROM Version: 0x02
P/N: 740-049388          S/N: 1EDL63706JD
Assembly ID: 0x0483        Assembly Version: 01.02
Date: 09-13-2016          Assembly Flags: 0x00
Version: REV 02           CLEI Code: CMUPADNBAA
ID: QFX10000 AC          FRU Model Number: QFX10000-PWR-AC
Board Information Record:
  Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
  Address 0x00: 7f b0 02 ff 04 83 01 02 52 45 56 20 30 32 00 00
  Address 0x10: 00 00 00 00 37 34 30 2d 30 34 39 33 38 38 00 00
  Address 0x20: 31 45 44 4c 36 33 37 30 36 4a 44 00 00 0d 09 07
  Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff
  Address 0x40: ff ff ff ff 01 43 4d 55 50 41 44 4e 42 41 41 51
  Address 0x50: 46 58 31 30 30 30 30 2d 50 57 52 2d 41 43 00 00
  Address 0x60: 00 00 00 00 00 00 01 30 31 ff ff ff ff ff ff ff
  Address 0x70: ff ff ff dc ff ff ff ff ff ff ff ff ff ff ff ff
Power Supply 6  REV 02  740-049388  1EDL63706JH  Power Supply AC
Jedec Code: 0x7fb0          EEPROM Version: 0x02
P/N: 740-049388          S/N: 1EDL63706JH
Assembly ID: 0x0483        Assembly Version: 01.02
Date: 09-13-2016          Assembly Flags: 0x00
Version: REV 02           CLEI Code: CMUPADNBAA
ID: QFX10000 AC          FRU Model Number: QFX10000-PWR-AC
Board Information Record:
  Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
  Address 0x00: 7f b0 02 ff 04 83 01 02 52 45 56 20 30 32 00 00
  Address 0x10: 00 00 00 00 37 34 30 2d 30 34 39 33 38 38 00 00
  Address 0x20: 31 45 44 4c 36 33 37 30 36 4a 48 00 00 0d 09 07
  Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff
  Address 0x40: ff ff ff ff 01 43 4d 55 50 41 44 4e 42 41 41 51
  Address 0x50: 46 58 31 30 30 30 30 2d 50 57 52 2d 41 43 00 00
  Address 0x60: 00 00 00 00 00 00 01 30 31 ff ff ff ff ff ff ff
  Address 0x70: ff ff ff dc ff ff ff ff ff ff ff ff ff ff ff ff
FTC 0          REV 10  750-050309  ACPM2918  Fan Controller 16
Jedec Code: 0x7fb0          EEPROM Version: 0x02
P/N: 750-050309          S/N: ACPM2918
Assembly ID: 0x0b9c        Assembly Version: 01.10
Date: 01-13-2017          Assembly Flags: 0x00
Version: REV 10           CLEI Code: CMUCAH5CAA
ID: QFX10016 FTC          FRU Model Number: QFX10016-FAN-CTRL
Board Information Record:
  Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
  Address 0x00: 7f b0 02 ff 0b 9c 01 0a 52 45 56 20 31 30 00 00
  Address 0x10: 00 00 00 00 37 35 30 2d 30 35 30 33 30 39 00 00
  Address 0x20: 53 2f 4e 20 41 43 50 4d 32 39 31 38 00 0d 01 07

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Address 0x30: e1 ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 43 4d 55 43 41 48 35 43 41 41 51
Address 0x50: 46 58 31 30 30 31 36 2d 46 41 4e 2d 43 54 52 4c
Address 0x60: 00 00 00 00 00 00 41 41 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff 6f ff ff ff ff ff ff ff ff ff ff ff ff

FTC 1          REV 10    750-050309    ACPE8185          Fan Controller 16
Jedec Code:    0x7fb0          EEPROM Version:    0x02
P/N:           750-050309      S/N:              ACPE8185
Assembly ID:   0x0b9c          Assembly Version:  01.10
Date:          12-22-2016      Assembly Flags:    0x00
Version:       REV 10          CLEI Code:         CMUCAH5CAA
ID: QFX10016 FTC              FRU Model Number: QFX10016-FAN-CTRL
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 0b 9c 01 0a 52 45 56 20 31 30 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 35 30 33 30 39 00 00
Address 0x20: 53 2f 4e 20 41 43 50 45 38 31 38 35 00 16 0c 07
Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 43 4d 55 43 41 48 35 43 41 41 51
Address 0x50: 46 58 31 30 30 31 36 2d 46 41 4e 2d 43 54 52 4c
Address 0x60: 00 00 00 00 00 00 41 41 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff 6f ff ff ff ff ff ff ff ff ff ff ff ff

Fan Tray 0      REV 10    760-077141    ACPV7288          Fan Tray 16
Jedec Code:    0x7fb0          EEPROM Version:    0x02
P/N:           760-077141      S/N:              ACPV7288
Assembly ID:   0x0bf1          Assembly Version:  01.10
Date:          06-07-2017      Assembly Flags:    0x00
Version:       REV 10          CLEI Code:         CMUCAH4CAA
ID: QFX10016 FHB              FRU Model Number: JNP10016-FAN
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 0b f1 01 0a 52 45 56 20 31 30 00 00
Address 0x10: 00 00 00 00 37 36 30 2d 30 37 37 31 34 31 00 00
Address 0x20: 53 2f 4e 20 41 43 50 56 37 32 38 38 00 07 06 07
Address 0x30: e1 ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 43 4d 55 43 41 48 34 43 41 41 4a
Address 0x50: 4e 50 31 30 30 31 36 2d 46 41 4e 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 41 42 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff 0d ff ff ff ff ff ff ff ff ff ff ff ff

Fan Tray 1      REV 10    760-057901    ACPL0546          Fan Tray 16
Jedec Code:    0x7fb0          EEPROM Version:    0x02
P/N:           760-057901      S/N:              ACPL0546
Assembly ID:   0x0bf1          Assembly Version:  01.10
Date:          02-14-2017      Assembly Flags:    0x00
Version:       REV 10          CLEI Code:         CMUCAH4CAA
ID: QFX10016 FHB              FRU Model Number: QFX10016-FAN
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 0b f1 01 0a 52 45 56 20 31 30 00 00
Address 0x10: 00 00 00 00 37 36 30 2d 30 35 37 39 30 31 00 00
Address 0x20: 53 2f 4e 20 41 43 50 4c 30 35 34 36 00 0e 02 07
Address 0x30: e1 ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 43 4d 55 43 41 48 34 43 41 41 51
Address 0x50: 46 58 31 30 30 31 36 2d 46 41 4e 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 41 42 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff 0d ff ff ff ff ff ff ff ff ff ff ff ff

SIB 0          REV 15    750-058270    ACPM2804          Switch Fabric 16
Jedec Code:    0x7fb0          EEPROM Version:    0x02

```

```

P/N:          750-058270      S/N:          ACPM2804
Assembly ID:  0x0bed          Assembly Version: 01.15
Date:         12-21-2016     Assembly Flags:  0x00
Version:      REV 15         CLEI Code:       CMUCAH6CAA
ID: QFX10016 SIB            FRU Model Number: QFX10016-SF
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 0b ed 01 0f 52 45 56 20 31 35 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 35 38 32 37 30 00 00
Address 0x20: 53 2f 4e 20 41 43 50 4d 32 38 30 34 00 15 0c 07
Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 43 4d 55 43 41 48 36 43 41 41 51
Address 0x50: 46 58 31 30 30 31 36 2d 53 46 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 41 42 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff d3 00 00 00 00 00 00 00 00 00 00 00 00
SIB 1          REV 15      750-058270      ACPM2808      Switch Fabric 16
Jedec Code:    0x7fb0      EEPROM Version: 0x02
P/N:          750-058270      S/N:          ACPM2808
Assembly ID:  0x0bed          Assembly Version: 01.15
Date:         12-21-2016     Assembly Flags:  0x00
Version:      REV 15         CLEI Code:       CMUCAH6CAA
ID: QFX10016 SIB            FRU Model Number: QFX10016-SF
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 0b ed 01 0f 52 45 56 20 31 35 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 35 38 32 37 30 00 00
Address 0x20: 53 2f 4e 20 41 43 50 4d 32 38 30 38 00 15 0c 07
Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 43 4d 55 43 41 48 36 43 41 41 51
Address 0x50: 46 58 31 30 30 31 36 2d 53 46 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 41 42 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff d3 00 00 00 00 00 00 00 00 00 00 00 00
SIB 2          REV 15      750-058270      ACPL4450      Switch Fabric 16
Jedec Code:    0x7fb0      EEPROM Version: 0x02
P/N:          750-058270      S/N:          ACPL4450
Assembly ID:  0x0bed          Assembly Version: 01.15
Date:         02-17-2017     Assembly Flags:  0x00
Version:      REV 15         CLEI Code:       CMUCAH6CAA
ID: QFX10016 SIB            FRU Model Number: QFX10016-SF
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 0b ed 01 0f 52 45 56 20 31 35 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 35 38 32 37 30 00 00
Address 0x20: 53 2f 4e 20 41 43 50 4c 34 34 35 30 00 11 02 07
Address 0x30: e1 ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 43 4d 55 43 41 48 36 43 41 41 51
Address 0x50: 46 58 31 30 30 31 36 2d 53 46 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 41 42 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff d3 00 00 00 00 00 00 00 00 00 00 00 00
SIB 3          REV 15      750-058270      ACPJ9834      Switch Fabric 16
Jedec Code:    0x7fb0      EEPROM Version: 0x02
P/N:          750-058270      S/N:          ACPJ9834
Assembly ID:  0x0bed          Assembly Version: 01.15
Date:         12-17-2016     Assembly Flags:  0x00
Version:      REV 15         CLEI Code:       CMUCAH6CAA
ID: QFX10016 SIB            FRU Model Number: QFX10016-SF
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff

```

```

I2C Hex Data:
Address 0x00: 7f b0 02 ff 0b ed 01 0f 52 45 56 20 31 35 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 35 38 32 37 30 00 00
Address 0x20: 53 2f 4e 20 41 43 50 4a 39 38 33 34 00 11 0c 07
Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 43 4d 55 43 41 48 36 43 41 41 51
Address 0x50: 46 58 31 30 30 31 36 2d 53 46 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 41 42 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff d3 00 00 00 00 00 00 00 00 00 00 00 00
SIB 4          REV 15    750-058270    ACPM2814          Switch Fabric 16
Jedec Code:    0x7fb0          EEPROM Version:    0x02
P/N:           750-058270      S/N:             ACPM2814
Assembly ID:   0x0bed          Assembly Version: 01.15
Date:          12-21-2016      Assembly Flags:   0x00
Version:       REV 15          CLEI Code:        CMUCAH6CAA
ID: QFX10016 SIB              FRU Model Number: QFX10016-SF
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 0b ed 01 0f 52 45 56 20 31 35 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 35 38 32 37 30 00 00
Address 0x20: 53 2f 4e 20 41 43 50 4d 32 38 31 34 00 15 0c 07
Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 43 4d 55 43 41 48 36 43 41 41 51
Address 0x50: 46 58 31 30 30 31 36 2d 53 46 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 41 42 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff d3 00 00 00 00 00 00 00 00 00 00 00 00
SIB 5          REV 15    750-058270    ACPL4277          Switch Fabric 16
Jedec Code:    0x7fb0          EEPROM Version:    0x02
P/N:           750-058270      S/N:             ACPL4277
Assembly ID:   0x0bed          Assembly Version: 01.15
Date:          02-17-2017      Assembly Flags:   0x00
Version:       REV 15          CLEI Code:        CMUCAH6CAA
ID: QFX10016 SIB              FRU Model Number: QFX10016-SF
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 0b ed 01 0f 52 45 56 20 31 35 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 35 38 32 37 30 00 00
Address 0x20: 53 2f 4e 20 41 43 50 4c 34 32 37 37 00 11 02 07
Address 0x30: e1 ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 43 4d 55 43 41 48 36 43 41 41 51
Address 0x50: 46 58 31 30 30 31 36 2d 53 46 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 41 42 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff d3 00 00 00 00 00 00 00 00 00 00 00 00
FPD Board      REV 07    711-054687    ACPL1407          Front Panel Display
Jedec Code:    0x7fb0          EEPROM Version:    0x01
P/N:           711-054687      S/N:             ACPL1407
Assembly ID:   0x0bf2          Assembly Version: 01.07
Date:          02-12-2017      Assembly Flags:   0x00
Version:       REV 07
ID: QFX10000 FPD
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 01 ff 0b f2 01 07 52 45 56 20 30 37 00 00
Address 0x10: 00 00 00 00 37 31 31 2d 30 35 34 36 38 37 00 00
Address 0x20: 53 2f 4e 20 41 43 50 4c 31 34 30 37 00 0c 02 07
Address 0x30: e1 ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x50: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff

```

Address 0x60: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
 Address 0x70: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff

show chassis hardware models (MX104 Router)

```
user@host> show chassis hardware models
Hardware inventory:
Item          Version  Part number  Serial number  FRU model number
Midplane      REV 20    750-044219   CAAS5849       PROTO-ASSEMBLY
PEM 0         REV 01    740-045932   1H072400065
Routing Engine 0 REV 16    750-044228   CAAR5915       PROTO-ASSEMBLY
AFEB 0        BUILTIN   BUILTIN
FPC 0         BUILTIN   BUILTIN
FPC 1         BUILTIN   BUILTIN
MIC 0         REV 01    750-046905   CAAK7103       MIC-3D-20GE-SFP-EH
FPC 2         BUILTIN   BUILTIN
Fan Tray      REV 02    711-049570   CAAX6538       PROTO-ASSEMBLY
```

show chassis hardware models (PTX10008 Router)

```
user@host> show chassis hardware models
Hardware inventory:
Item          Version  Part number  Serial number  FRU model number
Midplane      REV 27    750-054097   ACPD4307       QFX10008-CHAS
CB 0          REV 02    750-068820   ACNZ4440       QFX10000-RE
CB 1          REV 02    750-068820   ACNZ8284       QFX10000-RE
FPC 0         REV 36    750-051354   ACNP4679       QFX10000-36Q
PIC 0         BUILTIN   BUILTIN
FPC 1         REV 33    750-051354   ACNX8831       QFX10000-36Q
PIC 0         BUILTIN   BUILTIN
FPC 2         REV 32    750-051357   ACPB0341       QFX10000-30C
PIC 0         BUILTIN   BUILTIN
FPC 3         REV 35    750-051357   ACPD2186       QFX10000-30C
PIC 0         BUILTIN   BUILTIN
FPC 5         REV 08    750-068822   ACPF0057       QFX10000-36Q
PIC 0         BUILTIN   BUILTIN
FPC 6         REV 08    750-068822   ACPE9951       QFX10000-36Q
PIC 0         BUILTIN   BUILTIN
FPD Board     REV 07    711-054687   ACPC7142
Power Supply 0 REV 02    740-049388   1EDL62102N9    QFX10000-PWR-AC
Power Supply 1 REV 02    740-049388   1EDL60300KX    QFX10000-PWR-AC
Power Supply 2 REV 02    740-049388   1EDL60300DL    QFX10000-PWR-AC
Power Supply 3 REV 02    740-049388   1EDL61701BT    QFX10000-PWR-AC
Power Supply 4 REV 02    740-049388   1EDL62102P7    QFX10000-PWR-AC
Power Supply 5 REV 02    740-049388   1EDL62102PP    QFX10000-PWR-AC
FTC 0         REV 14    750-050108   ACPE4038       QFX10008-FAN-CTRL
FTC 1         REV 14    750-050108   ACPE4032       QFX10008-FAN-CTRL
Fan Tray 0    REV 09    760-054372   ACPD6799       QFX10008-FAN
Fan Tray 1    REV 09    760-054372   ACNZ3584       QFX10008-FAN
SIB 0         REV 24    750-050058   ACPD4587       QFX10008-SF
SIB 1         REV 24    750-050058   ACNZ0635       QFX10008-SF
SIB 2         REV 24    750-050058   ACPD4908       QFX10008-SF
SIB 3         REV 24    750-050058   ACNZ0617       QFX10008-SF
SIB 4         REV 24    750-050058   ACNZ0527       QFX10008-SF
SIB 5         REV 23    750-050058   ACNX6980       QFX10008-SF
```

show chassis hardware models (PTX10016 Router)

```
user@host> show chassis hardware models
```

Hardware inventory:

| Item | Version | Part number | Serial number | FRU model number |
|----------------|---------|-------------|---------------|------------------|
| Midplane | REV 24 | 750-077138 | ACPR5157 | JNP10016 |
| CB 0 | REV 04 | 711-065897 | CAHA9983 | PROTO-ASSEMBLY |
| CB 1 | REV 05 | 711-065897 | CAJD3802 | PROTO-ASSEMBLY |
| FPC 2 | | | | |
| PIC 0 | | BUILTIN | BUILTIN | |
| FPC 4 | REV 35 | 750-071976 | ACPD2168 | JNP10K-LC1101 |
| PIC 0 | | BUILTIN | BUILTIN | |
| FPC 5 | REV 13 | 750-068822 | ACPA0336 | JNP10K-LC1101 |
| PIC 0 | | BUILTIN | BUILTIN | |
| FPC 6 | REV 41 | 750-071976 | ACPF0695 | JNP10K-LC1101 |
| PIC 0 | | BUILTIN | BUILTIN | |
| FPC 7 | REV 35 | 750-071976 | ACPD2139 | JNP10K-LC1101 |
| PIC 0 | | BUILTIN | BUILTIN | |
| FPC 8 | REV 35 | 750-071976 | ACPD2142 | JNP10K-LC1101 |
| PIC 0 | | BUILTIN | BUILTIN | |
| FPC 9 | REV 41 | 750-071976 | ACPM5461 | JNP10K-LC1101 |
| PIC 0 | | BUILTIN | BUILTIN | |
| FPC 10 | REV 35 | 750-071976 | ACNS6795 | JNP10K-LC1101 |
| PIC 0 | | BUILTIN | BUILTIN | |
| FPC 11 | REV 35 | 750-071976 | ACPD1831 | JNP10K-LC1101 |
| PIC 0 | | BUILTIN | BUILTIN | |
| FPC 13 | REV 41 | 750-071976 | ACPS2075 | JNP10K-LC1101 |
| PIC 0 | | BUILTIN | BUILTIN | |
| FPC 15 | REV 37 | 750-071976 | ACPL7163 | JNP10K-LC1101 |
| PIC 0 | | BUILTIN | BUILTIN | |
| Power Supply 0 | REV 01 | 740-073147 | 1EDM6171155 | JNP10K-PWR-DC |
| Power Supply 1 | REV 01 | 740-073147 | 1EDM6281575 | JNP10K-PWR-DC |
| Power Supply 2 | REV 01 | 740-073147 | 1EDM6171044 | JNP10K-PWR-DC |
| Power Supply 3 | REV 01 | 740-073147 | 1EDM6281244 | JNP10K-PWR-DC |
| Power Supply 4 | REV 01 | 740-073147 | 1EDM6282093 | JNP10K-PWR-DC |
| Power Supply 5 | REV 01 | 740-073147 | 1EDM6281413 | JNP10K-PWR-DC |
| Power Supply 6 | REV 01 | 740-073147 | 1EDM6171071 | JNP10K-PWR-DC |
| Power Supply 7 | REV 01 | 740-073147 | 1EDM6170709 | JNP10K-PWR-DC |
| Power Supply 8 | REV 01 | 740-073147 | 1EDM6171169 | JNP10K-PWR-DC |
| Power Supply 9 | REV 01 | 740-073147 | 1EDM6170754 | JNP10K-PWR-DC |
| Fan Tray 0 | | | | QFX5100-FAN-AFO |
| Fan Tray 1 | | | | QFX5100-FAN-AFO |
| SIB 0 | REV 15 | 750-077140 | ACPV3933 | JNP10016-SF |
| SIB 1 | REV 15 | 750-077140 | ACPV3938 | JNP10016-SF |
| SIB 2 | REV 15 | 750-077140 | ACPV3974 | JNP10016-SF |
| SIB 3 | REV 15 | 750-077140 | ACPV3879 | JNP10016-SF |
| SIB 4 | REV 15 | 750-077140 | ACPV3964 | JNP10016-SF |
| SIB 5 | REV 15 | 750-077140 | ACPV3981 | JNP10016-SF |
| FPD Board | REV 07 | 711-054687 | ACPS8855 | |

show chassis hardware clei-models (MX104 Router)

user@host> show chassis hardware clei-models

Hardware inventory:

| Item | Version | Part number | CLEI code | FRU model number |
|------------------|---------|-------------|------------|--------------------|
| Midplane | REV 20 | 750-044219 | PROTOXCLEI | PROTO-ASSEMBLY |
| PEM 0 | REV 01 | 740-045932 | | |
| Routing Engine 0 | REV 16 | 750-044228 | PROTOXCLEI | PROTO-ASSEMBLY |
| AFEB 0 | | BUILTIN | | |
| FPC 0 | | BUILTIN | | |
| FPC 1 | | BUILTIN | | |
| MIC 0 | REV 01 | 750-046905 | PROTOXCLEI | MIC-3D-20GE-SFP-EH |
| FPC 2 | | BUILTIN | | |
| Fan Tray | REV 02 | 711-049570 | CAAX6538 | PROTO-ASSEMBLY |

show chassis hardware (MX240 Router)

```

user@host> show chassis hardware
Hardware inventory:

```

| Item | Version | Part number | Serial number | Description |
|------------------|---------|-------------|---------------|------------------------|
| Chassis | | | JN10C7F7EAFc | MX240 |
| Midplane | REV 01 | 710-021041 | TR1502 | MX240 Backplane |
| FPM Board | REV 01 | 710-017254 | KD4017 | Front Panel Display |
| PEM 0 | Rev 02 | 740-017330 | 000332 | PS 1.2-1.7kW; 100-240V |
| AC in | | | | |
| PEM 1 | Rev 02 | 740-017330 | 000226 | PS 1.2-1.7kW; 100-240V |
| AC in | | | | |
| Routing Engine 0 | REV 06 | 740-013063 | 1000703522 | RE-S-2000 |
| Routing Engine 1 | REV 06 | 740-015113 | 1000687625 | RE-S-1300 |
| CB 0 | REV 07 | 710-013385 | KC9057 | MX SCB |
| CB 1 | REV 05 | 710-013385 | JY4760 | MX SCB |
| FPC 1 | REV 01 | 750-021679 | KC7340 | DPCE 40x 1GE R |
| CPU | REV 06 | 710-013713 | KD4078 | DPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 10x 1GE(LAN) |
| Xcvr 0 | REV 01 | 740-011613 | P9F18ME | SFP-SX |
| PIC 1 | | BUILTIN | BUILTIN | 10x 1GE(LAN) |
| PIC 2 | | BUILTIN | BUILTIN | 10x 1GE(LAN) |
| PIC 3 | | BUILTIN | BUILTIN | 10x 1GE(LAN) |
| FPC 2 | REV 04 | 710-016669 | JS4529 | DPCE 40x 1GE R EQ |
| CPU | REV 06 | 710-013713 | KB3969 | DPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 10x 1GE(LAN) EQ |
| Xcvr 0 | REV 01 | 740-011613 | PBG3Y79 | SFP-SX |
| Xcvr 1 | REV 01 | 740-011613 | PBG3XU8 | SFP-SX |
| Xcvr 2 | REV 01 | 740-011613 | PBG3YG6 | SFP-SX |
| Xcvr 3 | REV 01 | 740-011613 | PBG3XUG | SFP-SX |
| Xcvr 4 | REV 01 | 740-011613 | PBG3XTJ | SFP-SX |
| PIC 1 | | BUILTIN | BUILTIN | 10x 1GE(LAN) EQ |
| Xcvr 0 | REV 01 | 740-011613 | PBG3ZUM | SFP-SX |
| Xcvr 1 | REV 01 | 740-011613 | PBG3Y5H | SFP-SX |
| Xcvr 2 | REV 01 | 740-011613 | PBG3UZT | SFP-SX |
| Xcvr 3 | REV 01 | 740-011613 | PBG3US1 | SFP-SX |
| PIC 2 | | BUILTIN | BUILTIN | 10x 1GE(LAN) EQ |
| Xcvr 0 | REV 01 | 740-011613 | PBG3YG7 | SFP-SX |
| Xcvr 1 | REV 01 | 740-011613 | PBG3XZ9 | SFP-SX |
| Xcvr 2 | REV 01 | 740-011613 | PBG3XTY | SFP-SX |
| Xcvr 3 | REV 01 | 740-011613 | PBG3UZG | SFP-SX |
| PIC 3 | | BUILTIN | BUILTIN | 10x 1GE(LAN) EQ |
| Xcvr 0 | REV 01 | 740-011613 | PBG3Y8W | SFP-SX |
| Xcvr 1 | REV 01 | 740-011613 | PBG3YVX | SFP-SX |
| Xcvr 2 | REV 01 | 740-011613 | PBG3YB3 | SFP-SX |
| Xcvr 3 | REV 01 | 740-011613 | PBG43VQ | SFP-SX |
| Fan Tray 0 | REV 01 | 710-021113 | JS4642 | MX240 Fan Tray |

show chassis hardware detail (MX 240 Router with Routing Engine Displaying DIMM Information)

```

user@host> show chassis hardware detail

```

| Item | Version | Part number | Serial number | Description |
|------------------|----------|-------------|--------------------|-------------------------|
| Chassis | | | JN11279B4AFc | MX240 Backplane |
| Midplane | REV 07 | 760-021404 | TS2474 | MX240 Backplane |
| FPM Board | REV 03 | 760-021392 | XC2643 | Front Panel Display |
| PEM 0 | Rev 03 | 740-017343 | QCS0908A068 | DC Power Entry Module |
| Routing Engine 0 | REV 01 | 740-031117 | AARCH00 | RE-S-1800x4 |
| ad0 3764 MB | STEC M2+ | CF 9.0.2 | STM2Q3209239145303 | Removable Compact Flash |

```

ad1    28626 MB   WDC SSD-F0030S-5000   C933Z036237215548S00 Compact Flash
usb0 (addr 1)   EHCI root hub 0       Intel                uhub0
usb0 (addr 2)   product 0x0020 32      vendor 0x8087        uhub1
DIMM 0          VL31B5263E-F8S DIE REV-0 PCB REV-0      MFR ID-ce80
DIMM 1          VL31B5263E-F8S DIE REV-0 PCB REV-0      MFR ID-ce80
DIMM 2          VL31B5263E-F8S DIE REV-0 PCB REV-0      MFR ID-ce80
DIMM 3          SL31B5263E-F8S DIE REV-0 PCB REV-0      MFR ID-ce80
CB 0           REV 03    710-021523   XD7225              MX SCB
Fan Tray 0     REV 01    710-021113   WZ4986              MX240 Fan Tray

```

show chassis hardware (MX240 Router with Enhanced MX SCB)

```

user@host> show chassis hardware
Hardware inventory:

```

| Item | Version | Part number | Serial number | Description |
|------------------|---------|-------------|---------------|------------------------|
| Chassis | | | JN10C7F7EAF | MX240 |
| Midplane | REV 01 | 710-021041 | TR1502 | MX240 Backplane |
| FPM Board | REV 01 | 710-017254 | KD4017 | Front Panel Display |
| PEM 0 | Rev 02 | 740-017330 | 000332 | PS 1.2-1.7kW; 100-240V |
| AC in | | | | |
| PEM 1 | Rev 02 | 740-017330 | 000226 | PS 1.2-1.7kW; 100-240V |
| AC in | | | | |
| Routing Engine 0 | REV 06 | 740-013063 | 1000703522 | RE-S-2000 |
| Routing Engine 1 | REV 06 | 740-015113 | 1000687625 | RE-S-1300 |
| CB 0 | REV 02 | 710-031391 | YE8494 | Enhanced MX SCB |
| CB 1 | REV 05 | 710-031391 | YOP5764 | Enhanced MX SCB |
| FPC 1 | REV 01 | 750-021679 | KC7340 | DPCE 40x 1GE R |
| CPU | REV 06 | 710-013713 | KD4078 | DPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 10x 1GE(LAN) |
| Xcvr 0 | REV 01 | 740-011613 | P9F18ME | SFP-SX |
| PIC 1 | | BUILTIN | BUILTIN | 10x 1GE(LAN) |
| PIC 2 | | BUILTIN | BUILTIN | 10x 1GE(LAN) |
| PIC 3 | | BUILTIN | BUILTIN | 10x 1GE(LAN) |
| FPC 2 | REV 04 | 710-016669 | JS4529 | DPCE 40x 1GE R EQ |
| CPU | REV 06 | 710-013713 | KB3969 | DPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 10x 1GE(LAN) EQ |
| Xcvr 0 | REV 01 | 740-011613 | PBG3Y79 | SFP-SX |
| Xcvr 1 | REV 01 | 740-011613 | PBG3XU8 | SFP-SX |
| Xcvr 2 | REV 01 | 740-011613 | PBG3YG6 | SFP-SX |
| Xcvr 3 | REV 01 | 740-011613 | PBG3XUG | SFP-SX |
| Xcvr 4 | REV 01 | 740-011613 | PBG3XTJ | SFP-SX |
| PIC 1 | | BUILTIN | BUILTIN | 10x 1GE(LAN) EQ |
| Xcvr 0 | REV 01 | 740-011613 | PBG3ZUM | SFP-SX |
| Xcvr 1 | REV 01 | 740-011613 | PBG3Y5H | SFP-SX |
| Xcvr 2 | REV 01 | 740-011613 | PBG3UZT | SFP-SX |
| Xcvr 3 | REV 01 | 740-011613 | PBG3US1 | SFP-SX |
| PIC 2 | | BUILTIN | BUILTIN | 10x 1GE(LAN) EQ |
| Xcvr 0 | REV 01 | 740-011613 | PBG3YG7 | SFP-SX |
| Xcvr 1 | REV 01 | 740-011613 | PBG3XZ9 | SFP-SX |
| Xcvr 2 | REV 01 | 740-011613 | PBG3XTY | SFP-SX |
| Xcvr 3 | REV 01 | 740-011613 | PBG3UZG | SFP-SX |
| PIC 3 | | BUILTIN | BUILTIN | 10x 1GE(LAN) EQ |
| Xcvr 0 | REV 01 | 740-011613 | PBG3Y8W | SFP-SX |
| Xcvr 1 | REV 01 | 740-011613 | PBG3YVX | SFP-SX |
| Xcvr 2 | REV 01 | 740-011613 | PBG3YB3 | SFP-SX |
| Xcvr 3 | REV 01 | 740-011613 | PBG43VQ | SFP-SX |
| Fan Tray 0 | REV 01 | 710-021113 | JS4642 | MX240 Fan Tray |

show chassis hardware (MX480 Router)

```

user@host> show chassis hardware
Hardware inventory:
Item             Version  Part number  Serial number  Description
Chassis          REV 04   710-017414   JN10C7F7FAFB  MX480
Midplane         REV 02   710-017254   KB8459        MX480 Midplane
FPM Board        Rev 02   740-017330   QCS07519029   Front Panel Display
PEM 0            Rev 02   740-017330   QCS07519029   PS 1.2-1.7kW; 100-240V
AC in
PEM 1            Rev 02   740-017330   QCS07519041   PS 1.2-1.7kW; 100-240V
AC in
PEM 2            Rev 02   740-017330   QCS07519097   PS 1.2-1.7kW; 100-240V
AC in
Routing Engine 0 REV 07   740-013063   1000733381    RE-S-2000
Routing Engine 1 REV 07   740-013063   1000733540    RE-S-2000
CB 0             REV 07   710-013385   KA8022        MX SCB
CB 1             REV 07   710-013385   KA8303        MX SCB
FPC 0            REV 09   750-020452   KA8660        DPCE 40x 1GE X EQ
CPU              REV 06   710-013713   KA8185        DPC PMB
PIC 0            BUILTIN BUILTIN      10x 1GE(LAN) EQ
PIC 1            BUILTIN BUILTIN      10x 1GE(LAN) EQ
PIC 2            BUILTIN BUILTIN      10x 1GE(LAN) EQ
PIC 3            BUILTIN BUILTIN      10x 1GE(LAN) EQ
Fan Tray
Left Fan Tray

```

show chassis hardware (MX480 Router with Enhanced MX SCB)

```

user@host> show chassis hardware
Hardware inventory:
Item             Version  Part number  Serial number  Description
Chassis          REV 04   710-017414   JN10C7F7FAFB  MX480
Midplane         REV 02   710-017254   KB8459        MX480 Midplane
FPM Board        Rev 02   740-017330   QCS07519029   Front Panel Display
PEM 0            Rev 02   740-017330   QCS07519029   PS 1.2-1.7kW; 100-240V
AC in
PEM 1            Rev 02   740-017330   QCS07519041   PS 1.2-1.7kW; 100-240V
AC in
PEM 2            Rev 02   740-017330   QCS07519097   PS 1.2-1.7kW; 100-240V
AC in
Routing Engine 0 REV 07   740-013063   1000733381    RE-S-2000
Routing Engine 1 REV 07   740-013063   1000733540    RE-S-2000
CB 0             REV 07   710-013385   KA8022        Enhanced MX SCB
CB 1             REV 07   710-013385   KA8303        Enhanced MX SCB
FPC 0            REV 09   750-020452   KA8660        DPCE 40x 1GE X EQ
CPU              REV 06   710-013713   KA8185        DPC PMB
PIC 0            BUILTIN BUILTIN      10x 1GE(LAN) EQ
PIC 1            BUILTIN BUILTIN      10x 1GE(LAN) EQ
PIC 2            BUILTIN BUILTIN      10x 1GE(LAN) EQ
PIC 3            BUILTIN BUILTIN      10x 1GE(LAN) EQ
Fan Tray
Left Fan Tray

```

show chassis hardware (MX480 Routers with MPC5E and Built-In OTN PIC)

```

user@host> show chassis hardware
Hardware inventory:
Item             Version  Part number  Serial number  Description
Chassis          REV 05   710-017414   JN11C0338AFB  MX480
Midplane         REV 02   710-017254   ABAB8430      MX480 Midplane
FPM Board        REV 02   710-017254   ZS8005        Front Panel Display

```


| | | | | |
|------------------|-------------|------------|--------------|------------------------|
| PEM 0 AC in | Rev 05 | 740-029970 | QCS1024U089 | PS 1.4-2.52kW; 90-264V |
| PEM 1 AC in | Rev 10 | 740-029970 | QCS1314U0FJ | PS 1.4-2.52kW; 90-264V |
| PEM 2 AC in | Rev 07 | 740-029970 | QCS1121U076 | PS 1.4-2.52kW; 90-264V |
| Routing Engine 0 | REV 05 | 740-031116 | 9009092471 | RE-S-1800x4 |
| Routing Engine 1 | REV 05 | 740-031116 | 9009097958 | RE-S-1800x4 |
| CB 0 | REV 16 | 750-031391 | CAAX0789 | Enhanced MX SCB |
| CB 1 | REV 16 | 750-031391 | CAAX0856 | Enhanced MX SCB |
| FPC 0 | REV 32 | 750-028467 | ABBP1782 | MPC 3D 16x 10GE |
| CPU | REV 10 | 711-029089 | ABBP5410 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-021308 | 983152A00038 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | B11F00211 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AQ72LPB | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AHNOWR5 | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | B11J03627 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | B11F00300 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-021308 | AQ42WSS | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021308 | AQ43HGC | SFP+-10G-SR |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-021308 | ANAONDO | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | ANAONGF | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-021308 | ANAONG9 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021308 | ANAOMP9 | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-021308 | AQA06CG | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | 19T511100493 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | APR040J | SFP+-10G-SR |
| FPC 1 | REV 26 | 750-046005 | CACN1894 | MPC5E 3D Q 2CGE+4XGE |
| CPU | REV 09 | 711-045719 | CACN8698 | RMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 2X10GE SFPP OTN |
| Xcvr 0 | REV 01 | 740-031980 | 163363A03046 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AJ40JS8 | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 1X100GE CFP2 OTN |
| PIC 2 | | BUILTIN | BUILTIN | 2X10GE SFPP OTN |
| Xcvr 0 | REV 01 | 740-031980 | 153363A00593 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AJ40JUJ | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 1X100GE CFP2 OTN |
| Xcvr 0 | | NON-JNPR | UQC0B53 | CFP2-100G-LR4-D |
| FPC 2 | REV 26 | 750-046005 | CACN1891 | MPC5E 3D Q 2CGE+4XGE |
| CPU | REV 09 | 711-045719 | CACN8694 | RMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 2X10GE SFPP OTN |
| Xcvr 0 | | NON-JNPR | URA012A | SFP+-10G-LR |
| PIC 1 | | BUILTIN | BUILTIN | 1X100GE CFP2 OTN |
| Xcvr 0 | | NON-JNPR | J13F47042 | CFP2-100G-LR4-D |
| PIC 2 | | BUILTIN | BUILTIN | 2X10GE SFPP OTN |
| Xcvr 0 | REV 01 | 740-031980 | AJC0BM3 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | 11T511100917 | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 1X100GE CFP2 OTN |
| Xcvr 0 | | NON-JNPR | UQK07SU | CFP2-100G-LR4-D |
| FPC 3 | REV 03 | 750-045372 | CAAD9425 | MPCE Type 3 3D |
| CPU | REV 08 | 711-035209 | CAAD9094 | HMPC PMB 2G |
| MIC 0 | REV 14 | 750-033196 | CAAW9204 | 1X100GE CXP |
| PIC 0 | | BUILTIN | BUILTIN | 1X100GE CXP |
| Xcvr 0 | REV 01 | 740-046563 | XD16FC034 | CFP2-100G-SR10 |
| MIC 1 | REV 19 | 750-033199 | CAAJ1814 | 1X100GE CFP |
| PIC 2 | | BUILTIN | BUILTIN | 1X100GE CFP |
| FPC 4 | REV 21.0.11 | 750-045715 | CAAY3568 | MPC5E 3D Q 24XGE+6XLGE |

| | | | | |
|----------|--------|------------|-----------|------------------------|
| CPU | REV 07 | 711-045719 | CAAW7430 | RMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 12X10GE SFPP OTN |
| Xcvr 0 | REV 01 | 740-031980 | AP406NG | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | AR41NLP | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | B11D05630 | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 12X10GE SFPP OTN |
| PIC 2 | | BUILTIN | BUILTIN | 3X40GE QSFPP |
| PIC 3 | | BUILTIN | BUILTIN | 3X40GE QSFPP |
| WAN MEZZ | REV 12 | 750-049136 | CACM6678 | MPC5E 24XGE OTN Mezz |
| FPC 5 | REV 11 | 750-045372 | CABK7539 | MPCE Type 3 3D |
| CPU | REV 08 | 711-035209 | CABJ2466 | HMPC PMB 2G |
| MIC 0 | REV 19 | 750-033199 | CAAJ9719 | 1X100GE CFP |
| PIC 0 | | BUILTIN | BUILTIN | 1X100GE CFP |
| Xcvr 0 | REV 01 | 740-035329 | UP1020P | CFP-100G-SR10 |
| MIC 1 | REV 07 | 750-033196 | YZ0797 | 1X100GE CXP |
| PIC 2 | | BUILTIN | BUILTIN | 1X100GE CXP |
| Xcvr 0 | REV 01 | 740-046563 | XC42FC022 | CFP2-100G-SR10 |
| Fan Tray | | | | Enhanced Left Fan Tray |

show chassis hardware detail (MX480 Routers with MPC5E and Built-In OTN PIC)

```

user@host> show chassis hardware detail
Hardware inventory:
Item          Version  Part number  Serial number  Description
Chassis                               JN11C0338AFB  MX480
Midplane      REV 05   710-017414   ABAB8430      MX480 Midplane
FPM Board     REV 02   710-017254   ZS8005        Front Panel Display
PEM 0         Rev 05   740-029970   QCS1024U089   PS 1.4-2.52kW; 90-264V
AC in
PEM 1         Rev 10   740-029970   QCS1314U0FJ   PS 1.4-2.52kW; 90-264V
AC in
PEM 2         Rev 07   740-029970   QCS1121U076   PS 1.4-2.52kW; 90-264V
AC in
Routing Engine 0 REV 05   740-031116   9009092471     RE-S-1800x4
ad0  3896 MB VRFCF14096DIHK1 VM4096MB 6862   Compact Flash
ad1  30533 MB UGB94ARF32H0S3-KC UNIGEN-478612-001127 Disk 1
usb0 (addr 1) EHCI root hub 0 Intel uhub0
usb0 (addr 2) product 0x0020 32 vendor 0x8087 uhub1
DIMM 0        SGU04G72H1BB2SA-BB DIE REV-52 PCB REV-54 MFR ID-ce80
DIMM 1        SGU04G72H1BB2SA-BB DIE REV-52 PCB REV-54 MFR ID-ce80
DIMM 2        SGU04G72H1BB2SA-BB DIE REV-52 PCB REV-54 MFR ID-ce80
DIMM 3        SGU04G72H1BB2SA-BB DIE REV-52 PCB REV-54 MFR ID-ce80
Routing Engine 1 REV 05   740-031116   9009097958     RE-S-1800x4
ad0  3896 MB VRFCF14096DIHK1 VM4096MB 6145   Compact Flash
ad1  30533 MB UGB94ARF32H0S3-KC UNIGEN-499551-000273 Disk 1
CB 0          REV 16   750-031391   CAAX0789      Enhanced MX SCB
CB 1          REV 16   750-031391   CAAX0856      Enhanced MX SCB
FPC 0         REV 32   750-028467   ABBP1782      MPC 3D 16x 10GE
CPU          REV 10   711-029089   ABBP5410      AMPC PMB
PIC 0         BUILTIN  BUILTIN       4x 10GE(LAN) SFP+
Xcvr 0        REV 01   740-021308   983152A00038  SFP+-10G-SR
Xcvr 1        REV 01   740-031980   B11F00211     SFP+-10G-SR
Xcvr 2        REV 01   740-031980   AQ72LPB       SFP+-10G-SR
Xcvr 3        REV 01   740-031980   AHN0WR5       SFP+-10G-SR
PIC 1         BUILTIN  BUILTIN       4x 10GE(LAN) SFP+
Xcvr 0        REV 01   740-031980   B11J03627     SFP+-10G-SR
Xcvr 1        REV 01   740-031980   B11F00300     SFP+-10G-SR
Xcvr 2        REV 01   740-021308   AQ42WSS       SFP+-10G-SR
Xcvr 3        REV 01   740-021308   AQ43HGC       SFP+-10G-SR
PIC 2         BUILTIN  BUILTIN       4x 10GE(LAN) SFP+
Xcvr 0        REV 01   740-021308   ANA0ND0       SFP+-10G-SR

```

| | | | | |
|----------|-------------|------------|--------------|------------------------|
| Xcvr 1 | REV 01 | 740-021308 | ANAONGF | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-021308 | ANAONG9 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021308 | ANAOMP9 | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-021308 | AQA06CG | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | 19T511100493 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | APR040J | SFP+-10G-SR |
| FPC 1 | REV 26 | 750-046005 | CACN1894 | MPC5E 3D Q 2CGE+4XGE |
| CPU | REV 09 | 711-045719 | CACN8698 | RMPD PMB |
| PIC 0 | | BUILTIN | BUILTIN | 2X10GE SFPP OTN |
| Xcvr 0 | REV 01 | 740-031980 | 163363A03046 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AJ40JS8 | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 1X100GE CFP2 OTN |
| PIC 2 | | BUILTIN | BUILTIN | 2X10GE SFPP OTN |
| Xcvr 0 | REV 01 | 740-031980 | 153363A00593 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AJ40JUJ | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 1X100GE CFP2 OTN |
| Xcvr 0 | | NON-JNPR | UQC0B53 | CFP2-100G-LR4-D |
| FPC 2 | REV 26 | 750-046005 | CACN1891 | MPC5E 3D Q 2CGE+4XGE |
| CPU | REV 09 | 711-045719 | CACN8694 | RMPD PMB |
| PIC 0 | | BUILTIN | BUILTIN | 2X10GE SFPP OTN |
| Xcvr 0 | | NON-JNPR | URA012A | SFP+-10G-LR |
| PIC 1 | | BUILTIN | BUILTIN | 1X100GE CFP2 OTN |
| Xcvr 0 | | NON-JNPR | J13F47042 | CFP2-100G-LR4-D |
| PIC 2 | | BUILTIN | BUILTIN | 2X10GE SFPP OTN |
| Xcvr 0 | REV 01 | 740-031980 | AJC0BM3 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | 11T511100917 | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 1X100GE CFP2 OTN |
| Xcvr 0 | | NON-JNPR | UQK07SU | CFP2-100G-LR4-D |
| FPC 3 | REV 03 | 750-045372 | CAAD9425 | MPCE Type 3 3D |
| CPU | REV 08 | 711-035209 | CAAD9094 | HMPD PMB 2G |
| MIC 0 | REV 14 | 750-033196 | CAAW9204 | 1X100GE CXP |
| PIC 0 | | BUILTIN | BUILTIN | 1X100GE CXP |
| Xcvr 0 | REV 01 | 740-046563 | XD16FC034 | CFP2-100G-SR10 |
| MIC 1 | REV 19 | 750-033199 | CAAJ1814 | 1X100GE CFP |
| PIC 2 | | BUILTIN | BUILTIN | 1X100GE CFP |
| FPC 4 | REV 21.0.11 | 750-045715 | CAAY3568 | MPC5E 3D Q 24XGE+6XLGE |
| CPU | REV 07 | 711-045719 | CAAW7430 | RMPD PMB |
| PIC 0 | | BUILTIN | BUILTIN | 12X10GE SFPP OTN |
| Xcvr 0 | REV 01 | 740-031980 | AP406NG | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | AR41NLP | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | B11D05630 | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 12X10GE SFPP OTN |
| PIC 2 | | BUILTIN | BUILTIN | 3X40GE QSFPP |
| PIC 3 | | BUILTIN | BUILTIN | 3X40GE QSFPP |
| WAN MEZZ | REV 12 | 750-049136 | CACM6678 | MPC5E 24XGE OTN Mezz |
| FPC 5 | REV 11 | 750-045372 | CABK7539 | MPCE Type 3 3D |
| CPU | REV 08 | 711-035209 | CABJ2466 | HMPD PMB 2G |
| MIC 0 | REV 19 | 750-033199 | CAAJ9719 | 1X100GE CFP |
| PIC 0 | | BUILTIN | BUILTIN | 1X100GE CFP |
| Xcvr 0 | REV 01 | 740-035329 | UP1020P | CFP-100G-SR10 |
| MIC 1 | REV 07 | 750-033196 | YZ0797 | 1X100GE CXP |
| PIC 2 | | BUILTIN | BUILTIN | 1X100GE CXP |
| Xcvr 0 | REV 01 | 740-046563 | XC42FC022 | CFP2-100G-SR10 |
| Fan Tray | | | | Enhanced Left Fan Tray |

show chassis hardware extensive (MX480 Routers with MPC5E and Built-In OTN PIC)

```
user@host> show chassis hardware extensive
```

Hardware inventory:

| Item | Version | Part number | Serial number | Description |
|---|---------------------|-------------------|-----------------|------------------------|
| Chassis | | | JN11C0338AFB | MX480 |
| Jedec Code: | 0x7fb0 | EEPROM Version: | 0x02 | |
| | | S/N: | JN11C0338AFB | |
| Assembly ID: | 0x01fe | Assembly Version: | 00.00 | |
| Date: | 00-00-0000 | Assembly Flags: | 0x02 | |
| ID: | MX480 | | | |
| Board Information Record: | | | | |
| Address 0x00: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 | | | | |
| I2C Hex Data: | | | | |
| Address 0x00: 7f b0 02 ff 01 fe 00 00 00 00 00 00 00 00 00 00 | | | | |
| Address 0x10: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 | | | | |
| Address 0x20: 4a 4e 31 31 43 30 33 33 38 41 46 42 02 00 00 00 | | | | |
| Address 0x30: 00 00 00 ff 00 00 00 00 00 00 00 00 00 00 00 00 | | | | |
| Address 0x40: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 | | | | |
| Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 | | | | |
| Address 0x60: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 | | | | |
| Address 0x70: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 | | | | |
| Midplane | REV 05 | 710-017414 | ABAB8430 | MX480 Midplane |
| Jedec Code: | 0x7fb0 | EEPROM Version: | 0x01 | |
| P/N: | 710-017414 | S/N: | ABAB8430 | |
| Assembly ID: | 0x01fe | Assembly Version: | 01.05 | |
| Date: | 12-13-2011 | Assembly Flags: | 0x00 | |
| Version: | REV 05 | | | |
| ID: | MX480 Midplane | FRU Model Number: | CHAS-BP-MX480-S | |
| Board Information Record: | | | | |
| Address 0x00: ad 01 08 00 00 23 9c fc 98 00 ff ff ff ff ff ff | | | | |
| I2C Hex Data: | | | | |
| Address 0x00: 7f b0 01 ff 01 fe 01 05 52 45 56 20 30 35 00 00 | | | | |
| Address 0x10: 00 00 00 00 37 31 30 2d 30 31 37 34 31 34 00 00 | | | | |
| Address 0x20: 53 2f 4e 20 41 42 41 42 38 34 33 30 00 0d 0c 07 | | | | |
| Address 0x30: db ff ff ff ad 01 08 00 00 23 9c fc 98 00 ff ff | | | | |
| Address 0x40: ff ff ff ff 01 00 00 00 00 00 00 00 00 00 00 43 | | | | |
| Address 0x50: 48 41 53 2d 42 50 2d 4d 58 34 38 30 2d 53 00 00 | | | | |
| Address 0x60: 00 00 00 00 00 00 00 ff ff ff ff ff ff ff ff ff | | | | |
| Address 0x70: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff | | | | |
| FPM Board | REV 02 | 710-017254 | ZS8005 | Front Panel Display |
| Jedec Code: | 0x7fb0 | EEPROM Version: | 0x01 | |
| P/N: | 710-017254 | S/N: | ZS8005 | |
| Assembly ID: | 0x01ff | Assembly Version: | 01.02 | |
| Date: | 11-21-2011 | Assembly Flags: | 0x00 | |
| Version: | REV 02 | | | |
| ID: | Front Panel Display | FRU Model Number: | CRAFT-MX480-S | |
| Board Information Record: | | | | |
| Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff | | | | |
| I2C Hex Data: | | | | |
| Address 0x00: 7f b0 01 ff 01 ff 01 02 52 45 56 20 30 32 00 00 | | | | |
| Address 0x10: 00 00 00 00 37 31 30 2d 30 31 37 32 35 34 00 00 | | | | |
| Address 0x20: 53 2f 4e 20 5a 53 38 30 30 35 00 00 00 15 0b 07 | | | | |
| Address 0x30: db ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff | | | | |
| Address 0x40: ff ff ff ff 01 00 00 00 00 00 00 00 00 00 00 43 | | | | |
| Address 0x50: 52 41 46 54 2d 4d 58 34 38 30 2d 53 00 00 00 00 | | | | |
| Address 0x60: 00 00 00 00 00 00 00 ff ff ff ff ff ff ff ff ff | | | | |
| Address 0x70: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff | | | | |
| PEM 0 | Rev 05 | 740-029970 | QCS1024U089 | PS 1.4-2.52kW; 90-264V |
| AC in | | | | |
| Jedec Code: | 0x7fb0 | EEPROM Version: | 0x01 | |
| P/N: | 740-029970 | S/N: | QCS1024U089 | |
| Assembly ID: | 0x0432 | Assembly Version: | 01.05 | |
| Date: | 06-17-2010 | Assembly Flags: | 0x00 | |

```

Version:      Rev 05
ID: PS 1.4-2.52kW; 90-264V AC in FRU Model Number:  PWR-MX480-2520-AC-S
Board Information Record:
  Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff 00 00 00 00
I2C Hex Data:
  Address 0x00: 7f b0 01 ff 04 32 01 05 52 65 76 20 30 35 00 00
  Address 0x10: 00 00 00 00 37 34 30 2d 30 32 39 39 37 30 00 00
  Address 0x20: 51 43 53 31 30 32 34 55 30 38 39 00 00 11 06 07
  Address 0x30: da ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
  Address 0x40: 00 00 00 00 01 00 00 00 00 00 00 00 00 00 00 50
  Address 0x50: 57 52 2d 4d 58 34 38 30 2d 32 35 32 30 2d 41 43
  Address 0x60: 2d 53 00 00 00 00 00 00 00 00 00 00 00 00 00 00
  Address 0x70: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
PEM 1          Rev 10   740-029970   QCS1314U0FJ   PS 1.4-2.52kW; 90-264V
AC in
Jedec Code:    0x7fb0          EEPROM Version: 0x01
P/N:           740-029970      S/N:           QCS1314U0FJ
Assembly ID:   0x0432          Assembly Version: 01.10
Date:          04-04-2013      Assembly Flags: 0x00
Version:       Rev 10
ID: PS 1.4-2.52kW; 90-264V AC in FRU Model Number:  PWR-MX480-2520-AC-S
Board Information Record:
  Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff 00 00 00 00
I2C Hex Data:
  Address 0x00: 7f b0 01 ff 04 32 01 0a 52 65 76 20 31 30 00 00
  Address 0x10: 00 00 00 00 37 34 30 2d 30 32 39 39 37 30 00 00
  Address 0x20: 51 43 53 31 33 31 34 55 30 46 4a 00 00 04 04 07
  Address 0x30: dd ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
  Address 0x40: 00 00 00 00 01 00 00 00 00 00 00 00 00 00 00 50
  Address 0x50: 57 52 2d 4d 58 34 38 30 2d 32 35 32 30 2d 41 43
  Address 0x60: 2d 53 00 00 00 00 00 00 00 00 00 00 00 00 00 00
  Address 0x70: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
PEM 2          Rev 07   740-029970   QCS1121U076   PS 1.4-2.52kW; 90-264V
AC in
Jedec Code:    0x7fb0          EEPROM Version: 0x01
P/N:           740-029970      S/N:           QCS1121U076
Assembly ID:   0x0432          Assembly Version: 01.07
Date:          05-23-2011      Assembly Flags: 0x00
Version:       Rev 07
ID: PS 1.4-2.52kW; 90-264V AC in FRU Model Number:  PWR-MX480-2520-AC-S
Board Information Record:
  Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff 00 00 00 00
I2C Hex Data:
  Address 0x00: 7f b0 01 ff 04 32 01 07 52 65 76 20 30 37 00 00
  Address 0x10: 00 00 00 00 37 34 30 2d 30 32 39 39 37 30 00 00
  Address 0x20: 51 43 53 31 31 32 31 55 30 37 36 00 00 17 05 07
  Address 0x30: db ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
  Address 0x40: 00 00 00 00 01 00 00 00 00 00 00 00 00 00 00 50
  Address 0x50: 57 52 2d 4d 58 34 38 30 2d 32 35 32 30 2d 41 43
  Address 0x60: 2d 53 00 00 00 00 00 00 00 00 00 00 00 00 00 00
  Address 0x70: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Routing Engine 0 REV 05   740-031116   9009092471   RE-S-1800x4
Jedec Code:    0x7fb0          EEPROM Version: 0x02
P/N:           740-031116      S/N:           9009092471
Assembly ID:   0x09c0          Assembly Version: 01.05
Date:          11-01-2011      Assembly Flags: 0x00
Version:       REV 05          CLEI Code:     COUCALDBAA
ID: RE-S-1800x4              FRU Model Number: RE-S-1800X4-16G-S
Board Information Record:
  Address 0x00: 54 32 30 32 37 43 41 2d 34 32 46 42 23 23 23 00
I2C Hex Data:

```

```

Address 0x00: 7f b0 02 ff 09 c0 01 05 52 45 56 20 30 35 00 00
Address 0x10: 00 00 00 00 37 34 30 2d 30 33 31 31 31 36 00 00
Address 0x20: 39 30 30 39 30 39 32 34 37 31 00 00 00 01 0b 07
Address 0x30: db ff ff ff 54 32 30 32 37 43 41 2d 34 32 46 42
Address 0x40: 23 23 23 00 01 43 4f 55 43 41 4c 44 42 41 41 52
Address 0x50: 45 2d 53 2d 31 38 30 30 58 34 2d 31 36 47 2d 53
Address 0x60: 00 00 00 00 00 00 41 30 30 ff ff ff ff ff ff ff
Address 0x70: ff ff ff 4b ff ff ff ff ff ff ff ff ff ff ff ff
ad0    3896 MB VRFCF14096DIHK1 VM4096MB 6862 Compact Flash
ad1    30533 MB UGB94ARF32H0S3-KC UNIGEN-478612-001127 Disk 1
usb0 (addr 1) EHCI root hub 0 Intel uhub0
usb0 (addr 2) product 0x0020 32 vendor 0x8087 uhub1
DIMM 0 SGU04G72H1BB2SA-BB DIE REV-52 PCB REV-54 MFR ID-ce80
DIMM 1 SGU04G72H1BB2SA-BB DIE REV-52 PCB REV-54 MFR ID-ce80
DIMM 2 SGU04G72H1BB2SA-BB DIE REV-52 PCB REV-54 MFR ID-ce80
DIMM 3 SGU04G72H1BB2SA-BB DIE REV-52 PCB REV-54 MFR ID-ce80
Routing Engine 1 REV 05 740-031116 9009097958 RE-S-1800x4
Jedec Code: 0x7fb0 EEPROM Version: 0x02
P/N: 740-031116 S/N: 9009097958
Assembly ID: 0x09c0 Assembly Version: 01.05
Date: 02-06-2012 Assembly Flags: 0x00
Version: REV 05 CLEI Code: COUCALDBAA
ID: RE-S-1800x4 FRU Model Number: RE-S-1800X4-16G-S
Board Information Record:
Address 0x00: 54 32 30 32 37 43 41 2d 34 32 46 42 23 23 23 00
I2C Hex Data:
Address 0x00: 7f b0 02 ff 09 c0 01 05 52 45 56 20 30 35 00 00
Address 0x10: 00 00 00 00 37 34 30 2d 30 33 31 31 31 36 00 00
Address 0x20: 39 30 30 39 30 39 37 39 35 38 00 00 00 06 02 07
Address 0x30: dc ff ff ff 54 32 30 32 37 43 41 2d 34 32 46 42
Address 0x40: 23 23 23 00 01 43 4f 55 43 41 4c 44 42 41 41 52
Address 0x50: 45 2d 53 2d 31 38 30 30 58 34 2d 31 36 47 2d 53
Address 0x60: 00 00 00 00 00 00 41 30 30 ff ff ff ff ff ff ff
Address 0x70: ff ff ff 4b ff ff ff ff ff ff ff ff ff ff ff ff
ad0    3896 MB VRFCF14096DIHK1 VM4096MB 6145 Compact Flash
ad1    30533 MB UGB94ARF32H0S3-KC UNIGEN-499551-000273 Disk 1
...

```

show chassis hardware (MX960 Router)

```

user@host> show chassis hardware
Hardware inventory:

```

| Item | Version | Part number | Serial number | Description |
|------------------|---------|-------------|---------------|-------------------------|
| Chassis | | | | MX960 |
| Midplane | REV 01 | 710-013698 | AA6082 | MX960 Midplane |
| PIM | Rev 01 | 740-013110 | 000008 | Power Inlet Module |
| PEM 2 | | | | |
| PEM 3 | Rev 01 | 740-013682 | 000038 | PS 1.7kW; 200-240VAC in |
| Routing Engine 0 | REV 00 | 740-015113 | 1000617944 | RE-S-1300 |
| CB 0 | REV 05 | 710-013725 | JK6947 | MX960 Test SCB |
| FPC 4 | REV 01 | 710-013305 | JM7617 | MX960 Test DPC |
| CPU | | | | |
| PIC 0 | | BUILTIN | BUILTIN | 1x 10GE (LAN/WAN) |
| PIC 1 | | BUILTIN | BUILTIN | 10x 1GE |
| FPC 7 | REV 01 | 710-013305 | JL9634 | MX960 Test DPC |
| CPU | | | | |
| PIC 0 | | BUILTIN | BUILTIN | 1x 10GE (LAN/WAN) |
| Xcvr 0 | | NON-JNPR | MYBG65I82C | XFP-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 10x 1GE |
| Xcvr 1 | REV 01 | 740-011782 | P7N0368 | SFP-SX |

| | | | | |
|------------|--------|------------|---------|--------|
| Xcvr 4 | REV 01 | 740-011782 | P8J1W27 | SFP-SX |
| Xcvr 6 | REV 01 | 740-011782 | P8J1VSD | SFP-SX |
| Xcvr 9 | REV 01 | 740-011782 | P8J1W25 | SFP-SX |
| Fan Tray 0 | | | | |
| Fan Tray 1 | | | | |

show chassis hardware (MX960 Router with Bidirectional Optics)

```

user@host> show chassis hardware
Hardware inventory:
Item          Version  Part number  Serial number  Description
Chassis                               JN10BA5B9AFA  MX960
Midplane      REV 03   710-013698  TR0234        MX960 Backplane
FPM Board     REV 03   710-014974  JA0878        Front Panel Display
PDM           Rev 03   740-013110  QCS11135028   Power Distribution Module
PEM 0         Rev 03   740-013682  QCS11154036   PS 1.7kW; 200-240VAC in
PEM 1         Rev 03   740-013682  QCS11154010   PS 1.7kW; 200-240VAC in
PEM 2         Rev 03   740-013682  QCS11154022   PS 1.7kW; 200-240VAC in
Routing Engine 0 REV 06   740-013063  1000691458    RE-S-2000
CB 0          REV 07   710-013385  KA2190        MX SCB
CB 1          REV 07   710-013385  KA0837        MX SCB
FPC 3         REV 02   750-018122  KB3890        DPCE 40x 1GE R
CPU
FPC 4         REV 01   750-018122  KB3889        DPCE 40x 1GE R
CPU           REV 06   710-013713  KB3976        DPC PMB
PIC 0         BUILTIN  BUILTIN      10x 1GE(LAN)
Xcvr 1        REV 01   740-020426  4910549       SFP-1000BASE-BX40-D
Xcvr 2        REV 01   740-020426  4910551       SFP-1000BASE-BX40-D
Xcvr 5        REV 01   740-021340  77E245N00006  SFP-1000BASE-BX10-U
Xcvr 6        REV 01   740-020425  4882821       SFP-1000BASE-BX40-U
Xcvr 8        REV 01   740-020425  4882820       SFP-1000BASE-BX40-U
PIC 1         BUILTIN  BUILTIN      10x 1GE(LAN)
Xcvr 0        REV 01   740-020465  77E555N00894  SFP-1000BASE-BX10-D
Xcvr 1        REV 01   740-020465  75E467X00818  SFP-1000BASE-BX10-D
Xcvr 2        REV 01   740-020465  75E467X00573  SFP-1000BASE-BX10-D
Xcvr 3        REV 01   740-020465  4888227       SFP-1000BASE-BX10-D
Xcvr 4        REV 01   740-020465  4888241       SFP-1000BASE-BX10-D
Xcvr 5        REV 01   740-021340  77E245N00005  SFP-1000BASE-BX10-U
Xcvr 6        REV 01   740-021340  76E245X00487  SFP-1000BASE-BX10-U
Xcvr 7        REV 01   740-021341  5255889       SFP-1000BASE-BX10-U
Xcvr 8        REV 01   740-021341  5255887       SFP-1000BASE-BX10-U
Xcvr 9        REV 01   740-021340  77E245N00004  SFP-1000BASE-BX10-U
PIC 2         BUILTIN  BUILTIN      10x 1GE(LAN)
Xcvr 0        REV 01   740-020424  5007582       SFP-1000BASE-BX10-D
Xcvr 1        REV 01   740-020424  4888187       SFP-1000BASE-BX10-D
Xcvr 2        REV 01   740-020424  4656500       SFP-1000BASE-BX10-D
Xcvr 5        REV 01   740-021341  5255886       SFP-1000BASE-BX10-U
Xcvr 7        REV 01   740-021340  77E245N00003  SFP-1000BASE-BX10-U
Xcvr 8        REV 01   740-021341  5255888       SFP-1000BASE-BX10-U
PIC 3         BUILTIN  BUILTIN      10x 1GE(LAN)
Xcvr 0        REV 01   740-017726  74S184H30341  SFP-EX
Xcvr 1        REV 01   740-017726  4814061       SFP-EX
Xcvr 5        REV 01   740-017726  6ZS184H31108  SFP-EX
Xcvr 9        REV 01   740-021340  76E245X00486  SFP-1000BASE-BX10-U
Fan Tray 0
Fan Tray 1    REV 03   740-014971  TP0850        Fan Tray

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show chassis hardware (MX960 Router with Enhanced MX SCB)

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user@host> show chassis hardware

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Hardware inventory:

| Item | Version | Part number | Serial number | Description |
|------------------|---------|-------------|-----------------|---------------------------|
| Chassis | | | JN1096805AFA | MX960 |
| Midplane | REV 03 | 710-013698 | TR0183 | MX960 Backplane |
| Fan Extender | REV 02 | 710-018051 | JY5227 | Extended Cable Manager |
| FPM Board | REV 03 | 710-014974 | JZ6876 | Front Panel Display |
| PDM | Rev 03 | 740-013110 | QCS11035023 | Power Distribution Module |
| PEM 1 | Rev 03 | 740-013682 | QCS1109400L | PS 1.7kW; 200-240VAC in |
| PEM 2 | Rev 03 | 740-013682 | QCS11094015 | PS 1.7kW; 200-240VAC in |
| PEM 3 | Rev 03 | 740-013682 | QCS11094012 | PS 1.7kW; 200-240VAC in |
| Routing Engine 0 | REV 06 | 740-013063 | 1000687969 | RE-S-2000 |
| Routing Engine 1 | REV 06 | 740-013063 | 1000687955 | RE-S-2000 |
| CB 0 | REV 11 | 750-031391 | YZ6072 | Enhanced MX SCB |
| CB 1 | REV 11 | 750-031391 | YZ6068 | Enhanced MX SCB |
| CB 2 | REV 11 | 750-031391 | YZ6081 | Enhanced MX SCB |
| FPC 0 | REV 01 | 750-018122 | KA5576 | DPCE 40x 1GE R |
| CPU | REV 06 | 710-013713 | KB3961 | DPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 10x 1GE(LAN) |
| Xcvr 0 | REV 01 | 740-011613 | P9F18GF | SFP-SX |
| Xcvr 2 | REV 01 | 740-011782 | P9M0TL9 | SFP-SX |
| Xcvr 7 | REV 01 | 740-011782 | P9P0XXH | SFP-SX |
| Xcvr 9 | REV 01 | 740-011782 | P9M0TN1 | SFP-SX |
| PIC 1 | | BUILTIN | BUILTIN | 10x 1GE(LAN) |
| Xcvr 0 | REV 01 | 740-011613 | PAJ4UHC | SFP-SX |
| PIC 2 | | BUILTIN | BUILTIN | 10x 1GE(LAN) |
| Xcvr 0 | REV 01 | 740-011613 | PFF2CD0 | SFP-SX |
| Xcvr 1 | REV 01 | 740-011613 | PBG3ZUT | SFP-SX |
| Xcvr 2 | REV 01 | 740-011613 | PFF2DDV | SFP-SX |
| Xcvr 5 | REV 01 | 740-011613 | P8E2SST | SFP-SX |
| Xcvr 9 | REV 01 | 740-011782 | PB8329N | SFP-SX |
| PIC 3 | | BUILTIN | BUILTIN | 10x 1GE(LAN) |
| Xcvr 0 | REV 01 | 740-026192 | 1U0201084503342 | SFP-100BASE-BX10-U |
| Xcvr 1 | REV 01 | 740-026193 | 1U1201084503313 | SFP-100BASE-BX10-D |
| Xcvr 2 | REV 01 | 740-011613 | PAJ4Y5B | SFP-SX |
| Xcvr 6 | REV 01 | 740-011782 | P9M0U3M | SFP-SX |
| Xcvr 7 | REV 01 | 740-011782 | P9M0TLA | SFP-SX |
| FPC 1 | REV 16 | 750-031089 | YL0719 | MPC Type 2 3D |
| CPU | REV 06 | 711-030884 | YL1463 | MPC PMB 2G |
| MIC 0 | REV 07 | 750-028387 | JR6500 | 3D 4x 10GE XFP |
| PIC 0 | | BUILTIN | BUILTIN | 2x 10GE XFP |
| Xcvr 0 | REV 01 | 740-014279 | 733019A00154 | XFP-10G-LR |
| Xcvr 1 | REV 02 | 740-014289 | T09F55034 | XFP-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 2x 10GE XFP |
| Xcvr 0 | REV 01 | 740-014279 | 913019B00791 | XFP-10G-LR |
| Xcvr 1 | REV 01 | 740-014289 | 98S803A90384 | XFP-10G-SR |
| MIC 1 | REV 24 | 750-028387 | YJ3950 | 3D 4x 10GE XFP |
| PIC 2 | | BUILTIN | BUILTIN | 2x 10GE XFP |
| Xcvr 0 | REV 02 | 740-014279 | T10B36134 | XFP-10G-LR |
| Xcvr 1 | REV 01 | 740-014289 | T07M86354 | XFP-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 2x 10GE XFP |
| FPC 2 | REV 08 | 710-014219 | JY9654 | DPCE 4x 10GE R |
| CPU | REV 06 | 710-013713 | JZ6549 | DPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 1x 10GE(LAN/WAN) |
| PIC 1 | | BUILTIN | BUILTIN | 1x 10GE(LAN/WAN) |
| PIC 2 | | BUILTIN | BUILTIN | 1x 10GE(LAN/WAN) |
| Xcvr 0 | REV 03 | 740-011571 | C931BK028 | XFP-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 1x 10GE(LAN/WAN) |
| FPC 3 | REV 10 | 750-024199 | XJ6692 | MX FPC Type 3 |
| CPU | REV 03 | 710-022351 | XF5182 | DPC PMB |
| PIC 0 | REV 17 | 750-009553 | RJ2945 | 4x OC-48 SONET |
| Xcvr 1 | REV 01 | 740-011785 | PCP3YLL | SFP-SR |

| | | | | |
|------------|--------|------------|--------------|----------------------|
| Xcvr 3 | REV 01 | 740-011785 | PDSOMRY | SFP-SR |
| PIC 1 | REV 32 | 750-003700 | DP2113 | 1x OC-192 12xMM VSR |
| FPC 5 | REV 25 | 750-028467 | YM8256 | MPC 3D 16x 10GE |
| CPU | REV 10 | 711-029089 | YL3029 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 1 | REV 01 | 740-031980 | AHNOX1Z | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| FPC 7 | REV 02 | 750-031092 | JR6658 | MPC Type 1 3D Q |
| CPU | REV 01 | 711-030884 | JZ9038 | MPC PMB 2G |
| MIC 0 | REV 08 | 750-028392 | JZ8737 | 3D 20x 1GE(LAN) SFP |
| PIC 0 | | BUILTIN | BUILTIN | 10x 1GE(LAN) SFP |
| Xcvr 0 | REV 01 | 740-011782 | PBE2C6Y | SFP-SX |
| Xcvr 2 | | NON-JNPR | U8105N8 | SFP-SX |
| Xcvr 4 | REV 01 | 740-011613 | PFM18EF | SFP-SX |
| Xcvr 7 | REV 01 | 740-011613 | PFF2AM8 | SFP-SX |
| Xcvr 8 | REV 01 | 740-011613 | PFF2CT6 | SFP-SX |
| PIC 1 | | BUILTIN | BUILTIN | 10x 1GE(LAN) SFP |
| Xcvr 0 | REV 01 | 740-011782 | PB82VHH | SFP-SX |
| Xcvr 1 | REV 01 | 740-011613 | PFF2CSW | SFP-SX |
| Xcvr 9 | REV 01 | 740-011613 | PFF2BY0 | SFP-SX |
| QXM 0 | REV 04 | 711-028408 | JR6372 | MPC QXM |
| FPC 8 | REV 05 | 750-024387 | JW9754 | MX FPC Type 2 |
| CPU | REV 03 | 710-022351 | KF1651 | DPC PMB |
| PIC 0 | REV 08 | 750-014730 | DM3664 | 4x OC-3 1x OC-12 SFP |
| Xcvr 0 | REV 01 | 740-016065 | 81S290N00077 | SFP-SR |
| Xcvr 1 | | NON-JNPR | 2191844 | SFP-SR |
| Xcvr 2 | REV 01 | 740-011618 | PD81EE5 | SFP-IR |
| PIC 1 | REV 08 | 750-014637 | DM3671 | 4x OC-12-3 SFP |
| Xcvr 0 | REV 01 | 740-011785 | PCK3UNK | SFP-SR |
| Xcvr 3 | REV 01 | 740-011785 | PDSOMPZ | SFP-SR |
| FPC 10 | REV 04 | 710-013699 | JY4654 | DPCE 40x 1GE R |
| CPU | REV 05 | 710-013713 | JS9717 | DPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 10x 1GE(LAN) |
| Xcvr 5 | REV 01 | 740-011782 | PAR1L72 | SFP-SX |
| Xcvr 6 | REV 01 | 740-011782 | P8N1YQ4 | SFP-SX |
| PIC 1 | | BUILTIN | BUILTIN | 10x 1GE(LAN) |
| PIC 2 | | BUILTIN | BUILTIN | 10x 1GE(LAN) |
| Xcvr 0 | REV 01 | 740-011782 | P8Q2AVL | SFP-SX |
| Xcvr 5 | REV 01 | 740-011782 | PAR1L7B | SFP-SX |
| Xcvr 6 | REV 01 | 740-011782 | PAR1L2J | SFP-SX |
| Xcvr 8 | REV 01 | 740-011782 | P8N1YMY | SFP-SX |
| PIC 3 | | BUILTIN | BUILTIN | 10x 1GE(LAN) |
| Fan Tray 0 | REV 03 | 740-014971 | TP0567 | Fan Tray |
| Fan Tray 1 | REV 03 | 740-014971 | TP0702 | Fan Tray |

show chassis hardware models (MX960 Router with Enhanced MX SCB)

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user@host> show chassis hardware models
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Hardware inventory:
```

| Item | Version | Part number | Serial number | FRU model number |
|------------------|---------|-------------|---------------|------------------|
| Midplane | REV 03 | 710-013698 | TR0183 | CHAS-BP-MX960-S |
| Fan Extender | REV 02 | 710-018051 | JY5227 | ECM-MX960 |
| FPM Board | REV 03 | 710-014974 | JZ6876 | CRAFT-MX960-S |
| Routing Engine 0 | REV 06 | 740-013063 | 1000687969 | RE-S-2000-4096-S |
| Routing Engine 1 | REV 06 | 740-013063 | 1000687955 | RE-S-2000-4096-S |
| CB 0 | REV 11 | 750-031391 | YZ6072 | SCBE-MX-S |
| CB 1 | REV 11 | 750-031391 | YZ6068 | SCBE-MX-S |
| CB 2 | REV 11 | 750-031391 | YZ6081 | SCBE-MX-S |
| FPC 0 | REV 01 | 750-018122 | KA5576 | DPCE-R-40GE-SFP |

| | | | | |
|------------|--------|------------|--------|------------------------|
| FPC 1 | REV 16 | 750-031089 | YL0719 | MX-MPC2-3D |
| MIC 0 | REV 07 | 750-028387 | JR6500 | MIC-3D-4XGE-XFP |
| MIC 1 | REV 24 | 750-028387 | YJ3950 | MIC-3D-4XGE-XFP |
| FPC 2 | REV 08 | 710-014219 | JY9654 | DPC-R-4XGE-XFP |
| FPC 3 | REV 10 | 750-024199 | XJ6692 | MX-FPC3 |
| PIC 0 | REV 17 | 750-009553 | RJ2945 | PC-40C48-SON-SFP |
| PIC 1 | REV 32 | 750-003700 | DP2113 | PC-10C192-SON-VSR |
| FPC 5 | REV 25 | 750-028467 | YM8256 | MPC-3D-16XGE-SFPP |
| FPC 7 | REV 02 | 750-031092 | JR6658 | MX-MPC1-3D-Q |
| MIC 0 | REV 08 | 750-028392 | JZ8737 | MIC-3D-20GE-SFP |
| FPC 8 | REV 05 | 750-024387 | JW9754 | MX-FPC2 |
| PIC 0 | REV 08 | 750-014730 | DM3664 | PB-40C3-10C12-SON2-SFP |
| PIC 1 | REV 08 | 750-014637 | DM3671 | PB-40C3-40C12-SON-SFP |
| FPC 10 | REV 04 | 710-013699 | JY4654 | DPC-R-40GE-SFP |
| Fan Tray 0 | REV 03 | 740-014971 | TP0567 | FFANTRAY-MX960-S |
| Fan Tray 1 | REV 03 | 740-014971 | TP0702 | FFANTRAY-MX960-S |

show chassis hardware (MX960 Router with MPC5EQ)

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user@host> show chassis hardware
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Hardware inventory:
```

| Item | Version | Part number | Serial number | Description |
|------------------|---------|-------------|---------------|---------------------------|
| Chassis | | | JN1214852AFA | MX960 |
| Midplane | REV 01 | 710-030012 | ACAX3674 | MX960 Backplane |
| FPM Board | REV 03 | 710-014974 | CAAZ9326 | Front Panel Display |
| PDM | Rev 03 | 740-013110 | QCS17025017 | Power Distribution Module |
| PEM 0 | Rev 10 | 740-027760 | QCS1702N062 | PS 4.1kW; 200-240V AC |
| in | | | | |
| PEM 1 | Rev 04 | 740-027760 | QCS1422N02C | PS 4.1kW; 200-240V AC |
| in | | | | |
| PEM 2 | Rev 09 | 740-027760 | QCS1614N01X | PS 4.1kW; 200-240V AC |
| in | | | | |
| Routing Engine 0 | REV 08 | 740-031116 | 9009131803 | RE-S-1800x4 |
| Routing Engine 1 | REV 08 | 740-031116 | 9009124913 | RE-S-1800x4 |
| CB 0 | REV 18 | 750-031391 | CABF0579 | Enhanced MX SCB |
| CB 1 | REV 16 | 750-031391 | CAAZ2471 | Enhanced MX SCB |
| CB 2 | REV 16 | 750-031391 | CAAW9595 | Enhanced MX SCB |
| FPC 0 | REV 18 | 750-046005 | CACE6574 | MPC5E 3D Q 2CGE+4XGE |
| CPU | REV 09 | 711-045719 | CACG8908 | RMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 2X10GE SFPP OTN |
| Xcvr 0 | REV 01 | 740-021308 | AQA0DYT | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | AQGOMS7 | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 1X100GE CFP2 OTN |
| Xcvr 0 | REV 01 | 740-046563 | XD16FC03Z | CFP2-100G-SR10 |
| PIC 2 | | BUILTIN | BUILTIN | 2X10GE SFPP OTN |
| Xcvr 0 | REV 01 | 740-021308 | ANAONAJ | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | AQGOMRQ | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 1X100GE CFP2 OTN |
| Xcvr 0 | REV 01 | 740-049775 | J13K72993 | CFP2-100G-LR4 |
| FPC 1 | REV 11 | 750-045372 | CABK8154 | MPCE Type 3 3D |
| CPU | REV 08 | 711-035209 | CABE7370 | HMPC PMB 2G |
| MIC 0 | REV 07 | 750-033307 | CABD5255 | 10X10GE SFPP |
| PIC 0 | | BUILTIN | BUILTIN | 10X10GE SFPP |
| Xcvr 0 | REV 01 | 740-021308 | AQ50319 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | AQ5035V | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-021308 | AQ502XJ | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021308 | AQ43HHR | SFP+-10G-SR |
| Xcvr 4 | REV 01 | 740-021308 | AQ502YA | SFP+-10G-SR |
| Xcvr 5 | REV 01 | 740-021308 | AQ502EU | SFP+-10G-SR |
| Xcvr 6 | REV 01 | 740-021308 | AQ502HR | SFP+-10G-SR |
| Xcvr 7 | REV 01 | 740-021308 | AQ502A6 | SFP+-10G-SR |

| | | | | |
|--------|--------|------------|-----------|----------------------|
| Xcvr 8 | REV 01 | 740-021308 | AQ43H8M | SFP+-10G-SR |
| MIC 1 | REV 14 | 750-033196 | CAAP1398 | 1X100GE CXP |
| PIC 2 | | BUILTIN | BUILTIN | 1X100GE CXP |
| Xcvr 0 | REV 01 | 740-046563 | XD16FC064 | CFP-100G-SR10 |
| FPC 3 | REV 35 | 750-028467 | CAAT9156 | MPC 3D 16x 10GE |
| CPU | REV 11 | 711-029089 | CAAV4645 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-021308 | AQ43HZ1 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | AQ43HZC | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-021308 | AQ43HD2 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021308 | AQ502HN | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-021308 | AQ43HGF | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | AQ501RZ | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-021308 | AQ5029V | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021308 | AQ501X9 | SFP+-10G-SR |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-021308 | AQ502ZN | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | AQ43H86 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-021308 | AQ502ZY | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021308 | AQ502PZ | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-021308 | AQ503E6 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | AQ502XN | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | B11F00213 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021308 | AQ50336 | SFP+-10G-SR |
| FPC 4 | REV 18 | 750-046005 | CACE6568 | MPC5E 3D Q 2CGE+4XGE |
| CPU | REV 09 | 711-045719 | CACG8900 | RMPD PMB |
| PIC 0 | | BUILTIN | BUILTIN | 2X10GE SFPP OTN |
| Xcvr 0 | REV 01 | 740-021308 | AQA095A | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | AQGOM1E | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 1X100GE CFP2 OTN |
| Xcvr 0 | | NON-JNPR | FE13F000F | CFP2-100G-SR10 |
| PIC 2 | | BUILTIN | BUILTIN | 2X10GE SFPP OTN |
| Xcvr 0 | REV 01 | 740-021308 | AQGOLYC | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | AQGOLYB | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 1X100GE CFP2 OTN |
| Xcvr 0 | REV 01 | 740-048813 | XD32FE00Z | CFP2-100G-SR10 |
| FPC 5 | REV 18 | 750-046005 | CACE6577 | MPC5E 3D Q 2CGE+4XGE |
| CPU | REV 09 | 711-045719 | CACG8902 | RMPD PMB |
| PIC 0 | | BUILTIN | BUILTIN | 2X10GE SFPP OTN |
| Xcvr 0 | REV 01 | 740-021308 | AQGOMXE | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | AQGOLVY | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 1X100GE CFP2 OTN |
| Xcvr 0 | REV 01 | 740-046563 | XD16FC03T | CFP2-100G-SR10 |
| PIC 2 | | BUILTIN | BUILTIN | 2X10GE SFPP OTN |
| Xcvr 0 | REV 01 | 740-021308 | AQGOLW1 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | AQGOLW3 | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 1X100GE CFP2 OTN |
| Xcvr 0 | | NON-JNPR | FE13F000J | CFP2-100G-SR10 |
| FPC 7 | REV 09 | 750-037355 | CAAF0937 | MPC4E 3D 2CGE+8XGE |
| CPU | REV 08 | 711-035209 | CAAD8004 | HMPD PMB 2G |
| PIC 0 | | BUILTIN | BUILTIN | 4x10GE SFPP |
| Xcvr 0 | REV 01 | 740-021308 | ANAOMM3 | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 1X100GE CFP |
| Xcvr 0 | REV 01 | 740-035329 | X000C163 | CFP-100G-SR10 |
| PIC 2 | | BUILTIN | BUILTIN | 4x10GE SFPP |
| Xcvr 0 | REV 01 | 740-021308 | AQGOMS6 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | AQGOMRX | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-021308 | AQGOM6Y | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021308 | AQGOLZM | SFP+-10G-SR |

| | | | | |
|----------|-------------|------------|--------------|------------------------|
| PIC 3 | | BUILTIN | BUILTIN | 1X100GE CFP |
| Xcvr 0 | REV 01 | 740-035329 | X12J00499 | CFP-100G-SR10 |
| FPC 8 | REV 39 | 750-045715 | CACD1903 | MPC5E 3D Q 24XGE+6XLGE |
| CPU | REV 09 | 711-045719 | CACD1815 | RMPD PMB |
| PIC 0 | | BUILTIN | BUILTIN | 12X10GE SFPP OTN |
| PIC 1 | | BUILTIN | BUILTIN | 12X10GE SFPP OTN |
| PIC 2 | | BUILTIN | BUILTIN | 3X40GE QSFPP |
| Xcvr 0 | REV 01 | 740-046565 | QC480289 | QSFP+-40G-SR4 |
| Xcvr 1 | REV 01 | 740-046565 | QC480274 | QSFP+-40G-SR4 |
| Xcvr 2 | REV 01 | 740-046565 | QD130190 | QSFP+-40G-SR4 |
| PIC 3 | | BUILTIN | BUILTIN | 3X40GE QSFPP |
| Xcvr 0 | REV 01 | 740-046565 | QD130197 | QSFP+-40G-SR4 |
| Xcvr 1 | REV 01 | 740-046565 | QD130180 | QSFP+-40G-SR4 |
| Xcvr 2 | REV 01 | 740-046565 | QD130199 | QSFP+-40G-SR4 |
| WAN MEZZ | REV 09 | 750-049136 | CABN0415 | MPC5E 24XGE OTN Mezz |
| FPC 9 | REV 05 | 750-044444 | CAAY9801 | MPCE Type 2 3D P |
| CPU | REV 04 | 711-038484 | CAAW3673 | MPCE PMB 2G |
| MIC 0 | REV 28 | 750-028387 | CAAX1071 | 3D 4x 10GE XFP |
| PIC 0 | | BUILTIN | BUILTIN | 2x 10GE XFP |
| Xcvr 0 | | NON-JNPR | T12L92342 | XFP-10G-SR |
| Xcvr 1 | | NON-JNPR | T12L92303 | XFP-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 2x 10GE XFP |
| Xcvr 0 | | NON-JNPR | CC07BK02X | XFP-10G-SR |
| QXM 0 | REV 06 | 711-028408 | CAAW4883 | MPC QXM |
| QXM 1 | REV 06 | 711-028408 | CAAW4603 | MPC QXM |
| FPC 10 | REV 21.0.11 | 750-045715 | CAAY3541 | MPC5E 3D Q 24XGE+6XLGE |
| CPU | REV 07 | 711-045719 | CAAW7426 | RMPD PMB |
| PIC 0 | | BUILTIN | BUILTIN | 12X10GE SFPP |
| Xcvr 0 | REV 01 | 740-031980 | AHK01AP | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | AQ502ZU | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AP41BLS | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021308 | AQA08YA | SFP+-10G-SR |
| Xcvr 4 | REV 01 | 740-021308 | AQA0K26 | SFP+-10G-SR |
| Xcvr 6 | REV 01 | 740-021308 | AQA06S3 | SFP+-10G-SR |
| Xcvr 7 | REV 01 | 740-021308 | AQA06AS | SFP+-10G-SR |
| Xcvr 8 | REV 01 | 740-021308 | AQA053N | SFP+-10G-SR |
| Xcvr 9 | REV 01 | 740-021308 | AQA0E97 | SFP+-10G-SR |
| Xcvr 10 | REV 01 | 740-021308 | AQA0GS4 | SFP+-10G-SR |
| Xcvr 11 | REV 01 | 740-021308 | AQA0JVA | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 12X10GE SFPP |
| Xcvr 0 | REV 01 | 740-021308 | AQA057A | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | ANA0MLS | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-021308 | AQA093A | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021309 | 943153A00075 | SFP+-10G-LR |
| Xcvr 4 | REV 01 | 740-021308 | AQA077B | SFP+-10G-SR |
| Xcvr 5 | REV 01 | 740-021308 | AQA0JSC | SFP+-10G-SR |
| Xcvr 6 | REV 01 | 740-021308 | AQA0735 | SFP+-10G-SR |
| Xcvr 7 | REV 01 | 740-021308 | AQ5028N | SFP+-10G-SR |
| Xcvr 8 | REV 01 | 740-031980 | AP40VN5 | SFP+-10G-SR |
| Xcvr 9 | REV 01 | 740-021308 | AQA0K0J | SFP+-10G-SR |
| Xcvr 10 | REV 01 | 740-021308 | AQA07AP | SFP+-10G-SR |
| Xcvr 11 | REV 01 | 740-021308 | AQA08YB | SFP+-10G-SR |
| PIC 2 | | BUILTIN | BUILTIN | 3X40GE QSFPP |
| PIC 3 | | BUILTIN | BUILTIN | 3X40GE QSFPP |
| WAN MEZZ | REV 07 | 750-045717 | CAAX3123 | MPC5E 24XGE Mezz |
| FPC 11 | REV 17 | 750-037355 | CAAT3986 | MPC4E 3D 2CGE+8XGE |
| CPU | REV 08 | 711-035209 | CAAR3972 | HMPD PMB 2G |
| PIC 0 | | BUILTIN | BUILTIN | 4x10GE SFPP |
| Xcvr 0 | REV 01 | 740-021308 | AQA0DSE | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | AQ501Y3 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-021308 | AQ501XU | SFP+-10G-SR |

| | | | | |
|------------|--------|------------|-----------|-------------------|
| Xcvr 3 | REV 01 | 740-021308 | AQ5036Y | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 1X100GE CFP |
| Xcvr 0 | | NON-JNPR | X12J00247 | CFP-100G-SR10 |
| PIC 2 | | BUILTIN | BUILTIN | 4x10GE SFPP |
| Xcvr 0 | REV 01 | 740-031980 | ALQ1DKF | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AJ403YA | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AP40TY0 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | ALQ14G0 | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 1X100GE CFP |
| Xcvr 0 | REV 01 | 740-035329 | X12J00095 | CFP-100G-SR10 |
| Fan Tray 0 | REV 08 | 740-031521 | ACAF4219 | Enhanced Fan Tray |
| Fan Tray 1 | REV 08 | 740-031521 | ACAF4225 | Enhanced Fan Tray |

show chassis hardware detail (MX960 Router)

```
user@host> show chassis hardware detail
Hardware inventory:
Item          Version  Part number  Serial number  Description
Chassis
Midplane      REV 01    710-013698   AA6082         MX960 Midplane
PIM           Rev 01    740-013110   000008         Power Inlet Module
PEM 2
PEM 3         Rev 01    740-013682   000038         PS 1.7kW; 200-240VAC in
Routing Engine 0 REV 00    740-015113   1000617944     RE-S-1300
  ad0        245 MB   SanDisk     SDCFB-256      111419E1805T1141 Compact Flash
  ad2        38154 MB FUJITSU     MHT2040BH      NROWT5925N77    Hard Disk
CB 0          REV 05    710-013725   JK6947         MX960 Test SCB
FPC 4         REV 01    710-013305   JM7617         MX960 Test DPC
CPU
PIC 0
PIC 1
FPC 7         REV 01    710-013305   JL9634         MX960 Test DPC
CPU
PIC 0
Xcvr 0
PIC 1
Xcvr 1        REV 01    740-011782   P7N0368        SFP-SX
Xcvr 4        REV 01    740-011782   P8J1W27        SFP-SX
Xcvr 6        REV 01    740-011782   P8J1VSD        SFP-SX
Xcvr 9        REV 01    740-011782   P8J1W25        SFP-SX
Fan Tray 0
Fan Tray 1
```

show chassis hardware detail (MX960 Router with MPC5EQ)

```
user@host> show chassis hardware detail
Hardware inventory:
Item          Version  Part number  Serial number  Description
Chassis
Midplane      REV 01    710-030012   ACAX3674       MX960 Backplane
FPM Board     REV 03    710-014974   CAAZ9326       Front Panel Display
PDM           Rev 03    740-013110   QCS17025017    Power Distribution Module
PEM 0         Rev 10    740-027760   QCS1702N062    PS 4.1kW; 200-240V AC
in
PEM 1         Rev 04    740-027760   QCS1422N02C    PS 4.1kW; 200-240V AC
in
PEM 2         Rev 09    740-027760   QCS1614N01X    PS 4.1kW; 200-240V AC
in
Routing Engine 0 REV 08    740-031116   9009131803     RE-S-1800x4
  ad0        3831 MB   UGB30SFA4000T1 SFA4000T1 000016CD Compact Flash
```

| | | | | |
|------------------|----------|---------------------|--------------------|---------------|
| ad1 | 30533 MB | UGB94BPH32H0S1-KCI | 11000061346 | Disk 1 |
| usb0 (addr 1) | | EHCI root hub 0 | Intel | uhub0 |
| usb0 (addr 2) | | product 0x0020 32 | vendor 0x8087 | uhub1 |
| DIMM 0 | | VL31B5263F-F8SD DIE | REV-0 PCB REV-0 | MFR ID-ce80 |
| DIMM 1 | | VL31B5263F-F8SD DIE | REV-0 PCB REV-0 | MFR ID-ce80 |
| DIMM 2 | | VL31B5263F-F8SD DIE | REV-0 PCB REV-0 | MFR ID-ce80 |
| DIMM 3 | | VL31B5263F-F8SD DIE | REV-0 PCB REV-0 | MFR ID-ce80 |
| Routing Engine 1 | | REV 08 | 740-031116 | 9009124913 |
| ad0 | 3831 MB | UGB30SFA4000T1 | SFA4000T1 0000106D | Compact Flash |
| ad1 | 30533 MB | UGB94BPH32H0S1-KCI | 11000052402 | Disk 1 |
| CB 0 | | REV 18 | 750-031391 | CABF0579 |
| CB 1 | | REV 16 | 750-031391 | CAAZ2471 |
| CB 2 | | REV 16 | 750-031391 | CAAW9595 |
| FPC 0 | | REV 18 | 750-046005 | CACE6574 |
| CPU | | REV 09 | 711-045719 | CACG8908 |
| PIC 0 | | | BUILTIN | BUILTIN |
| Xcvr 0 | | REV 01 | 740-021308 | AQA0DYT |
| Xcvr 1 | | REV 01 | 740-021308 | AQGOMS7 |
| PIC 1 | | | BUILTIN | BUILTIN |
| Xcvr 0 | | REV 01 | 740-046563 | XD16FC03Z |
| PIC 2 | | | BUILTIN | BUILTIN |
| Xcvr 0 | | REV 01 | 740-021308 | ANAONAJ |
| Xcvr 1 | | REV 01 | 740-021308 | AQGOMRQ |
| PIC 3 | | | BUILTIN | BUILTIN |
| Xcvr 0 | | REV 01 | 740-049775 | J13K72993 |
| FPC 1 | | REV 11 | 750-045372 | CABK8154 |
| CPU | | REV 08 | 711-035209 | CABE7370 |
| MIC 0 | | REV 07 | 750-033307 | CABD5255 |
| PIC 0 | | | BUILTIN | BUILTIN |
| Xcvr 0 | | REV 01 | 740-021308 | AQ50319 |
| Xcvr 1 | | REV 01 | 740-021308 | AQ5035V |
| Xcvr 2 | | REV 01 | 740-021308 | AQ502XJ |
| Xcvr 3 | | REV 01 | 740-021308 | AQ43HHR |
| Xcvr 4 | | REV 01 | 740-021308 | AQ502YA |
| Xcvr 5 | | REV 01 | 740-021308 | AQ502EU |
| Xcvr 6 | | REV 01 | 740-021308 | AQ502HR |
| Xcvr 7 | | REV 01 | 740-021308 | AQ502A6 |
| Xcvr 8 | | REV 01 | 740-021308 | AQ43H8M |
| MIC 1 | | REV 14 | 750-033196 | CAAP1398 |
| PIC 2 | | | BUILTIN | BUILTIN |
| Xcvr 0 | | REV 01 | 740-046563 | XD16FC064 |
| FPC 3 | | REV 35 | 750-028467 | CAAT9156 |
| CPU | | REV 11 | 711-029089 | CAAV4645 |
| PIC 0 | | | BUILTIN | BUILTIN |
| Xcvr 0 | | REV 01 | 740-021308 | AQ43HZ1 |
| Xcvr 1 | REV 01 | 740-021308 | AQ43HZC | SFP+-10G-SR |
| Xcvr 2 | | REV 01 | 740-021308 | AQ43HD2 |
| Xcvr 3 | | REV 01 | 740-021308 | AQ502HN |
| PIC 1 | | | BUILTIN | BUILTIN |
| Xcvr 0 | | REV 01 | 740-021308 | AQ43HGF |
| Xcvr 1 | | REV 01 | 740-021308 | AQ501RZ |
| Xcvr 2 | | REV 01 | 740-021308 | AQ5029V |
| Xcvr 3 | | REV 01 | 740-021308 | AQ501X9 |
| PIC 2 | | | BUILTIN | BUILTIN |
| Xcvr 0 | | REV 01 | 740-021308 | AQ502ZN |
| Xcvr 1 | | REV 01 | 740-021308 | AQ43H86 |
| Xcvr 2 | | REV 01 | 740-021308 | AQ502ZY |
| Xcvr 3 | | REV 01 | 740-021308 | AQ502PZ |
| PIC 3 | | | BUILTIN | BUILTIN |
| Xcvr 0 | | REV 01 | 740-021308 | AQ503E6 |
| Xcvr 1 | | REV 01 | 740-021308 | AQ502XN |

| | | | | |
|----------|--------|------------|-----------|------------------------|
| Xcvr 2 | REV 01 | 740-031980 | B11F00213 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021308 | AQ50336 | SFP+-10G-SR |
| FPC 4 | REV 18 | 750-046005 | CACE6568 | MPC5E 3D Q 2CGE+4XGE |
| CPU | REV 09 | 711-045719 | CACG8900 | RMPD PMB |
| PIC 0 | | BUILTIN | BUILTIN | 2X10GE SFPP OTN |
| Xcvr 0 | REV 01 | 740-021308 | AQA095A | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | AQGOM1E | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 1X100GE CFP2 OTN |
| Xcvr 0 | | NON-JNPR | FE13F000F | CFP2-100G-SR10 |
| PIC 2 | | BUILTIN | BUILTIN | 2X10GE SFPP OTN |
| Xcvr 0 | REV 01 | 740-021308 | AQGOLYC | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | AQGOLYB | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 1X100GE CFP2 OTN |
| Xcvr 0 | REV 01 | 740-048813 | XD32FE00Z | CFP2-100G-SR10 |
| FPC 5 | REV 18 | 750-046005 | CACE6577 | MPC5E 3D Q 2CGE+4XGE |
| CPU | REV 09 | 711-045719 | CACG8902 | RMPD PMB |
| PIC 0 | | BUILTIN | BUILTIN | 2X10GE SFPP OTN |
| Xcvr 0 | REV 01 | 740-021308 | AQGOMXE | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | AQGOLVY | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 1X100GE CFP2 OTN |
| Xcvr 0 | REV 01 | 740-046563 | XD16FC03T | CFP2-100G-SR10 |
| PIC 2 | | BUILTIN | BUILTIN | 2X10GE SFPP OTN |
| Xcvr 0 | REV 01 | 740-021308 | AQGOLW1 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | AQGOLW3 | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 1X100GE CFP2 OTN |
| Xcvr 0 | | NON-JNPR | FE13F000J | CFP2-100G-SR10 |
| FPC 7 | REV 09 | 750-037355 | CAAF0937 | MPC4E 3D 2CGE+8XGE |
| CPU | REV 08 | 711-035209 | CAAD8004 | HMPD PMB 2G |
| PIC 0 | | BUILTIN | BUILTIN | 4x10GE SFPP |
| Xcvr 0 | REV 01 | 740-021308 | ANAOMM3 | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 1X100GE CFP |
| Xcvr 0 | REV 01 | 740-035329 | X000C163 | CFP-100G-SR10 |
| PIC 2 | | BUILTIN | BUILTIN | 4x10GE SFPP |
| Xcvr 0 | REV 01 | 740-021308 | AQGOMS6 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | AQGOMRX | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-021308 | AQGOM6Y | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021308 | AQGOLZM | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 1X100GE CFP |
| Xcvr 0 | REV 01 | 740-035329 | X12J00499 | CFP-100G-SR10 |
| FPC 8 | REV 39 | 750-045715 | CACD1903 | MPC5E 3D Q 24XGE+6XLGE |
| CPU | REV 09 | 711-045719 | CACD1815 | RMPD PMB |
| PIC 0 | | BUILTIN | BUILTIN | 12X10GE SFPP OTN |
| PIC 1 | | BUILTIN | BUILTIN | 12X10GE SFPP OTN |
| PIC 2 | | BUILTIN | BUILTIN | 3X40GE QSFPP |
| Xcvr 0 | REV 01 | 740-046565 | QC480289 | QSFP+-40G-SR4 |
| Xcvr 1 | REV 01 | 740-046565 | QC480274 | QSFP+-40G-SR4 |
| Xcvr 2 | REV 01 | 740-046565 | QD130190 | QSFP+-40G-SR4 |
| PIC 3 | | BUILTIN | BUILTIN | 3X40GE QSFPP |
| Xcvr 0 | REV 01 | 740-046565 | QD130197 | QSFP+-40G-SR4 |
| Xcvr 1 | REV 01 | 740-046565 | QD130180 | QSFP+-40G-SR4 |
| Xcvr 2 | REV 01 | 740-046565 | QD130199 | QSFP+-40G-SR4 |
| WAN MEZZ | REV 09 | 750-049136 | CABN0415 | MPC5E 24XGE OTN Mezz |
| FPC 9 | REV 05 | 750-044444 | CAAY9801 | MPCE Type 2 3D P |
| CPU | REV 04 | 711-038484 | CAAW3673 | MPCE PMB 2G |
| MIC 0 | REV 28 | 750-028387 | CAAX1071 | 3D 4x 10GE XFP |
| PIC 0 | | BUILTIN | BUILTIN | 2x 10GE XFP |
| Xcvr 0 | | NON-JNPR | T12L92342 | XFP-10G-SR |
| Xcvr 1 | | NON-JNPR | T12L92303 | XFP-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 2x 10GE XFP |
| Xcvr 0 | | NON-JNPR | CC07BK02X | XFP-10G-SR |
| QXM 0 | REV 06 | 711-028408 | CAAW4883 | MPD QXM |

| | | | | |
|------------|-------------|------------|--------------|------------------------|
| QXM 1 | REV 06 | 711-028408 | CAAW4603 | MPC QXM |
| FPC 10 | REV 21.0.11 | 750-045715 | CAAY3541 | MPC5E 3D Q 24XGE+6XLGE |
| CPU | REV 07 | 711-045719 | CAAW7426 | RMPM PMB |
| PIC 0 | | BUILTIN | BUILTIN | 12X10GE SFPP |
| Xcvr 0 | REV 01 | 740-031980 | AHK01AP | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | AQ502ZU | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AP41BLS | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021308 | AQA08YA | SFP+-10G-SR |
| Xcvr 4 | REV 01 | 740-021308 | AQA0K26 | SFP+-10G-SR |
| Xcvr 6 | REV 01 | 740-021308 | AQA06S3 | SFP+-10G-SR |
| Xcvr 7 | REV 01 | 740-021308 | AQA06AS | SFP+-10G-SR |
| Xcvr 8 | REV 01 | 740-021308 | AQA053N | SFP+-10G-SR |
| Xcvr 9 | REV 01 | 740-021308 | AQA0E97 | SFP+-10G-SR |
| Xcvr 10 | REV 01 | 740-021308 | AQA0GS4 | SFP+-10G-SR |
| Xcvr 11 | REV 01 | 740-021308 | AQA0JVA | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 12X10GE SFPP |
| Xcvr 0 | REV 01 | 740-021308 | AQA057A | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | ANA0MLS | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-021308 | AQA093A | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021309 | 943153A00075 | SFP+-10G-LR |
| Xcvr 4 | REV 01 | 740-021308 | AQA077B | SFP+-10G-SR |
| Xcvr 5 | REV 01 | 740-021308 | AQA0JSC | SFP+-10G-SR |
| Xcvr 6 | REV 01 | 740-021308 | AQA0735 | SFP+-10G-SR |
| Xcvr 7 | REV 01 | 740-021308 | AQ5028N | SFP+-10G-SR |
| Xcvr 8 | REV 01 | 740-031980 | AP40VN5 | SFP+-10G-SR |
| Xcvr 9 | REV 01 | 740-021308 | AQA0K0J | SFP+-10G-SR |
| Xcvr 10 | REV 01 | 740-021308 | AQA07AP | SFP+-10G-SR |
| Xcvr 11 | REV 01 | 740-021308 | AQA08YB | SFP+-10G-SR |
| PIC 2 | | BUILTIN | BUILTIN | 3X40GE QSFPP |
| PIC 3 | | BUILTIN | BUILTIN | 3X40GE QSFPP |
| WAN MEZZ | REV 07 | 750-045717 | CAAX3123 | MPC5E 24XGE Mezz |
| FPC 11 | REV 17 | 750-037355 | CAAT3986 | MPC4E 3D 2CGE+8XGE |
| CPU | REV 08 | 711-035209 | CAAR3972 | HMPM PMB 2G |
| PIC 0 | | BUILTIN | BUILTIN | 4x10GE SFPP |
| Xcvr 0 | REV 01 | 740-021308 | AQA0DSE | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | AQ501Y3 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-021308 | AQ501XU | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021308 | AQ5036Y | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 1X100GE CFP |
| Xcvr 0 | | NON-JNPR | X12J00247 | CFP-100G-SR10 |
| PIC 2 | | BUILTIN | BUILTIN | 4x10GE SFPP |
| Xcvr 0 | REV 01 | 740-031980 | ALQ1DKF | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AJ403YA | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AP40TY0 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | ALQ14G0 | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 1X100GE CFP |
| Xcvr 0 | REV 01 | 740-035329 | X12J00095 | CFP-100G-SR10 |
| Fan Tray 0 | REV 08 | 740-031521 | ACAF4219 | Enhanced Fan Tray |
| Fan Tray 1 | REV 08 | 740-031521 | ACAF4225 | Enhanced Fan Tray |

show chassis hardware extensive (MX960 Router with MPC5EQ)

```
user@host> show chassis hardware extensive
```

```
Hardware inventory:
```

| Item | Version | Part number | Serial number | Description |
|--------------|------------|-------------------|---------------|-------------|
| Chassis | | | JN1214852AFA | MX960 |
| Jedec Code: | 0x7fb0 | EEPROM Version: | 0x02 | |
| | | S/N: | JN1214852AFA | |
| Assembly ID: | 0x0512 | Assembly Version: | 00.00 | |
| Date: | 00-00-0000 | Assembly Flags: | 0x00 | |
| ID: | MX960 | | | |


```

Board Information Record:
  Address 0x00: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
I2C Hex Data:
  Address 0x00: 7f b0 02 ff 05 12 00 00 00 00 00 00 00 00 00 00
  Address 0x10: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
  Address 0x20: 4a 4e 31 32 31 34 38 35 32 41 46 41 00 00 00 00
  Address 0x30: 00 00 00 ff 00 00 00 00 00 00 00 00 00 00 00 00
  Address 0x40: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
  Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
  Address 0x60: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
  Address 0x70: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Midplane          REV 01   710-030012   ACAX3674           MX960 Backplane
Jedec Code:      0x7fb0           EEPROM Version:      0x02
P/N:             710-030012       S/N:                ACAX3674
Assembly ID:     0x01df           Assembly Version:    01.01
Date:            01-19-2013       Assembly Flags:      0x00
Version:         REV 01           CLEI Code:          COM8T00CRB
ID: MX960 Backplane              FRU Model Number:   CHAS-BP-MX960-S
Board Information Record:
  Address 0x00: ad 01 08 00 54 e0 32 bc 68 00 ff ff ff ff ff ff
I2C Hex Data:
  Address 0x00: 7f b0 02 ff 01 df 01 01 52 45 56 20 30 31 00 00
  Address 0x10: 00 00 00 00 37 31 30 2d 30 33 30 30 31 32 00 00
  Address 0x20: 53 2f 4e 20 41 43 41 58 33 36 37 34 00 13 01 07
  Address 0x30: dd ff ff ff ad 01 08 00 54 e0 32 bc 68 00 ff ff
  Address 0x40: ff ff ff ff 01 43 4f 4d 38 54 30 30 43 52 42 43
  Address 0x50: 48 41 53 2d 42 50 2d 4d 58 39 36 30 2d 53 00 00
  Address 0x60: 00 00 00 00 00 00 42 00 00 ff ff ff ff ff ff ff
  Address 0x70: ff ff ff aa ff ff ff ff ff ff ff ff ff ff ff ff
FPM Board          REV 03   710-014974   CAAZ9326           Front Panel Display
Jedec Code:      0x7fb0           EEPROM Version:      0x01
P/N:             710-014974       S/N:                CAAZ9326
Assembly ID:     0x01e6           Assembly Version:    01.03
Date:            12-31-2012       Assembly Flags:      0x00
Version:         REV 03
ID: Front Panel Display          FRU Model Number:   CRAFT-MX960-S
Board Information Record:
  Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
  Address 0x00: 7f b0 01 ff 01 e6 01 03 52 45 56 20 30 33 00 00
  Address 0x10: 00 00 00 00 37 31 30 2d 30 31 34 39 37 34 00 00
  Address 0x20: 53 2f 4e 20 43 41 41 5a 39 33 32 36 00 1f 0c 07
  Address 0x30: dc ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
  Address 0x40: ff ff ff ff 01 00 00 00 00 00 00 00 00 00 00 43
  Address 0x50: 52 41 46 54 2d 4d 58 39 36 30 2d 53 00 00 00 00
  Address 0x60: 00 00 00 00 00 00 ff ff ff ff ff ff ff ff ff ff
  Address 0x70: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
PDM                Rev 03   740-013110   QCS17025017       Power Distribution Module
Jedec Code:      0x7fb0           EEPROM Version:      0x01
P/N:             740-013110       S/N:                QCS17025017
Assembly ID:     0x0416           Assembly Version:    01.03
Date:            01-10-2013       Assembly Flags:      0x00
Version:         Rev 03
ID: Power Distribution Module
Board Information Record:
  Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff 00 00 00
I2C Hex Data:
  Address 0x00: 7f b0 01 ff 04 16 01 03 52 65 76 20 30 33 00 00
  Address 0x10: 00 00 00 00 37 34 30 2d 30 31 33 31 31 30 00 00
  Address 0x20: 51 43 53 31 37 30 32 35 30 31 37 00 00 0a 01 07
  Address 0x30: dd ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff

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Address 0x40: ff 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x70: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
PEM 0          Rev 10   740-027760   QCS1702N062   PS 4.1kW; 200-240V AC
in
Jedec Code:    0x7fb0          EEPROM Version: 0x01
P/N:           740-027760      S/N:           QCS1702N062
Assembly ID:   0x0430          Assembly Version: 01.10
Date:          01-15-2013      Assembly Flags: 0x00
Version:       Rev 10
ID: PS 4.1kW; 200-240V AC in   FRU Model Number: PWR-MX960-4100-AC-S
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff 00 00 00 00
I2C Hex Data:
Address 0x00: 7f b0 01 ff 04 30 01 0a 52 65 76 20 31 30 00 00
Address 0x10: 00 00 00 00 37 34 30 2d 30 32 37 37 36 30 00 00
Address 0x20: 51 43 53 31 37 30 32 4e 30 36 32 00 00 0f 01 07
Address 0x30: dd ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: 00 00 00 00 01 00 00 00 00 00 00 00 00 00 00 50
Address 0x50: 57 52 2d 4d 58 39 36 30 2d 34 31 30 30 2d 41 43
Address 0x60: 2d 53 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x70: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
PEM 1          Rev 04   740-027760   QCS1422N02C   PS 4.1kW; 200-240V AC
in
Jedec Code:    0x7fb0          EEPROM Version: 0x01
P/N:           740-027760      S/N:           QCS1422N02C
Assembly ID:   0x0430          Assembly Version: 01.04
Date:          06-04-2010      Assembly Flags: 0x00
Version:       Rev 04
ID: PS 4.1kW; 200-240V AC in   FRU Model Number: PWR-MX960-4100-AC-S
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff 00 00 00 00
I2C Hex Data:
Address 0x00: 7f b0 01 ff 04 30 01 04 52 65 76 20 30 34 00 00
Address 0x10: 00 00 00 00 37 34 30 2d 30 32 37 37 36 30 00 00
Address 0x20: 51 43 53 31 34 32 32 4e 30 32 43 00 00 04 06 07
Address 0x30: da ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: 00 00 00 00 01 00 00 00 00 00 00 00 00 00 00 50
Address 0x50: 57 52 2d 4d 58 39 36 30 2d 34 31 30 30 2d 41 43
Address 0x60: 2d 53 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x70: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
PEM 2          Rev 09   740-027760   QCS1614N01X   PS 4.1kW; 200-240V AC
in
Jedec Code:    0x7fb0          EEPROM Version: 0x01
P/N:           740-027760      S/N:           QCS1614N01X
Assembly ID:   0x0430          Assembly Version: 01.09
Date:          04-07-2012      Assembly Flags: 0x00
Version:       Rev 09
ID: PS 4.1kW; 200-240V AC in   FRU Model Number: PWR-MX960-4100-AC-S
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff 00 00 00 00
I2C Hex Data:
Address 0x00: 7f b0 01 ff 04 30 01 09 52 65 76 20 30 39 00 00
Address 0x10: 00 00 00 00 37 34 30 2d 30 32 37 37 36 30 00 00
Address 0x20: 51 43 53 31 36 31 34 4e 30 31 58 00 00 07 04 07
Address 0x30: dc ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: 00 00 00 00 01 00 00 00 00 00 00 00 00 00 00 50
Address 0x50: 57 52 2d 4d 58 39 36 30 2d 34 31 30 30 2d 41 43
Address 0x60: 2d 53 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x70: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

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Routing Engine 0 REV 08 740-031116 9009131803 RE-S-1800x4
Jedec Code: 0x7fb0 EEPROM Version: 0x02
P/N: 740-031116 S/N: 9009131803
Assembly ID: 0x09c0 Assembly Version: 01.08
Date: 03-04-2013 Assembly Flags: 0x00
Version: REV 08 CLEI Code: COUCASKBAA
ID: RE-S-1800x4 FRU Model Number: RE-S-1800X4-16G-S
Board Information Record:
Address 0x00: 54 32 30 32 37 44 42 2d 34 34 47 42 23 42 23 00
I2C Hex Data:
Address 0x00: 7f b0 02 ff 09 c0 01 08 52 45 56 20 30 38 00 00
Address 0x10: 00 00 00 00 37 34 30 2d 30 33 31 31 31 36 00 00
Address 0x20: 39 30 30 39 31 33 31 38 30 33 00 00 00 04 03 07
Address 0x30: dd ff ff ff 54 32 30 32 37 44 42 2d 34 34 47 42
Address 0x40: 23 42 23 00 01 43 4f 55 43 41 53 4b 42 41 41 52
Address 0x50: 45 2d 53 2d 31 38 30 30 58 34 2d 31 36 47 2d 53
Address 0x60: 00 00 00 00 00 00 41 30 30 ff ff ff ff ff ff ff
Address 0x70: ff ff ff 59 ff ff ff ff ff ff ff ff ff ff ff ff
ad0 3831 MB UGB30SFA4000T1 SFA4000T1 000016CD Compact Flash
ad1 30533 MB UGB94BPH32H0S1-KCI 11000061346 Disk 1
usb0 (addr 1) EHCI root hub 0 Intel uhub0
usb0 (addr 2) product 0x0020 32 vendor 0x8087 uhub1
DIMM 0 VL31B5263F-F8SD DIE REV-0 PCB REV-0 MFR ID-ce80
DIMM 1 VL31B5263F-F8SD DIE REV-0 PCB REV-0 MFR ID-ce80
DIMM 2 VL31B5263F-F8SD DIE REV-0 PCB REV-0 MFR ID-ce80
DIMM 3 VL31B5263F-F8SD DIE REV-0 PCB REV-0 MFR ID-ce80
Routing Engine 1 REV 08 740-031116 9009124913 RE-S-1800x4
Jedec Code: 0x7fb0 EEPROM Version: 0x02
P/N: 740-031116 S/N: 9009124913
Assembly ID: 0x09c0 Assembly Version: 01.08
Date: 01-09-2013 Assembly Flags: 0x00
Version: REV 08 CLEI Code: COUCASKBAA
ID: RE-S-1800x4 FRU Model Number: RE-S-1800X4-16G-S
Board Information Record:
Address 0x00: 54 32 30 32 37 44 42 2d 34 34 47 42 23 42 23 00
I2C Hex Data:
Address 0x00: 7f b0 02 ff 09 c0 01 08 52 45 56 20 30 38 00 00
Address 0x10: 00 00 00 00 37 34 30 2d 30 33 31 31 31 36 00 00
Address 0x20: 39 30 30 39 31 32 34 39 31 33 00 00 00 09 01 07
Address 0x30: dd ff ff ff 54 32 30 32 37 44 42 2d 34 34 47 42
Address 0x40: 23 42 23 00 01 43 4f 55 43 41 53 4b 42 41 41 52
Address 0x50: 45 2d 53 2d 31 38 30 30 58 34 2d 31 36 47 2d 53
Address 0x60: 00 00 00 00 00 00 41 30 30 ff ff ff ff ff ff ff
Address 0x70: ff ff ff 59 ff ff ff ff ff ff ff ff ff ff ff ff
ad0 3831 MB UGB30SFA4000T1 SFA4000T1 0000106D Compact Flash
ad1 30533 MB UGB94BPH32H0S1-KCI 11000052402 Disk 1
CB 0 REV 18 750-031391 CABF0579 Enhanced MX SCB
Jedec Code: 0x7fb0 EEPROM Version: 0x02
P/N: 750-031391 S/N: CABF0579
Assembly ID: 0x09b0 Assembly Version: 01.18
Date: 04-15-2013 Assembly Flags: 0x00
Version: REV 18 CLEI Code: COUCASRBAA
ID: Enhanced MX SCB FRU Model Number: SCBE-MX-S
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 09 b0 01 12 52 45 56 20 31 38 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 33 31 33 39 31 00 00
Address 0x20: 53 2f 4e 20 43 41 42 46 30 35 37 39 00 0f 04 07
Address 0x30: dd ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 43 4f 55 43 41 53 52 42 41 41 53

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Address 0x50: 43 42 45 2d 4d 58 2d 53 00 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 43 00 00 ff ff ff ff ff ff
Address 0x70: ff ff ff 7d ff ff ff ff ff ff ff ff ff ff ff
CB 1          REV 16    750-031391    CAAZ2471          Enhanced MX SCB
Jedec Code:   0x7fb0          EEPROM Version:   0x02
P/N:          750-031391      S/N:          CAAZ2471
Assembly ID:  0x09b0          Assembly Version: 01.16
Date:         03-09-2013      Assembly Flags: 0x00
Version:      REV 16          CLEI Code:     COUCARCBAB
ID: Enhanced MX SCB          FRU Model Number: SCBE-MX-S
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 09 b0 01 10 52 45 56 20 31 36 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 33 31 33 39 31 00 00
Address 0x20: 53 2f 4e 20 43 41 41 5a 32 34 37 31 00 09 03 07
Address 0x30: dd ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 43 4f 55 43 41 52 43 42 41 42 53
Address 0x50: 43 42 45 2d 4d 58 2d 53 00 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 42 00 00 ff ff ff ff ff ff
Address 0x70: ff ff ff 6d ff ff ff ff ff ff ff ff ff ff ff
CB 2          REV 16    750-031391    CAAW9595          Enhanced MX SCB
Jedec Code:   0x7fb0          EEPROM Version:   0x02
P/N:          750-031391      S/N:          CAAW9595
Assembly ID:  0x09b0          Assembly Version: 01.16
Date:         02-01-2013      Assembly Flags: 0x00
Version:      REV 16          CLEI Code:     COUCARCBAB
ID: Enhanced MX SCB          FRU Model Number: SCBE-MX-S
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 09 b0 01 10 52 45 56 20 31 36 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 33 31 33 39 31 00 00
Address 0x20: 53 2f 4e 20 43 41 41 57 39 35 39 35 00 01 02 07
Address 0x30: dd ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 43 4f 55 43 41 52 43 42 41 42 53
Address 0x50: 43 42 45 2d 4d 58 2d 53 00 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 42 00 00 ff ff ff ff ff ff
Address 0x70: ff ff ff 6d ff ff ff ff ff ff ff ff ff ff ff
FPC 0         REV 18    750-046005    CACE6574          MPC5E 3D Q 2CGE+4XGE
Jedec Code:   0x7fb0          EEPROM Version:   0x02
P/N:          750-046005      S/N:          CACE6574
Assembly ID:  0x0b8c          Assembly Version: 01.18
Date:         11-20-2013      Assembly Flags: 0x00
Version:      REV 18          CLEI Code:     PROTOXCLEI
ID: MPC5E 3D Q 2CGE+4XGE      FRU Model Number: PROTO-ASSEMBLY
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 0b 8c 01 12 52 45 56 20 31 38 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 34 36 30 30 35 00 00
Address 0x20: 53 2f 4e 20 43 41 43 45 36 35 37 34 00 14 0b 07
Address 0x30: dd ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 50 52 4f 54 4f 58 43 4c 45 49 50
Address 0x50: 52 4f 54 4f 2d 41 53 53 45 4d 42 4c 59 00 00 00
Address 0x60: 00 00 00 00 00 00 41 30 30 ff ff ff ff ff ff
Address 0x70: ff ff ff c2 ff ff ff ff ff ff ff ff ff ff ff
CPU          REV 09    711-045719    CACG8908          RMPC PMB
Jedec Code:   0x7fb0          EEPROM Version:   0x02
P/N:          711-045719      S/N:          CACG8908
Assembly ID:  0x0b85          Assembly Version: 01.09

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Date:          11-13-2013      Assembly Flags:    0x00
Version:       REV 09
ID: RMPC PMB
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 0b 85 01 09 52 45 56 20 30 39 00 00
Address 0x10: 00 00 00 00 37 31 31 2d 30 34 35 37 31 39 00 00
Address 0x20: 53 2f 4e 20 43 41 43 47 38 39 30 38 00 0d 0b 07
Address 0x30: dd ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 00 50 52 4f 54 4f 58 43 4c 45 49 50
Address 0x50: 52 4f 54 4f 2d 41 53 53 45 4d 42 4c 59 00 00 00
Address 0x60: 00 00 00 00 00 00 41 30 30 ff ff ff ff ff ff
Address 0x70: ff ff ff c2 00 00 00 00 00 00 00 00 00 00 00 00
PIC 0          BUILTIN      BUILTIN          2X10GE SFPP OTN
Jedec Code:    0x0000      EEPROM Version:    0x00
P/N:          BUILTIN      S/N:            BUILTIN
Assembly ID:   0x0a90      Assembly Version: 00.00
Date:         00-00-0000   Assembly Flags:    0x00
ID: 2X10GE SFPP OTN
Board Information Record:
Address 0x00: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
I2C Hex Data:
Address 0x00: 00 00 00 00 0a 90 00 00 00 00 00 00 00 00 00 00
Address 0x10: 00 00 00 00 42 55 49 4c 54 49 4e 00 25 73 3a 20
Address 0x20: 42 55 49 4c 54 49 4e 00 25 73 3a 20 00 00 00 00
Address 0x30: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x40: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x70: 00 00 00 00 c0 02 ae dc 00 00 00 00 0a 6e 00 00
Xcvr 0         REV 01      740-021308    AQA0DYT          SFP+-10G-SR
Xcvr 1         REV 01      740-021308    AQGOMS7          SFP+-10G-SR
PIC 1          BUILTIN      BUILTIN          1X100GE CFP2 OTN
Jedec Code:    0x0000      EEPROM Version:    0x00
P/N:          BUILTIN      S/N:            BUILTIN
Assembly ID:   0x0a6e      Assembly Version: 00.00
Date:         00-00-0000   Assembly Flags:    0x00
ID: 1X100GE CFP2 OTN
Board Information Record:
Address 0x00: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
I2C Hex Data:
Address 0x00: 00 00 00 00 0a 6e 00 00 00 00 00 00 00 00 00 00
Address 0x10: 00 00 00 00 42 55 49 4c 54 49 4e 00 25 73 3a 20
Address 0x20: 42 55 49 4c 54 49 4e 00 25 73 3a 20 00 00 00 00
Address 0x30: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x40: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x70: 00 00 00 00 c0 03 f3 8c 31 5c e7 80 00 00 00 02
Xcvr 0         REV 01      740-046563    XD16FC03Z        CFP2-100G-SR10
PIC 2          BUILTIN      BUILTIN          2X10GE SFPP OTN
Jedec Code:    0x0000      EEPROM Version:    0x00
P/N:          BUILTIN      S/N:            BUILTIN
Assembly ID:   0x0a90      Assembly Version: 00.00
Date:         00-00-0000   Assembly Flags:    0x00
ID: 2X10GE SFPP OTN
Board Information Record:
Address 0x00: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
I2C Hex Data:
Address 0x00: 00 00 00 00 0a 90 00 00 00 00 00 00 00 00 00 00

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Address 0x10: 00 00 00 00 42 55 49 4c 54 49 4e 00 25 73 3a 20
Address 0x20: 42 55 49 4c 54 49 4e 00 25 73 3a 20 00 00 00 00
Address 0x30: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x40: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x70: 00 00 00 00 c0 03 f5 6c 31 5c db 40 00 00 00 02
Xcvr 0      REV 01  740-021308  ANA0NAJ      SFP+-10G-SR
Xcvr 1      REV 01  740-021308  AQGOMRQ     SFP+-10G-SR
PIC 3              BUILTIN      BUILTIN      1X100GE CFP2 OTN
Jedec Code: 0x0000      EEPROM Version: 0x00
P/N:          BUILTIN    S/N:          BUILTIN
Assembly ID: 0x0a6e      Assembly Version: 00.00
Date:         00-00-0000  Assembly Flags: 0x00
ID: 1X100GE CFP2 OTN
Board Information Record:
Address 0x00: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
I2C Hex Data:
Address 0x00: 00 00 00 00 0a 6e 00 00 00 00 00 00 00 00 00 00
Address 0x10: 00 00 00 00 42 55 49 4c 54 49 4e 00 25 73 3a 20
Address 0x20: 42 55 49 4c 54 49 4e 00 25 73 3a 20 00 00 00 00
Address 0x30: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x40: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x70: 00 00 00 00 c0 03 ed ec 31 5c e2 e8 00 00 00 02
Xcvr 0      REV 01  740-049775  J13K72993    CFP2-100G-LR4
FPC 1      REV 11  750-045372  CABK8154     MPCE Type 3 3D
Jedec Code: 0x7fb0      EEPROM Version: 0x02
P/N:          750-045372 S/N:          CABK8154
Assembly ID: 0x09db      Assembly Version: 04.11
Date:         05-18-2013 Assembly Flags: 0x00
Version:      REV 11      CLEI Code:     COUIBBNBAA
ID: MPCE Type 3 3D      FRU Model Number: MX-MPC3E-3D
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 09 db 04 0b 52 45 56 20 31 31 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 34 35 33 37 32 00 00
Address 0x20: 53 2f 4e 20 43 41 42 4b 38 31 35 34 00 12 05 07
Address 0x30: dd ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 43 4f 55 49 42 42 4e 42 41 41 4d
Address 0x50: 58 2d 4d 50 43 33 45 2d 33 44 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 44 00 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff cf ff ff ff ff ff ff ff ff ff ff ff ff
CPU      REV 08  711-035209  CABE7370     HMPC PMB 2G
Jedec Code: 0x7fb0      EEPROM Version: 0x01
P/N:          711-035209 S/N:          CABE7370
Assembly ID: 0x0b04      Assembly Version: 01.08
Date:         05-08-2013 Assembly Flags: 0x00
Version:      REV 08
ID: HMPC PMB 2G
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 01 ff 0b 04 01 08 52 45 56 20 30 38 00 00
Address 0x10: 00 00 00 00 37 31 31 2d 30 33 35 32 30 39 00 00
Address 0x20: 53 2f 4e 20 43 41 42 45 37 33 37 30 00 08 05 07
Address 0x30: dd ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 00 ff ff ff ff ff ff ff ff ff ff ff
Address 0x50: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff

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Address 0x60: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x70: ff ff ff ff 00 00 00 00 00 00 00 00 00 00 00 00
MIC 0          REV 07    750-033307    CABD5255          10X10GE SFPP
Jedec Code:    0x7fb0          EEPROM Version:    0x02
P/N:           750-033307      S/N:         CABD5255
Assembly ID:   0x0a2a          Assembly Version: 02.07
Date:          04-25-2013      Assembly Flags: 0x00
Version:       REV 07          CLEI Code:    COUIBBJBAA
ID: 10X10GE SFPP              FRU Model Number: MIC3-3D-10XGE-SFPP
Board Information Record:
Address 0x00: 34 01 03 03 05 ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 fe 0a 2a 02 07 52 45 56 20 30 37 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 33 33 33 30 37 00 00
Address 0x20: 53 2f 4e 20 43 41 42 44 35 32 35 35 00 19 04 07
Address 0x30: dd ff ff ff 34 01 03 03 05 ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 43 4f 55 49 42 42 4a 42 41 41 4d
Address 0x50: 49 43 33 2d 33 44 2d 31 30 58 47 45 2d 53 46 50
Address 0x60: 50 00 00 00 00 00 41 00 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff 82 c0 03 f0 bc 57 79 83 80 00 00 00 02
PIC 0          BUILTIN      BUILTIN          10X10GE SFPP
Xcvr 0         REV 01      740-021308    AQ50319          SFP+-10G-SR
Xcvr 1         REV 01      740-021308    AQ5035V          SFP+-10G-SR
Xcvr 2         REV 01      740-021308    AQ502XJ          SFP+-10G-SR
Xcvr 3         REV 01      740-021308    AQ43HHR          SFP+-10G-SR
Xcvr 4         REV 01      740-021308    AQ502YA          SFP+-10G-SR
Xcvr 5         REV 01      740-021308    AQ502EU          SFP+-10G-SR
Xcvr 6         REV 01      740-021308    AQ502HR          SFP+-10G-SR
Xcvr 7         REV 01      740-021308    AQ502A6          SFP+-10G-SR
Xcvr 8         REV 01      740-021308    AQ43H8M          SFP+-10G-SR
MIC 1          REV 14      750-033196    CAAP1398          1X100GE CXP
Jedec Code:    0x7fb0          EEPROM Version:    0x02
P/N:           750-033196      S/N:         CAAP1398
Assembly ID:   0x0a29          Assembly Version: 03.14
Date:          10-27-2012      Assembly Flags: 0x00
Version:       REV 14          CLEI Code:    COUIBBKBAA
ID: 1X100GE CXP              FRU Model Number: MIC3-3D-1X100GE-CXP
Board Information Record:
Address 0x00: 34 01 07 07 08 ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 fe 0a 29 03 0e 52 45 56 20 31 34 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 33 33 31 39 36 00 00
Address 0x20: 53 2f 4e 20 43 41 41 50 31 33 39 38 00 1b 0a 07
Address 0x30: dc ff ff ff 34 01 07 07 08 ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 43 4f 55 49 42 42 4b 42 41 41 4d
Address 0x50: 49 43 33 2d 33 44 2d 31 58 31 30 30 47 45 2d 43
Address 0x60: 58 50 00 00 00 00 41 00 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff 96 c0 03 ef cc 57 79 85 08 00 00 00 02
PIC 2          BUILTIN      BUILTIN          1X100GE CXP
Xcvr 0         REV 01      740-046563    XD16FC064        CFP2-100G-SR10
FPC 3         REV 35      750-028467    CAAT9156          MPC 3D 16x 10GE
Jedec Code:    0x7fb0          EEPROM Version:    0x01
P/N:           750-028467      S/N:         CAAT9156
Assembly ID:   0x0997          Assembly Version: 01.35
Date:          12-17-2012      Assembly Flags: 0x00
Version:       REV 35
ID: MPC 3D 16x 10GE          FRU Model Number: MPC-3D-16XGE-SFPP
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 01 ff 09 97 01 23 52 45 56 20 33 35 00 00

```

```

Address 0x10: 00 00 00 00 37 35 30 2d 30 32 38 34 36 37 00 00
Address 0x20: 53 2f 4e 20 43 41 41 54 39 31 35 36 00 11 0c 07
Address 0x30: dc ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 00 00 00 00 00 00 00 00 00 00 4d
Address 0x50: 50 43 2d 33 44 2d 31 36 58 47 45 2d 53 46 50 50
Address 0x60: 00 00 00 00 00 00 ff ff ff ff ff ff ff ff ff
Address 0x70: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
CPU          REV 11    711-029089    CAAV4645    AMPC PMB
Jedec Code:  0x7fb0    EEPROM Version:  0x01
P/N:         711-029089    S/N:            CAAV4645
Assembly ID: 0x0998    Assembly Version: 01.11
Date:        12-13-2012    Assembly Flags:  0x00
Version:     REV 11
ID: AMPC PMB
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 01 ff 09 98 01 0b 52 45 56 20 31 31 00 00
Address 0x10: 00 00 00 00 37 31 31 2d 30 32 39 30 38 39 00 00
Address 0x20: 53 2f 4e 20 43 41 41 56 34 36 34 35 00 0d 0c 07
Address 0x30: dc ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 00 ff ff ff ff ff ff ff ff ff ff
Address 0x50: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x60: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x70: ff ff ff ff 00 00 00 00 00 00 00 00 00 00 00 00
PIC 0          BUILTIN    BUILTIN    4x 10GE(LAN) SFP+
Jedec Code:  0x0000    EEPROM Version:  0x00
P/N:         BUILTIN    S/N:            BUILTIN
Assembly ID: 0x02fe    Assembly Version: 00.00
Date:        00-00-0000    Assembly Flags:  0x00
ID: 4x 10GE(LAN) SFP+
Board Information Record:
Address 0x00: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
I2C Hex Data:
Address 0x00: 00 00 00 00 02 fe 00 00 00 00 00 00 00 00 00 00
Address 0x10: 00 00 00 00 42 55 49 4c 54 49 4e 00 25 73 3a 20
Address 0x20: 42 55 49 4c 54 49 4e 00 25 73 3a 20 00 00 00 00
Address 0x30: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x40: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x70: 00 00 00 00 c0 02 6b 94 00 00 00 00 02 fe 00 00
Xcvr 0      REV 01    740-021308    AQ43HZ1    SFP+-10G-SR
Xcvr 1      REV 01    740-021308    AQ43HZC    SFP+-10G-SR
Xcvr 2      REV 01    740-021308    AQ43HD2    SFP+-10G-SR
Xcvr 3      REV 01    740-021308    AQ502HN    SFP+-10G-SR
PIC 1          BUILTIN    BUILTIN    4x 10GE(LAN) SFP+
Jedec Code:  0x0000    EEPROM Version:  0x00
P/N:         BUILTIN    S/N:            BUILTIN
Assembly ID: 0x02fe    Assembly Version: 00.00
Date:        00-00-0000    Assembly Flags:  0x00
ID: 4x 10GE(LAN) SFP+
Board Information Record:
Address 0x00: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
I2C Hex Data:
Address 0x00: 00 00 00 00 02 fe 00 00 00 00 00 00 00 00 00 00
Address 0x10: 00 00 00 00 42 55 49 4c 54 49 4e 00 25 73 3a 20
Address 0x20: 42 55 49 4c 54 49 4e 00 25 73 3a 20 00 00 00 00
Address 0x30: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x40: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

```



```

Address 0x60: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x70: 00 00 00 00 c0 02 ac 0c 00 00 00 00 02 fe 00 00
  Xcvr 0      REV 01  740-021308  AQ43HGF      SFP+-10G-SR
  Xcvr 1      REV 01  740-021308  AQ501RZ      SFP+-10G-SR
  Xcvr 2      REV 01  740-021308  AQ5029V      SFP+-10G-SR
  Xcvr 3      REV 01  740-021308  AQ501X9      SFP+-10G-SR
  PIC 2              BUILTIN      BUILTIN      4x 10GE(LAN) SFP+
Jedec Code: 0x0000      EEPROM Version: 0x00
P/N:        BUILTIN      S/N:        BUILTIN
Assembly ID: 0x02fe      Assembly Version: 00.00
Date:       00-00-0000    Assembly Flags: 0x00
.....

```

show chassis hardware models (MX960 Router with MPC5EQ)

```

user@host> show chassis hardware models
Hardware inventory:
Item          Version  Part number  Serial number  FRU model number
Midplane      REV 01    710-030012  ACAX3674      CHAS-BP-MX960-S
FPM Board     REV 03    710-014974  CAAZ9326      CRAFT-MX960-S
PEM 0         Rev 10    740-027760  QCS1702N062   PWR-MX960-4100-AC-S
PEM 1         Rev 04    740-027760  QCS1422N02C   PWR-MX960-4100-AC-S
PEM 2         Rev 09    740-027760  QCS1614N01X   PWR-MX960-4100-AC-S
Routing Engine 0 REV 08    740-031116  9009131803    RE-S-1800X4-16G-S
Routing Engine 1 REV 08    740-031116  9009124913    RE-S-1800X4-16G-S
CB 0          REV 18    750-031391  CABF0579      SCBE-MX-S
CB 1          REV 16    750-031391  CAAZ2471      SCBE-MX-S
CB 2          REV 16    750-031391  CAAW9595      SCBE-MX-S
FPC 0         REV 18    750-046005  CACE6574      PROTO-ASSEMBLY
FPC 1         REV 11    750-045372  CABK8154      MX-MPC3E-3D
  MIC 0       REV 07    750-033307  CABD5255      MIC3-3D-10XGE-SFPP
  MIC 1       REV 14    750-033196  CAAP1398      MIC3-3D-1X100GE-CXP
FPC 3         REV 35    750-028467  CAAT9156      MPC-3D-16XGE-SFPP
FPC 4         REV 18    750-046005  CACE6568      PROTO-ASSEMBLY
FPC 5         REV 18    750-046005  CACE6577      PROTO-ASSEMBLY
FPC 7         REV 09    750-037355  CAAF0937      MPC4E-2CGE-8XGE
FPC 8         REV 39    750-045715  CACD1903      PROTO-ASSEMBLY
FPC 9         REV 05    750-044444  CAAY9801      MX-MPC2E-3D-P
  MIC 0       REV 28    750-028387  CAAX1071      MIC-3D-4XGE-XFP
FPC 10        REV 21.0.11 750-045715  CAAY3541      PROTO-ASSEMBLY
FPC 11        REV 17    750-037355  CAAT3986      MPC4E-3D-2CGE-8XGE
Fan Tray 0    REV 08    740-031521  ACAF4219      FFANTRAY-MX960-HC-S
Fan Tray 1    REV 08    740-031521  ACAF4225      FFANTRAY-MX960-HC-S

```

show chassis hardware clei-models (MX960 Router with MPC5EQ)

```

user@host> show chassis hardware clei-models
Hardware inventory:
Item          Version  Part number  CLEI code      FRU model number
Midplane      REV 01    710-030012  COM8T00CRB     CHAS-BP-MX960-S
FPM Board     REV 03    710-014974             CRAFT-MX960-S
PEM 0         Rev 10    740-027760             PWR-MX960-4100-AC-S
PEM 1         Rev 04    740-027760             PWR-MX960-4100-AC-S
PEM 2         Rev 09    740-027760             PWR-MX960-4100-AC-S
Routing Engine 0 REV 08    740-031116  COUCASKBAA     RE-S-1800X4-16G-S
Routing Engine 1 REV 08    740-031116  COUCASKBAA     RE-S-1800X4-16G-S
CB 0          REV 18    750-031391  COUCASRBAA     SCBE-MX-S
CB 1          REV 16    750-031391  COUCARCBAB     SCBE-MX-S
CB 2          REV 16    750-031391  COUCARCBAB     SCBE-MX-S
FPC 0         REV 18    750-046005  PROTOXCLEI     PROTO-ASSEMBLY

```

| | | | | |
|------------|-------------|------------|------------|---------------------|
| FPC 1 | REV 11 | 750-045372 | COUIBBNBAA | MX-MPC3E-3D |
| MIC 0 | REV 07 | 750-033307 | COUIBBJBAA | MIC3-3D-10XGE-SFPP |
| MIC 1 | REV 14 | 750-033196 | COUIBBKBAA | MIC3-3D-1X100GE-CXP |
| FPC 3 | REV 35 | 750-028467 | | MPC-3D-16XGE-SFPP |
| FPC 4 | REV 18 | 750-046005 | PROTOXCLEI | PROTO-ASSEMBLY |
| FPC 5 | REV 18 | 750-046005 | PROTOXCLEI | PROTO-ASSEMBLY |
| FPC 7 | REV 09 | 750-037355 | PROTOXCLEI | MPC4E-2CGE-8XGE |
| FPC 8 | REV 39 | 750-045715 | PROTOXCLEI | PROTO-ASSEMBLY |
| FPC 9 | REV 05 | 750-044444 | COUIBBGBAA | MX-MPC2E-3D-P |
| MIC 0 | REV 28 | 750-028387 | COUIA16BAA | MIC-3D-4XGE-XFP |
| FPC 10 | REV 21.0.11 | 750-045715 | PROTOXCLEI | PROTO-ASSEMBLY |
| FPC 11 | REV 17 | 750-037355 | IPU3A4DHAA | MPC4E-3D-2CGE-8XGE |
| Fan Tray 0 | REV 08 | 740-031521 | | FFANTRAY-MX960-HC-S |
| Fan Tray 1 | REV 08 | 740-031521 | | FFANTRAY-MX960-HC-S |

show chassis hardware (MX960 Router with MPC3E and 100-Gigabit DWDM OTN MIC)

user@host> show chassis hardware

Hardware inventory:

| Item | Version | Part number | Serial number | Description |
|------------------|---------|-------------|---------------|---------------------------|
| Chassis | | | JN123F6D9AFA | MX960 |
| Midplane | REV 04 | 750-047849 | ACRC8764 | Enhanced MX960 Backplane |
| FPM Board | REV 03 | 710-014974 | CACS4395 | Front Panel Display |
| PDM | Rev 03 | 740-013110 | QCS1809500Z | Power Distribution Module |
| PEM 0 | Rev 08 | 740-029344 | QCS1817V0LK | DC 4.1kW Power Entry |
| Module | | | | |
| PEM 1 | Rev 08 | 740-029344 | QCS1814V01F | DC 4.1kW Power Entry |
| Module | | | | |
| PEM 2 | Rev 08 | 740-029344 | QCS1810V1EW | DC 4.1kW Power Entry |
| Module | | | | |
| PEM 3 | Rev 08 | 740-029344 | QCS1810V1K5 | DC 4.1kW Power Entry |
| Module | | | | |
| Routing Engine 0 | REV 11 | 740-031116 | 9013103483 | RE-S-1800x4 |
| Routing Engine 1 | REV 10 | 740-031116 | 9009198513 | RE-S-1800x4 |
| CB 0 | REV 23 | 750-031391 | CADW3218 | Enhanced MX SCB |
| CB 1 | REV 14 | 750-031391 | ABBK5220 | Enhanced MX SCB |
| FPC 1 | REV 14 | 750-045372 | CADK0464 | MPCE Type 3 3D |
| CPU | REV 10 | 711-035209 | CADM9839 | HMPC PMB 2G |
| MIC 0 | REV 19 | 750-033199 | CAAE5870 | 1X100GE CFP |
| PIC 0 | | BUILTIN | BUILTIN | 1X100GE CFP |
| Xcvr 0 | REV 01 | 740-032210 | UTH0H0W | CFP-100G-LR4 |
| FPC 2 | REV 14 | 750-045372 | CADN3262 | MPCE Type 3 3D |
| CPU | REV 10 | 711-035209 | CADN8129 | HMPC PMB 2G |
| FPC 3 | REV 14 | 750-045372 | CADH0146 | MPCE Type 3 3D |
| CPU | REV 10 | 711-035209 | CADT2458 | HMPC PMB 2G |
| MIC 0 | REV 03 | 750-057666 | CADP1386 | 1X100GE DWDM CFP2-ACO |
| PIC 0 | | BUILTIN | BUILTIN | 1X100GE DWDM CFP2-ACO |
| Xcvr 0 | REV 01 | 740-062357 | SMD5136.1 | OTN-100G-LH |
| FPC 4 | REV 18 | 750-045372 | CAEV5668 | MPCE Type 3 3D |
| CPU | REV 10 | 711-035209 | CAET7827 | HMPC PMB 2G |
| FPC 7 | REV 14 | 750-045372 | CADJ1947 | MPCE Type 3 3D |
| CPU | REV 10 | 711-035209 | CADJ1561 | HMPC PMB 2G |
| MIC 0 | REV 05 | 750-057666 | CAEB5763 | 1X100GE DWDM CFP2-ACO |
| PIC 0 | | BUILTIN | BUILTIN | 1X100GE DWDM CFP2-ACO |
| Xcvr 0 | REV 01 | 740-062357 | 1DJBZ052002 | OTN-100G-LH |
| FPC 8 | REV 14 | 750-045372 | CADK0485 | MPCE Type 3 3D |
| CPU | REV 10 | 711-035209 | CADM9828 | HMPC PMB 2G |
| MIC 0 | REV 03 | 750-057666 | CADP1390 | 1X100GE DWDM CFP2-ACO |
| PIC 0 | | BUILTIN | BUILTIN | 1X100GE DWDM CFP2-ACO |
| FPC 9 | REV 14 | 750-045372 | CADJ1936 | MPCE Type 3 3D |
| CPU | REV 10 | 711-035209 | CADJ1566 | HMPC PMB 2G |

| | | | | |
|------------|--------|------------|-------------|-----------------------|
| MIC 0 | REV 14 | 750-057666 | CAFF7544 | 1X100GE DWDM CFP2-ACO |
| PIC 0 | | BUILTIN | BUILTIN | 1X100GE DWDM CFP2-ACO |
| Xcvr 0 | REV 01 | 740-062357 | 1DJBZ05100K | OTN-100G-LH |
| FPC 10 | REV 14 | 750-054901 | CADJ3846 | MPC3E NG HQoS |
| CPU | REV 11 | 711-045719 | CADN5471 | RMPD PMB |
| MIC 0 | REV 05 | 750-057666 | CAEB5760 | 1X100GE DWDM CFP2-ACO |
| PIC 0 | | BUILTIN | BUILTIN | 1X100GE DWDM CFP2-ACO |
| Xcvr 0 | REV 01 | 740-062357 | SMD5091.1 | CFP-Loopback |
| Fan Tray 0 | REV 08 | 740-031521 | ACDB4083 | Enhanced Fan Tray |
| Fan Tray 1 | REV 08 | 740-031521 | ACDB3995 | Enhanced Fan Tray |

show chassis hardware clei-models(MX960 Router with MPC3E and 100-Gigabit DWDM OTN MIC)

```
user@host> show chassis hardware clei-models
```

Hardware inventory:

| Item | Version | Part number | CLEI code | FRU model number |
|------------------|---------|-------------|------------|---------------------|
| Midplane | REV 04 | 750-047849 | CMMJA10BRA | CHAS-BP3-MX960-S |
| FPM Board | REV 03 | 710-014974 | | CRAFT-MX960-S |
| PEM 0 | Rev 08 | 740-029344 | | PWR-MX960-4100-DC-S |
| PEM 1 | Rev 08 | 740-029344 | | PWR-MX960-4100-DC-S |
| PEM 2 | Rev 08 | 740-029344 | | PWR-MX960-4100-DC-S |
| PEM 3 | Rev 08 | 740-029344 | | PWR-MX960-4100-DC-S |
| Routing Engine 0 | REV 11 | 740-031116 | COUCASYBAB | RE-S-1800X4-16G-S |
| Routing Engine 1 | REV 10 | 740-031116 | COUCASYBAA | RE-S-1800X4-16G-S |
| CB 0 | REV 23 | 750-031391 | COUCATXBAA | SCBE-MX-S |
| CB 1 | REV 14 | 750-031391 | COUCARCBAA | SCBE-MX-S |
| FPC 1 | REV 14 | 750-045372 | COUIBBNBAB | MX-MPC3E-3D |
| MIC 0 | REV 19 | 750-033199 | COUIBA8BAA | MIC3-3D-1X100GE-CFP |
| FPC 2 | REV 14 | 750-045372 | COUIBBNBAB | MX-MPC3E-3D |
| FPC 3 | REV 14 | 750-045372 | COUIBBNBAB | MX-MPC3E-3D |
| MIC 0 | REV 03 | 750-057666 | PROTOXCLEI | PROTO-ASSEMBLY |
| FPC 4 | REV 18 | 750-045372 | COUIBBNBAC | MX-MPC3E-3D |
| FPC 7 | REV 14 | 750-045372 | COUIBBNBAB | MX-MPC3E-3D |
| MIC 0 | REV 05 | 750-057666 | PROTOXCLEI | PROTO-ASSEMBLY |
| FPC 8 | REV 14 | 750-045372 | COUIBBNBAB | MX-MPC3E-3D |
| MIC 0 | REV 03 | 750-057666 | PROTOXCLEI | PROTO-ASSEMBLY |
| FPC 9 | REV 14 | 750-045372 | COUIBBNBAB | MX-MPC3E-3D |
| MIC 0 | REV 14 | 750-057666 | PROTOXCLEI | PROTO-ASSEMBLY |
| FPC 10 | REV 14 | 750-054901 | PROTOXCLEI | PROTO-ASSEMBLY |
| MIC 0 | REV 05 | 750-057666 | PROTOXCLEI | PROTO-ASSEMBLY |
| Fan Tray 0 | REV 08 | 740-031521 | | FFANTRAY-MX960-HC-S |
| Fan Tray 1 | REV 08 | 740-031521 | | FFANTRAY-MX960-HC-S |

show chassis hardware (PTX3000 Router with 5-port 100-Gigabit DWDM OTN PIC)

```
user@host> show chassis hardware
```

Hardware inventory:

| Item | Version | Part number | Serial number | Description |
|------------------|---------|-------------|---------------|-----------------------|
| Chassis | | | JN123AC42AJC | PTX3000 |
| Midplane | REV 22 | 750-044645 | ACLP6640 | Backplane |
| FPM | REV 07 | 760-044663 | ACMX2146 | Front Panel Display |
| PSM 1 | REV 02 | 740-044980 | 1EDD3080169 | DC 12V Power Supply |
| PSM 2 | REV 06 | 740-044981 | 1EDK5040563 | AC 12V Power Supply |
| PSM 3 | REV 06 | 740-044981 | 1EDK5040313 | AC 12V Power Supply |
| PSM 4 | REV 04 | 740-044980 | 1EDJ3330088 | DC 12V Power Supply |
| Routing Engine 0 | REV 12 | 740-026942 | P737A-006029 | RE-DUO-2600 |
| CB 0 | REV 18 | 750-044656 | ACMZ3179 | Control Board |
| FPC 2 | REV 06 | 750-057064 | ACAM6098 | FPC3-SFF-PTX-1X |
| CPU | | BUILTIN | BUILTIN | SMPD PMB |
| PIC 0 | REV 17 | 750-059747 | ACNW3510 | 5X100GE DWDM CFP2-ACO |

| | | | | |
|------------|--------|------------|-------------|-----------------------|
| Xcvr 0 | REV 01 | 740-062357 | 1DJBZ040003 | OTN-100G-LH |
| Xcvr 2 | REV 01 | 740-062357 | 1DJBZ044004 | OTN-100G-LH |
| Xcvr 3 | REV 01 | 740-062357 | 1DJBZ03500P | OTN-100G-LH |
| Xcvr 4 | REV 01 | 740-062357 | 1DJBZ03700C | OTN-100G-LH |
| FPC 4 | REV 12 | 750-057064 | ACAM7153 | FPC3-SFF-PTX-1X |
| CPU | | BUILTIN | BUILTIN | SMP C PMB |
| PIC 0 | REV 17 | 750-059747 | ACNW3511 | 5X100GE DWDM CFP2-ACO |
| Xcvr 0 | REV 01 | 740-061663 | 47 | OTN-100G-LH |
| Xcvr 1 | REV 01 | 740-061663 | 39 | OTN-100G-LH |
| Xcvr 2 | REV 01 | 740-062357 | 1DJBZ044002 | OTN-100G-LH |
| Xcvr 3 | REV 01 | 740-062357 | 1DJBZ03700G | OTN-100G-LH |
| Xcvr 4 | REV 01 | 740-062357 | 1DJBZ041001 | OTN-100G-LH |
| FPC 8 | REV 11 | 750-057064 | ACAM6808 | FPC3-SFF-PTX-1X |
| CPU | | BUILTIN | BUILTIN | SMP C PMB |
| PIC 0 | REV 17 | 750-059747 | ACNW3508 | 5X100GE DWDM CFP2-ACO |
| Xcvr 0 | REV 01 | 740-061663 | 194 | OTN-100G-LH |
| Xcvr 1 | REV 01 | 740-061663 | 168 | OTN-100G-LH |
| Xcvr 2 | REV 01 | 740-061663 | 52 | OTN-100G-LH |
| Xcvr 3 | REV 01 | 740-061663 | 85 | OTN-100G-LH |
| Xcvr 4 | REV 01 | 740-061663 | 218 | OTN-100G-LH |
| SIB 0 | REV 03 | 750-057067 | ACAM8513 | SIB3-SFF-PTX |
| SIB 1 | REV 01 | 750-057067 | ACAM5918 | SIB3-SFF-PTX |
| SIB 2 | REV 01 | 711-057066 | ACAM4325 | SIB3-SFF-PTX |
| SIB 3 | REV 01 | 711-057066 | ACAM4328 | SIB3-SFF-PTX |
| SIB 4 | REV 01 | 711-057066 | ACAM4349 | SIB3-SFF-PTX |
| SIB 5 | REV 01 | 711-057066 | ACAM4323 | SIB3-SFF-PTX |
| SIB 6 | REV 01 | 711-057066 | ACAM4344 | SIB3-SFF-PTX |
| SIB 7 | REV 01 | 750-057067 | ACAM4346 | SIB3-SFF-PTX |
| SIB 8 | REV 01 | 750-057067 | ACAM5911 | SIB3-SFF-PTX |
| Fan Tray 0 | REV 13 | 760-044659 | ACMP6395 | Fan Tray (Exhaust) |
| Fan Tray 1 | REV 13 | 760-044659 | ACMZ6957 | Fan Tray (Exhaust) |

show chassis hardware clei-models (PTX3000 Router with 5-port 100-Gigabit DWDM OTN PIC)

```
user@host> show chassis hardware clei-models
```

Hardware inventory:

| Item | Version | Part number | CLEI code | FRU model number |
|------------------|---------|-------------|------------|-----------------------|
| Midplane | REV 22 | 750-044645 | IPMVN10FRA | CHAS-MP-PTX3000-S |
| FPM | REV 07 | 760-044663 | IPUCBE5CAA | FPD-SFF-PTX-S |
| PSM 1 | REV 02 | 740-044980 | PROTOPWRDC | PSM-SFF-PTX-DC-2200-S |
| PSM 2 | REV 06 | 740-044981 | IPUPAKOKAB | PSM-SFF-PTX-AC-S |
| PSM 3 | REV 06 | 740-044981 | IPUPAKOKAB | PSM-SFF-PTX-AC-S |
| PSM 4 | REV 04 | 740-044980 | IPUPAK1KAA | PSM-SFF-PTX-DC-S |
| Routing Engine 0 | REV 12 | 740-026942 | | RE-DUO-C2600-16G-S |
| CB 0 | REV 18 | 750-044656 | IPUCBE6CAB | CB-SFF-PTX-S |
| FPC 2 | REV 06 | 750-057064 | PROTOXCLEI | PROTO-ASSEMBLY |
| PIC 0 | REV 17 | 750-059747 | IPU3BC5HAA | PTX-5-100G-WDM |
| FPC 4 | REV 12 | 750-057064 | | |
| PIC 0 | REV 17 | 750-059747 | IPU3BC5HAA | PTX-5-100G-WDM |
| FPC 8 | REV 11 | 750-057064 | | |
| PIC 0 | REV 17 | 750-059747 | IPU3BC5HAA | PTX-5-100G-WDM |
| SIB 0 | REV 03 | 750-057067 | PROTOXCLEI | PROTO-ASSEMBLY |
| SIB 1 | REV 01 | 750-057067 | PROTOXCLEI | PROTO-ASSEMBLY |
| SIB 2 | REV 01 | 711-057066 | PROTOXCLEI | PROTO-ASSEMBLY |
| SIB 3 | REV 01 | 711-057066 | PROTOXCLEI | PROTO-ASSEMBLY |
| SIB 4 | REV 01 | 711-057066 | PROTOXCLEI | PROTO-ASSEMBLY |
| SIB 5 | REV 01 | 711-057066 | PROTOXCLEI | PROTO-ASSEMBLY |
| SIB 6 | REV 01 | 711-057066 | PROTOXCLEI | PROTO-ASSEMBLY |
| SIB 7 | REV 01 | 750-057067 | PROTOXCLEI | PROTO-ASSEMBLY |
| SIB 8 | REV 01 | 750-057067 | PROTOXCLEI | PROTO-ASSEMBLY |

| | | | | |
|------------|--------|------------|------------|---------------|
| Fan Tray 0 | REV 13 | 760-044659 | IPUCBE8CAA | FAN-SFF-PTX-S |
| Fan Tray 1 | REV 13 | 760-044659 | IPUCBE8CAA | FAN-SFF-PTX-S |

show chassis hardware (MX2010 Router)

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Hardware inventory:
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| Item | Version | Part number | Serial number | Description |
|------------------|---------|-------------|---------------|----------------------|
| Chassis | | | JN11E3217AFK | MX2010 |
| Midplane | | | | Lower Backplane |
| Midplane 1 | REV 01 | 711-044557 | ZY8296 | Upper Backplane |
| PMP | REV 03 | 711-032426 | ACAJ1388 | Power Midplane |
| FPM Board | REV 06 | 711-032349 | ZX8744 | Front Panel Display |
| PSM 4 | REV 0C | 740-033727 | VK00254 | DC 52V Power Supply |
| Module | | | | |
| PSM 5 | REV 0B | 740-033727 | VG00015 | DC 52V Power Supply |
| Module | | | | |
| PSM 6 | REV 0B | 740-033727 | VH00097 | DC 52V Power Supply |
| Module | | | | |
| PSM 7 | REV 0C | 740-033727 | VJ00151 | DC 52V Power Supply |
| Module | | | | |
| PSM 8 | REV 0C | 740-033727 | VJ00149 | DC 52V Power Supply |
| Module | | | | |
| PDM 0 | REV 0B | 740-038109 | WA00008 | DC Power Dist Module |
| PDM 1 | REV 0B | 740-038109 | WA00014 | DC Power Dist Module |
| Routing Engine 0 | REV 02 | 740-041821 | 9009094134 | RE-S-1800x4 |
| Routing Engine 1 | REV 02 | 740-041821 | 9009094141 | RE-S-1800x4 |
| CB 0 | REV 08 | 750-040257 | CAAB3491 | Control Board |
| CB 1 | REV 08 | 750-040257 | CAAB3489 | Control Board |
| SPMB 0 | REV 02 | 711-041855 | CAA6135 | PMB Board |
| SPMB 1 | REV 02 | 711-041855 | CAA6137 | PMB Board |
| SFB 0 | REV 06 | 711-032385 | ZV1828 | Switch Fabric Board |
| SFB 1 | REV 07 | 711-032385 | ZZ2568 | Switch Fabric Board |
| SFB 2 | REV 07 | 711-032385 | ZZ2563 | Switch Fabric Board |
| SFB 3 | REV 07 | 711-032385 | ZZ2564 | Switch Fabric Board |
| SFB 4 | REV 07 | 711-032385 | ZZ2580 | Switch Fabric Board |
| SFB 5 | REV 07 | 711-032385 | ZZ2579 | Switch Fabric Board |
| SFB 6 | REV 07 | 711-032385 | CAAB4882 | Switch Fabric Board |
| SFB 7 | REV 07 | 711-032385 | CAAB4898 | Switch Fabric Board |
| FPC 0 | REV 33 | 750-028467 | CAAB1919 | MPC 3D 16x 10GE |
| CPU | REV 11 | 711-029089 | CAAB7174 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-021308 | AMH02RE | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | AMH038C | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-021308 | AMH0390 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021308 | AMG0SUA | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-021308 | AMH0579 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | AMG0SGP | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-021308 | AMH04SV | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021308 | AMH04X3 | SFP+-10G-SR |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-021308 | AMH0135 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | AMH02NC | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-021308 | AMH02XB | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021308 | AMH02PN | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-021308 | AMH057Y | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | AMG0JHE | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-021308 | AMH02HT | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021308 | AMH04V4 | SFP+-10G-SR |

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|--------|--------|------------|--------------|---------------------|
| FPC 1 | REV 21 | 750-033205 | ZG5027 | MPC Type 3 |
| CPU | REV 04 | 711-035209 | YT4780 | HMPD PMB 2G |
| MIC 0 | REV 03 | 750-033307 | ZV6299 | 10X10GE SFPP |
| PIC 0 | | BUILTIN | BUILTIN | 10X10GE SFPP |
| Xcvr 0 | REV 01 | 740-031980 | 083363A00410 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | 083363A00334 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 113363A00125 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | 083363A00953 | SFP+-10G-SR |
| Xcvr 4 | REV 01 | 740-031980 | AHR013D | SFP+-10G-SR |
| Xcvr 5 | REV 01 | 740-031980 | AJ40JUR | SFP+-10G-SR |
| Xcvr 6 | REV 01 | 740-031980 | AJ40JKL | SFP+-10G-SR |
| Xcvr 7 | REV 01 | 740-031980 | AJ30ECK | SFP+-10G-SR |
| Xcvr 8 | REV 01 | 740-021308 | 19T511100864 | SFP+-10G-SR |
| Xcvr 9 | REV 01 | 740-021308 | 19T511100868 | SFP+-10G-SR |
| MIC 1 | REV 03 | 750-033307 | ZV6268 | 10X10GE SFPP |
| PIC 2 | | BUILTIN | BUILTIN | 10X10GE SFPP |
| Xcvr 0 | REV 01 | 740-031980 | AJC0JML | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AJ403PC | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AJ10N25 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AJ40JF4 | SFP+-10G-SR |
| Xcvr 4 | REV 01 | 740-031980 | AJ40JSJ | SFP+-10G-SR |
| Xcvr 5 | REV 01 | 740-031980 | AJ403V7 | SFP+-10G-SR |
| Xcvr 6 | REV 01 | 740-031980 | AJ40JN3 | SFP+-10G-SR |
| Xcvr 7 | REV 01 | 740-031980 | AJ40JSU | SFP+-10G-SR |
| Xcvr 8 | REV 01 | 740-021308 | 19T511100468 | SFP+-10G-SR |
| Xcvr 9 | REV 01 | 740-021308 | 19T511101363 | SFP+-10G-SR |
| FPC 8 | REV 22 | 750-031089 | ZT9746 | MPC Type 2 3D |
| CPU | REV 06 | 711-030884 | ZS1271 | MPC PMB 2G |
| MIC 0 | REV 26 | 750-028392 | ABBS1150 | 3D 20x 1GE(LAN) SFP |
| PIC 0 | | BUILTIN | BUILTIN | 10x 1GE(LAN) SFP |
| Xcvr 0 | REV 01 | 740-031851 | PLG023C | SFP-SX |
| Xcvr 1 | REV 01 | 740-031851 | PLG09C6 | SFP-SX |
| Xcvr 2 | REV 02 | 740-011613 | AM0950SF9L7 | SFP-SX |
| Xcvr 3 | REV 02 | 740-011613 | AM1001SFN1H | SFP-SX |
| Xcvr 4 | REV 02 | 740-011613 | AM1001SFM9D | SFP-SX |
| Xcvr 5 | REV 02 | 740-011613 | AM1001SFLTJ | SFP-SX |
| Xcvr 6 | REV 01 | 740-031851 | AC1108S03L9 | SFP-SX |
| Xcvr 7 | REV 01 | 740-031851 | AC1102S00NC | SFP-SX |
| Xcvr 8 | REV 01 | 740-031851 | AC1102S00MX | SFP-SX |
| Xcvr 9 | REV 01 | 740-031851 | AC1102S0085 | SFP-SX |
| PIC 1 | | BUILTIN | BUILTIN | 10x 1GE(LAN) SFP |
| Xcvr 0 | REV 01 | 740-031851 | AC1102S00KU | SFP-SX |
| Xcvr 1 | REV 01 | 740-031851 | AC1102S00NG | SFP-SX |
| Xcvr 2 | REV 01 | 740-031851 | AC1102S00K3 | SFP-SX |
| Xcvr 3 | REV 01 | 740-031851 | AC1102S008R | SFP-SX |
| Xcvr 4 | REV 01 | 740-031851 | AM1107SUFVJ | SFP-SX |
| Xcvr 5 | REV 01 | 740-031851 | AC1108S03LG | SFP-SX |
| MIC 1 | REV 26 | 750-028387 | ABBR9582 | 3D 4x 10GE XFP |
| PIC 2 | | BUILTIN | BUILTIN | 2x 10GE XFP |
| Xcvr 0 | | NON-JNPR | T10A91703 | XFP-10G-SR |
| Xcvr 1 | | NON-JNPR | T09L42604 | XFP-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 2x 10GE XFP |
| FPC 9 | REV 11 | 750-036284 | ZL3591 | MPC 3D 16x 10GE EM |
| CPU | REV 10 | 711-029089 | ZL0513 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | 1YT517101825 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | 1YT517101821 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 1YT517101682 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | ALQ13R6 | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | 1YT517101828 | SFP+-10G-SR |

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|------------|--------|------------|--------------|------------------------|
| Xcvr 1 | REV 01 | 740-031980 | 1YT517101716 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 1YT517101732 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | ALP0TR1 | SFP+-10G-SR |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | 1YT517101741 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | 1YT517101829 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 1YT517101669 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | ALQ14E3 | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | 1YT517101826 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | 1YT517101817 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 1YT517101735 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | ALQ159A | SFP+-10G-SR |
| ADC 0 | REV 05 | 750-043596 | CAAC2073 | Adapter Card |
| ADC 1 | REV 01 | 750-043596 | ZV4117 | Adapter Card |
| ADC 8 | REV 01 | 750-043596 | ZV4107 | Adapter Card |
| ADC 9 | REV 02 | 750-043596 | ZW1555 | Adapter Card |
| Fan Tray 0 | REV 2A | 760-046960 | ACAY0015 | 172mm FanTray - 6 Fans |
| Fan Tray 1 | REV 2A | 760-046960 | ACAY0019 | 172mm FanTray - 6 Fans |
| Fan Tray 2 | REV 2A | 760-046960 | ACAY0020 | 172mm FanTray - 6 Fans |
| Fan Tray 3 | REV 2A | 760-046960 | ACAY0021 | 172mm FanTray - 6 Fans |

show chassis hardware detail (MX2010 Router)

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Hardware inventory:
Item                Version  Part number  Serial number  Description
Chassis
Midplane            REV 26   750-044636   ABAB9357       Lower Backplane
Midplane 1          REV 01   711-044557   ABAB8643       Upper Backplane
PMP                  REV 04   711-032426   ACAJ1677       Power Midplane
FPM Board           REV 08   760-044634   ABBV9726       Front Panel Display
PSM 0                REV 01   740-045050   1E02224000P    DC 52V Power Supply
Module
PSM 1                REV 01   740-045050   1E02224000M    DC 52V Power Supply
Module
PSM 2                REV 01   740-045050   1E022240010    DC 52V Power Supply
Module
PSM 3                REV 01   740-045050   1E02224000G    DC 52V Power Supply
Module
PSM 4                REV 01   740-045050   1E022240013    DC 52V Power Supply
Module
PSM 5                REV 01   740-045050   1E022240007    DC 52V Power Supply
Module
PSM 6                REV 01   740-045050   1E02224001C    DC 52V Power Supply
Module
PSM 7                REV 01   740-045050   1E02224001D    DC 52V Power Supply
Module
PSM 8                REV 01   740-045050   1E02224001B    DC 52V Power Supply
Module
PDM 0               REV 01   740-045234   1E262250067    DC Power Dist Module
Routing Engine 0    REV 02   740-041821   9009099704     RE-S-1800x4
  ad0    3831 MB   UGB30SFA4000T1   SFA4000T1 00000651 Compact Flash
  ad1    30533 MB UGB94BPH32H0S1-KCI 11000019592    Disk 1
  usb0 (addr 1)    EHCI root hub 0    Intel        uhub0
  usb0 (addr 2)    product 0x0020 32 vendor 0x8087   uhub1
DIMM 0             SGU04G72H1BD2SA-BB DIE REV-52 PCB REV-54 MFR ID-ce80
DIMM 1             SGU04G72H1BD2SA-BB DIE REV-52 PCB REV-54 MFR ID-ce80
DIMM 2             SGU04G72H1BD2SA-BB DIE REV-52 PCB REV-54 MFR ID-ce80
DIMM 3             SGU04G72H1BD2SA-BB DIE REV-52 PCB REV-54 MFR ID-ce80
Routing Engine 1    REV 02   740-041821   9009099706     RE-S-1800x4

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|--------|----------|-------------------|-------------|----------------------|---------------------|
| ad0 | 3998 MB | Virtium | - TuffDrive | VCF P1T0200262860208 | 114 Compact Flash |
| ad1 | 30533 MB | UGB94ARF32H0S3-KC | | UNIGEN-499551-000404 | Disk 1 |
| CB 0 | | REV 13 | 750-040257 | CAAF8436 | Control Board |
| CB 1 | | REV 13 | 750-040257 | CAAF8434 | Control Board |
| SPMB 0 | | REV 02 | 711-041855 | ABBV3825 | PMB Board |
| SPMB 1 | | REV 02 | 711-041855 | ABBV3833 | PMB Board |
| SFB 0 | | REV 05 | 711-044466 | ABBX5682 | Switch Fabric Board |
| SFB 1 | | REV 05 | 711-044466 | ABBX5676 | Switch Fabric Board |
| SFB 2 | | REV 05 | 711-044466 | ABBX5665 | Switch Fabric Board |
| SFB 3 | | REV 05 | 711-044466 | ABBX5699 | Switch Fabric Board |
| SFB 4 | | REV 05 | 711-044466 | ABBX5603 | Switch Fabric Board |
| SFB 5 | | REV 05 | 711-044466 | ABBX5587 | Switch Fabric Board |
| SFB 6 | | REV 05 | 711-044466 | ABBX5607 | Switch Fabric Board |
| SFB 7 | | REV 05 | 711-044466 | ABBX5669 | Switch Fabric Board |
| FPC 0 | | REV 09 | 750-037355 | CAAF0924 | MPC Type 4-2 |
| CPU | | REV 08 | 711-035209 | CAAB9842 | HMPC PMB 2G |
| PIC 0 | | | BUILTIN | BUILTIN | 4x10GE SFPP |
| Xcvr 0 | | REV 01 | 740-021308 | 19T511101656 | SFP+-10G-SR |
| Xcvr 1 | | REV 01 | 740-031980 | AMA04RU | SFP+-10G-SR |
| Xcvr 2 | | REV 01 | 740-031980 | 193363A00558 | SFP+-10G-SR |
| Xcvr 3 | | REV 01 | 740-031980 | B10M00202 | SFP+-10G-SR |
| PIC 1 | | | BUILTIN | BUILTIN | 1X100GE CFP |
| Xcvr 0 | | | NON-JNPR | X12J00328 | CFP-100G-SR10 |
| PIC 2 | | | BUILTIN | BUILTIN | 4x10GE SFPP |
| Xcvr 0 | | REV 01 | 740-031980 | AMA088W | SFP+-10G-SR |
| Xcvr 1 | | REV 01 | 740-031980 | B10L04211 | SFP+-10G-SR |
| Xcvr 2 | | REV 01 | 740-021308 | 19T511101602 | SFP+-10G-SR |
| Xcvr 3 | | REV 01 | 740-031980 | B10L04151 | SFP+-10G-SR |
| PIC 3 | | | BUILTIN | BUILTIN | 1X100GE CFP |
| Xcvr 0 | | NON-JNPR | X12J00332 | | CFP-100G-SR10 |
| FPC 1 | | REV 18 | 750-033205 | ZE0128 | MPC Type 3 |
| CPU | | REV 06 | 711-035209 | ZG5431 | HMPC PMB 2G |
| MIC 0 | | REV 15 | 750-033199 | ZP6435 | 1X100GE CFP |
| PIC 0 | | | BUILTIN | BUILTIN | 1X100GE CFP |
| Xcvr 0 | | REV 01 | 740-032210 | J11E46118 | CFP-100G-LR4 |
| MIC 1 | | REV 15 | 750-033199 | ZP6442 | 1X100GE CFP |
| PIC 2 | | | BUILTIN | BUILTIN | 1X100GE CFP |
| Xcvr 0 | | REV 01 | 740-032210 | UMN03T4 | CFP-100G-LR4 |
| FPC 2 | | REV 16 | 750-037358 | CAAL1001 | MPC Type 4-1 |
| CPU | | REV 08 | 711-035209 | CAAK7927 | HMPC PMB 2G |
| PIC 0 | | | BUILTIN | BUILTIN | 8X10GE SFPP |
| Xcvr 0 | | REV 01 | 740-031980 | 193363A00589 | SFP+-10G-SR |
| Xcvr 1 | | REV 01 | 740-021308 | 973152A00028 | SFP+-10G-SR |
| Xcvr 2 | | REV 01 | 740-031980 | 193363A00376 | SFP+-10G-SR |
| Xcvr 3 | | REV 01 | 740-021308 | 973152A00016 | SFP+-10G-SR |
| Xcvr 4 | | REV 01 | 740-031980 | 193363A00499 | SFP+-10G-SR |
| Xcvr 5 | | REV 01 | 740-021308 | 973152A00039 | SFP+-10G-SR |
| Xcvr 6 | | REV 01 | 740-031980 | B11E01239 | SFP+-10G-SR |
| Xcvr 7 | | REV 01 | 740-021308 | 973152A00058 | SFP+-10G-SR |
| PIC 1 | | | BUILTIN | BUILTIN | 8X10GE SFPP |
| Xcvr 0 | | REV 01 | 740-031980 | B10M00075 | SFP+-10G-SR |
| Xcvr 1 | | REV 01 | 740-021308 | 973152A00014 | SFP+-10G-SR |
| Xcvr 2 | | REV 01 | 740-031980 | AMA0638 | SFP+-10G-SR |
| Xcvr 3 | | REV 01 | 740-021308 | 973152A00063 | SFP+-10G-SR |
| Xcvr 4 | | REV 01 | 740-031980 | AMA0629 | SFP+-10G-SR |
| Xcvr 5 | | REV 01 | 740-021308 | 973152A00053 | SFP+-10G-SR |
| Xcvr 6 | | REV 01 | 740-031980 | 193363A00344 | SFP+-10G-SR |
| Xcvr 7 | | REV 01 | 740-021308 | 973152A00046 | SFP+-10G-SR |
| PIC 2 | | | BUILTIN | BUILTIN | 8X10GE SFPP |
| Xcvr 0 | | REV 01 | 740-031980 | AMA062M | SFP+-10G-SR |
| Xcvr 1 | | REV 01 | 740-021308 | 973152A00080 | SFP+-10G-SR |

| | | | | |
|--------|--------|------------|--------------|-------------------|
| Xcvr 2 | REV 01 | 740-031980 | 193363A00580 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021308 | 973152A00064 | SFP+-10G-SR |
| Xcvr 4 | REV 01 | 740-031980 | 093363A01494 | SFP+-10G-SR |
| Xcvr 5 | REV 01 | 740-021308 | 973152A00020 | SFP+-10G-SR |
| Xcvr 6 | REV 01 | 740-031980 | 123363A00047 | SFP+-10G-SR |
| Xcvr 7 | REV 01 | 740-021308 | 973152A00072 | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 8X10GE SFPP |
| Xcvr 0 | REV 01 | 740-021308 | 03DZ06A01033 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | 973152A00022 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-021308 | 03DZ06A01026 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021308 | 973152A00013 | SFP+-10G-SR |
| Xcvr 4 | REV 01 | 740-021308 | 03DZ06A01028 | SFP+-10G-SR |
| Xcvr 5 | REV 01 | 740-021308 | 973152A00079 | SFP+-10G-SR |
| Xcvr 6 | REV 01 | 740-021308 | 03DZ06A01018 | SFP+-10G-SR |
| Xcvr 7 | REV 01 | 740-021308 | 973152A00025 | SFP+-10G-SR |
| FPC 3 | REV 33 | 750-028467 | CAAF5400 | MPC 3D 16x 10GE |
| CPU | REV 11 | 711-029089 | CAAH7626 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-021308 | 973152A00066 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | 973152A00021 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-021308 | 973152A00062 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021308 | 973152A00027 | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-021308 | 973152A00065 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | 973152A00069 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-021308 | 973152A00026 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021308 | 973152A00003 | SFP+-10G-SR |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-021308 | 973152A00035 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | 973152A00004 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-021308 | 973152A00049 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021308 | 973152A00055 | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-021308 | 973152A00010 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | 973152A00001 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-021308 | 973152A00073 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021308 | 973152A00012 | SFP+-10G-SR |
| FPC 4 | REV 21 | 750-033205 | ZG5028 | MPC Type 3 |
| CPU | REV 05 | 711-035209 | YX3911 | HMPC PMB 2G |
| MIC 0 | REV 03 | 750-036233 | ZL2036 | 2X40GE QSFP |
| PIC 0 | | BUILTIN | BUILTIN | 2X40GE QSFP |
| Xcvr 0 | REV 01 | 740-032986 | QB220708 | QSFP+-40G-SR4 |
| Xcvr 1 | REV 01 | 740-032986 | QB220735 | QSFP+-40G-SR4 |
| MIC 1 | REV 03 | 750-036233 | ZL2028 | 2X40GE QSFP |
| PIC 2 | | BUILTIN | BUILTIN | 2X40GE QSFP |
| Xcvr 0 | REV 01 | 740-032986 | QB220727 | QSFP+-40G-SR4 |
| Xcvr 1 | REV 01 | 740-032986 | QB220715 | QSFP+-40G-SR4 |
| FPC 5 | REV 11 | 750-037358 | CAAE2196 | MPC Type 4-1 |
| CPU | REV 08 | 711-035209 | CAAD9074 | HMPC PMB 2G |
| PIC 0 | | BUILTIN | BUILTIN | 8X10GE SFPP |
| Xcvr 0 | REV 01 | 740-031980 | AMA062S | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AMA062P | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AMA052R | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AMA0632 | SFP+-10G-SR |
| Xcvr 4 | REV 01 | 740-031980 | 193363A00564 | SFP+-10G-SR |
| Xcvr 5 | REV 01 | 740-031980 | 193363A00229 | SFP+-10G-SR |
| Xcvr 6 | REV 01 | 740-031980 | 193363A00363 | SFP+-10G-SR |
| Xcvr 7 | REV 01 | 740-031980 | 193363A00278 | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 8X10GE SFPP |
| Xcvr 0 | REV 01 | 740-031980 | AMA04CC | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | AD0927A001W | SFP+-10G-SR |

| | | | | |
|--------|--------|------------|--------------|-------------------|
| Xcvr 2 | REV 01 | 740-031980 | AMA04N2 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AMA062U | SFP+-10G-SR |
| Xcvr 4 | REV 01 | 740-031980 | 193363A00491 | SFP+-10G-SR |
| Xcvr 5 | REV 01 | 740-031980 | 183363A01511 | SFP+-10G-SR |
| Xcvr 6 | REV 01 | 740-031980 | 193363A00565 | SFP+-10G-SR |
| Xcvr 7 | REV 01 | 740-031980 | 193363A00405 | SFP+-10G-SR |
| PIC 2 | | BUILTIN | BUILTIN | 8X10GE SFPP |
| Xcvr 0 | REV 01 | 740-031980 | AMA07QX | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AMA06MS | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 193363A00318 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | 193363A00402 | SFP+-10G-SR |
| Xcvr 4 | REV 01 | 740-031980 | 193363A00174 | SFP+-10G-SR |
| Xcvr 5 | REV 01 | 740-031980 | 193363A00388 | SFP+-10G-SR |
| Xcvr 6 | REV 01 | 740-031980 | 193363A00377 | SFP+-10G-SR |
| Xcvr 7 | REV 01 | 740-031980 | 193363A00234 | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 8X10GE SFPP |
| Xcvr 0 | REV 01 | 740-031980 | AMA062T | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | 193363A00550 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 193363A00364 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AMA0630 | SFP+-10G-SR |
| Xcvr 4 | REV 01 | 740-031980 | 193363A00509 | SFP+-10G-SR |
| Xcvr 5 | REV 01 | 740-031980 | 193363A00459 | SFP+-10G-SR |
| Xcvr 6 | REV 01 | 740-031980 | 113363A00191 | SFP+-10G-SR |
| Xcvr 7 | REV 01 | 740-031980 | 193363A00352 | SFP+-10G-SR |
| FPC 6 | REV 33 | 750-028467 | CAAF5552 | MPC 3D 16x 10GE |
| CPU | REV 11 | 711-029089 | CAAH7601 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-021308 | AD0927A0036 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | AD0927A003M | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-021308 | AD0927A003G | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021308 | AD0927A0031 | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | 193363A00331 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | 193363A00325 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 193363A00417 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | 183363A02509 | SFP+-10G-SR |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-021308 | T09K75140 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | B11A04356 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | B11K01952 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | B11K01914 | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-021308 | T09K75157 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | T09K75194 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | B11K01926 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | B11K01936 | SFP+-10G-SR |
| FPC 7 | REV 16 | 750-037358 | CAAL1012 | MPC Type 4-1 |
| CPU | REV 08 | 711-035209 | CAAJ3851 | HMPC PMB 2G |
| PIC 0 | | BUILTIN | BUILTIN | 8X10GE SFPP |
| Xcvr 0 | REV 01 | 740-031980 | AMA04NK | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | B11F00260 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | B11E02192 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AMA04CP | SFP+-10G-SR |
| Xcvr 4 | REV 01 | 740-031980 | AJ40JKK | SFP+-10G-SR |
| Xcvr 5 | REV 01 | 740-031980 | B11F00238 | SFP+-10G-SR |
| Xcvr 6 | REV 01 | 740-031980 | B10M00275 | SFP+-10G-SR |
| Xcvr 7 | REV 01 | 740-031980 | 193363A00211 | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 8X10GE SFPP |
| Xcvr 0 | REV 01 | 740-031980 | B11D05577 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | B11G00586 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AMA08B7 | SFP+-10G-SR |

| | | | | |
|------------|--------|------------|--------------|------------------------|
| Xcvr 3 | REV 01 | 740-031980 | AMA04Q0 | SFP+-10G-SR |
| Xcvr 4 | REV 01 | 740-031980 | B11D05840 | SFP+-10G-SR |
| Xcvr 5 | REV 01 | 740-031980 | B11E00467 | SFP+-10G-SR |
| Xcvr 6 | REV 01 | 740-031980 | B11E00029 | SFP+-10G-SR |
| Xcvr 7 | REV 01 | 740-021308 | 19T511101712 | SFP+-10G-SR |
| PIC 2 | | BUILTIN | BUILTIN | 8X10GE SFPP |
| Xcvr 0 | REV 01 | 740-031980 | 193363A00568 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | B10M00166 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | B10M00212 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | B11D05823 | SFP+-10G-SR |
| Xcvr 4 | REV 01 | 740-021308 | 03DZ06A01005 | SFP+-10G-SR |
| Xcvr 5 | REV 01 | 740-021308 | 03DZ06A01003 | SFP+-10G-SR |
| Xcvr 6 | REV 01 | 740-021308 | 03DZ06A01009 | SFP+-10G-SR |
| Xcvr 7 | REV 01 | 740-021308 | 03DZ06A01004 | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 8X10GE SFPP |
| Xcvr 0 | REV 01 | 740-021308 | 03DZ06A01017 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | 03DZ06A01016 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-021308 | 03DZ06A01024 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021308 | 03DZ06A01008 | SFP+-10G-SR |
| Xcvr 4 | REV 01 | 740-030658 | AD0946A02UH | SFP+-10G-USR |
| Xcvr 5 | REV 01 | 740-021308 | T09J67913 | SFP+-10G-SR |
| Xcvr 6 | REV 01 | 740-021308 | AD0837ES09G | SFP+-10G-SR |
| Xcvr 7 | REV 01 | 740-021308 | 03DZ06A01015 | SFP+-10G-SR |
| FPC 8 | REV 03 | 750-045372 | CAAD3111 | MPC Type 3 |
| CPU | REV 08 | 711-035209 | CAAD8033 | HMPD PMB 2G |
| MIC 0 | REV 03 | 750-036233 | ZL2032 | 2X40GE QSFP |
| PIC 0 | | BUILTIN | BUILTIN | 2X40GE QSFP |
| Xcvr 0 | REV 01 | 740-032986 | QB230273 | QSFP+-40G-SR4 |
| Xcvr 1 | REV 01 | 740-032986 | QB230254 | QSFP+-40G-SR4 |
| MIC 1 | REV 03 | 750-036233 | ZL2021 | 2X40GE QSFP |
| PIC 2 | | BUILTIN | BUILTIN | 2X40GE QSFP |
| Xcvr 0 | REV 01 | 740-032986 | QB390962 | QSFP+-40G-SR4 |
| Xcvr 1 | REV 01 | 740-032986 | QB390960 | QSFP+-40G-SR4 |
| FPC 9 | REV 09 | 750-037355 | CAAF1531 | MPC Type 4-2 |
| CPU | REV 08 | 711-035209 | CAAB9927 | HMPD PMB 2G |
| PIC 0 | | BUILTIN | BUILTIN | 4x10GE SFPP |
| Xcvr 0 | REV 01 | 740-031980 | 193363A00525 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | 193363A00504 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 193363A00368 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AJ40JSS | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 1X100GE CFP |
| PIC 2 | | BUILTIN | BUILTIN | 4x10GE SFPP |
| Xcvr 0 | REV 01 | 740-031980 | 123363A00042 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | B10M00023 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AJ802EM | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | B11E02348 | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 1X100GE CFP |
| ADC 0 | REV 13 | 750-043596 | ABBX5532 | Adapter Card |
| ADC 1 | REV 13 | 750-043596 | ABBX5550 | Adapter Card |
| ADC 2 | REV 13 | 750-043596 | ABBX5571 | Adapter Card |
| ADC 3 | REV 13 | 750-043596 | ABBX5568 | Adapter Card |
| ADC 4 | REV 13 | 750-043596 | ABBX5556 | Adapter Card |
| ADC 5 | REV 13 | 750-043596 | ABBX5553 | Adapter Card |
| ADC 6 | REV 13 | 750-043596 | ABBX5541 | Adapter Card |
| ADC 7 | REV 13 | 750-043596 | ABBX5578 | Adapter Card |
| ADC 8 | REV 13 | 750-043596 | ABBX5560 | Adapter Card |
| ADC 9 | REV 07 | 750-043596 | ABBV7188 | Adapter Card |
| Fan Tray 0 | REV 03 | 760-046960 | ACAY0127 | 172mm FanTray - 6 Fans |
| Fan Tray 1 | REV 2A | 760-046960 | ACAY0068 | 172mm FanTray - 6 Fans |
| Fan Tray 2 | REV 2A | 760-046960 | ACAY0072 | 172mm FanTray - 6 Fans |
| Fan Tray 3 | REV 2A | 760-046960 | ACAY0070 | 172mm FanTray - 6 Fans |

show chassis hardware extensive (MX2010 Router)

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user@host > show chassis hardware extensive
Hardware inventory:
Item          Version  Part number  Serial number  Description
Chassis                               JN11E233DAFK  MX2010
  Jedec Code:  0x7fb0                EEPROM Version: 0x02
                                     S/N:           JN11E233DAFK
  Assembly ID: 0x0557                Assembly Version: 00.00
  Date:         00-00-0000           Assembly Flags:  0x00
  ID: MX2010
Board Information Record:
  Address 0x00: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
I2C Hex Data:
  Address 0x00: 7f b0 02 ff 05 57 00 00 00 00 00 00 00 00 00 00
  Address 0x10: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
  Address 0x20: 4a 4e 31 31 45 32 33 33 44 41 46 4b 00 00 00 00
  Address 0x30: 00 00 00 ff 00 00 00 00 00 00 00 00 00 00 00 00
  Address 0x40: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
  Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
  Address 0x60: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
  Address 0x70: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Midplane      REV 26    750-044636  ABAB9357      Lower Backplane
  Jedec Code:  0x7fb0                EEPROM Version: 0x02
  P/N:         750-044636            S/N:           ABAB9357
  Assembly ID: 0x0b66                Assembly Version: 01.26
  Date:        08-28-2012           Assembly Flags: 0x00
  Version:     REV 26               CLEI Code:     PROTOXCLEI
  ID: Lower Backplane              FRU Model Number: PROTO-ASSEMBLY
Board Information Record:
  Address 0x00: ad 01 08 00 2c 21 72 70 a0 00 ff ff ff ff ff ff
I2C Hex Data:
  Address 0x00: 7f b0 02 ff 0b 66 01 1a 52 45 56 20 32 36 00 00
  Address 0x10: 00 00 00 00 37 35 30 2d 30 34 34 36 33 36 00 00
  Address 0x20: 53 2f 4e 20 41 42 41 42 39 33 35 37 00 1c 08 07
  Address 0x30: dc ff ff ff ad 01 08 00 2c 21 72 70 a0 00 ff ff
  Address 0x40: ff ff ff ff 01 50 52 4f 54 4f 58 43 4c 45 49 50
  Address 0x50: 52 4f 54 4f 2d 41 53 53 45 4d 42 4c 59 00 00 00
  Address 0x60: 00 00 00 00 00 00 41 30 30 ff ff ff ff ff ff ff
  Address 0x70: ff ff ff c2 ff ff ff ff ff ff ff ff ff ff ff ff
Midplane 1    REV 01    711-044557  ABAB8643      Upper Backplane
  Jedec Code:  0x7fb0                EEPROM Version: 0x01
  P/N:         711-044557            S/N:           ABAB8643
  Assembly ID: 0x0b65                Assembly Version: 01.01
  Date:        07-27-2012           Assembly Flags: 0x00
  Version:     REV 01
  ID: Upper Backplane
Board Information Record:
  Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
  Address 0x00: 7f b0 01 ff 0b 65 01 01 52 45 56 20 30 31 00 00
  Address 0x10: 00 00 00 00 37 31 31 2d 30 34 34 35 35 37 00 00
  Address 0x20: 53 2f 4e 20 41 42 41 42 38 36 34 33 00 1b 07 07
  Address 0x30: dc ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
  Address 0x40: ff ff ff ff 00 ff ff ff ff ff ff ff ff ff ff ff
  Address 0x50: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
  Address 0x60: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
  Address 0x70: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
PMP           REV 04    711-032426  ACAJ1677      Power Midplane
  Jedec Code:  0x7fb0                EEPROM Version: 0x01

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P/N:          711-032426      S/N:          ACAJ1677
Assembly ID:  0x045d          Assembly Version: 01.04
Date:         07-20-2012      Assembly Flags:  0x00
Version:      REV 04
ID: Power Midplane
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 01 ff 04 5d 01 04 52 45 56 20 30 34 00 00
Address 0x10: 00 00 00 00 37 31 31 2d 30 33 32 34 32 36 00 00
Address 0x20: 53 2f 4e 20 41 43 41 4a 31 36 37 37 00 14 07 0f
Address 0x30: dc ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 00 ff ff ff ff ff ff ff ff ff ff
Address 0x50: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x60: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x70: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
FPM Board          REV 08      760-044634      ABBV9726      Front Panel Display
Jedec Code:       0x7fb0      EEPROM Version:  0x02
P/N:              760-044634      S/N:            ABBV9726
Assembly ID:      0x0b64      Assembly Version: 01.08
Date:             09-10-2012      Assembly Flags:  0x00
Version:          REV 08      CLEI Code:       IPMYA4EJRA
ID: Front Panel Display      FRU Model Number:  MX2010-CRAFT-S
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 0b 64 01 08 52 45 56 20 30 38 00 00
Address 0x10: 00 00 00 00 37 36 30 2d 30 34 34 36 33 34 00 00
Address 0x20: 53 2f 4e 20 41 42 42 56 39 37 32 36 00 0a 09 0f
Address 0x30: dc ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 49 50 4d 59 41 34 45 4a 52 41 4d
Address 0x50: 58 32 30 31 30 2d 43 52 41 46 54 2d 53 00 00 00
Address 0x60: 00 00 00 00 00 00 41 00 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff 93 ff ff ff ff ff ff ff ff ff ff ff ff
PSM 0              REV 01      740-045050      1E02224000P      DC 52V Power Supply
Module
Jedec Code:       0x7fb0      EEPROM Version:  0x02
P/N:              740-045050      S/N:            1E02224000P
Assembly ID:      0x0478      Assembly Version: 01.01
Date:             12-06-2012      Assembly Flags:  0x00
Version:          REV 01      CLEI Code:       XXXXXXXXXX
ID: DC 52V Power Supply Module  FRU Model Number:  MX2000-PSM-HC-DC-S-A
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 04 78 01 01 52 45 56 20 30 31 00 00
Address 0x10: 00 00 00 00 37 34 30 2d 30 34 35 30 35 30 00 00
Address 0x20: 31 45 30 32 32 32 34 30 30 30 50 00 00 06 0c 07
Address 0x30: dc ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 58 58 58 58 58 58 58 58 58 58 4d
Address 0x50: 58 32 30 30 30 2d 50 53 4d 2d 48 43 2d 44 43 2d
Address 0x60: 53 2d 41 00 00 00 31 30 31 ff ff ff ff ff ff ff
Address 0x70: ff ff ff 4a 00 00 00 00 00 00 00 00 00 00 00 00
PSM 1              REV 01      740-045050      1E02224000M      DC 52V Power Supply
Module
Jedec Code:       0x7fb0      EEPROM Version:  0x02
P/N:              740-045050      S/N:            1E02224000M
Assembly ID:      0x0478      Assembly Version: 01.01
Date:             12-06-2012      Assembly Flags:  0x00
Version:          REV 01      CLEI Code:       XXXXXXXXXX
ID: DC 52V Power Supply Module  FRU Model Number:  MX2000-PSM-HC-DC-S-A

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Board Information Record:
  Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
  Address 0x00: 7f b0 02 ff 04 78 01 01 52 45 56 20 30 31 00 00
  Address 0x10: 00 00 00 00 37 34 30 2d 30 34 35 30 35 30 00 00
  Address 0x20: 31 45 30 32 32 32 34 30 30 30 4d 00 00 06 0c 07
  Address 0x30: dc ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
  Address 0x40: ff ff ff ff 01 58 58 58 58 58 58 58 58 58 58 4d
  Address 0x50: 58 32 30 30 30 2d 50 53 4d 2d 48 43 2d 44 43 2d
  Address 0x60: 53 2d 41 00 00 00 31 30 31 ff ff ff ff ff ff ff
  Address 0x70: ff ff ff 4a 00 00 00 00 00 00 00 00 00 00 00 00
...
PDM 0          REV 01  740-045234  1E262250067      DC Power Dist Module
Jedec Code:    0x7fb0          EEPROM Version:    0x02
P/N:           740-045234      S/N:           1E262250067
Assembly ID:   0x047b          Assembly Version: 01.01
Date:          06-28-2012      Assembly Flags: 0x00
Version:       REV 01          CLEI Code:     IPUPAJSKAA
ID: DC Power Dist Module      FRU Model Number: MX2000-PDM-DC-S-A
Board Information Record:
  Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
  Address 0x00: 7f b0 02 ff 04 7b 01 01 52 45 56 20 30 31 00 00
  Address 0x10: 00 00 00 00 37 34 30 2d 30 34 35 32 33 34 00 00
  Address 0x20: 31 45 32 36 32 32 35 30 30 36 37 00 00 1c 06 07
  Address 0x30: dc ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
  Address 0x40: ff ff ff ff 01 49 50 55 50 41 4a 53 4b 41 41 4d
  Address 0x50: 58 32 30 30 30 2d 50 44 4d 2d 44 43 2d 53 2d 41
  Address 0x60: 00 00 00 00 00 00 31 30 31 ff ff ff ff ff ff ff
  Address 0x70: ff ff ff 89 00 00 00 00 00 00 00 00 00 00 00 00
Routing Engine 0 REV 02  740-041821  9009099704      RE-S-1800x4
Jedec Code:    0x7fb0          EEPROM Version:    0x02
P/N:           740-041821      S/N:           9009099704
Assembly ID:   0x09c0          Assembly Version: 01.02
Date:          03-15-2012      Assembly Flags: 0x00
Version:       REV 02
ID: RE-S-1800x4      FRU Model Number: RE-S-1800X4-16G-S
Board Information Record:
  Address 0x00: 54 32 30 32 37 44 41 2d 34 34 47 42 23 41 23 00
I2C Hex Data:
  Address 0x00: 7f b0 02 ff 09 c0 01 02 52 45 56 20 30 32 00 00
  Address 0x10: 00 00 00 00 37 34 30 2d 30 34 31 38 32 31 00 00
  Address 0x20: 39 30 30 39 30 39 39 37 30 34 00 00 00 0f 03 07
  Address 0x30: dc ff ff ff 54 32 30 32 37 44 41 2d 34 34 47 42
  Address 0x40: 23 41 23 00 01 00 00 00 00 00 00 00 00 00 00 52
  Address 0x50: 45 2d 53 2d 31 38 30 30 58 34 2d 31 36 47 2d 53
  Address 0x60: 00 00 00 00 00 00 41 30 30 ff ff ff ff ff ff ff
  Address 0x70: ff ff ff 8c ff ff ff ff ff ff ff ff ff ff ff ff
ad0  3831 MB  UGB30SFA4000T1  SFA4000T1 00000651 Compact Flash
ad1  30533 MB UGB94BPH32H0S1-KCI 11000019592  Disk 1
usb0 (addr 1) EHCI root hub 0 Intel uhub0
usb0 (addr 2) product 0x0020 32 vendor 0x8087 uhub1
DIMM 0  SGU04G72H1BD2SA-BB DIE REV-52 PCB REV-54 MFR ID-ce80
DIMM 1  SGU04G72H1BD2SA-BB DIE REV-52 PCB REV-54 MFR ID-ce80
DIMM 2  SGU04G72H1BD2SA-BB DIE REV-52 PCB REV-54 MFR ID-ce80
DIMM 3  SGU04G72H1BD2SA-BB DIE REV-52 PCB REV-54 MFR ID-ce80
Routing Engine 1 REV 02  740-041821  9009099706      RE-S-1800x4
Jedec Code:    0x7fb0          EEPROM Version:    0x02
P/N:           740-041821      S/N:           9009099706
Assembly ID:   0x09c0          Assembly Version: 01.02
Date:          02-23-2012      Assembly Flags: 0x00

```

```

Version:          REV 02
ID: RE-S-1800x4          FRU Model Number: RE-S-1800X4-16G-S
Board Information Record:
  Address 0x00: 54 32 30 32 37 44 41 2d 34 34 47 42 23 41 23 00
I2C Hex Data:
  Address 0x00: 7f b0 02 ff 09 c0 01 02 52 45 56 20 30 32 00 00
  Address 0x10: 00 00 00 00 37 34 30 2d 30 34 31 38 32 31 00 00
  Address 0x20: 39 30 30 39 30 39 39 37 30 36 00 00 00 17 02 07
  Address 0x30: dc ff ff ff 54 32 30 32 37 44 41 2d 34 34 47 42
  Address 0x40: 23 41 23 00 01 00 00 00 00 00 00 00 00 00 00 52
  Address 0x50: 45 2d 53 2d 31 38 30 30 58 34 2d 31 36 47 2d 53
  Address 0x60: 00 00 00 00 00 00 41 30 30 ff ff ff ff ff ff ff
  Address 0x70: ff ff ff 8c ff ff ff ff ff ff ff ff ff ff ff ff
ad0   3998 MB  Virtium - TuffDrive VCF P1T0200262860208 114 Compact Flash
ad1   30533 MB UGB94ARF32H0S3-KC UNIGEN-499551-000404 Disk 1
CB 0          REV 13   750-040257   CAAF8436          Control Board
Jedec Code:    0x7fb0          EEPROM Version:    0x02
P/N:          750-040257      S/N:          CAAF8436
Assembly ID:   0x0b26          Assembly Version: 01.13
Date:         08-29-2012      Assembly Flags: 0x00
Version:      REV 13          CLEI Code:     PROTOXCLEI
ID: Control Board          FRU Model Number:  PROTO-ASSEMBLY
Board Information Record:
  Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
  Address 0x00: 7f b0 02 ff 0b 26 01 0d 52 45 56 20 31 33 00 00
  Address 0x10: 00 00 00 00 37 35 30 2d 30 34 30 32 35 37 00 00
  Address 0x20: 53 2f 4e 20 43 41 41 46 38 34 33 36 00 1d 08 07
  Address 0x30: dc ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
  Address 0x40: ff ff ff ff 01 50 52 4f 54 4f 58 43 4c 45 49 50
  Address 0x50: 52 4f 54 4f 2d 41 53 53 45 4d 42 4c 59 00 00 00
  Address 0x60: 00 00 00 00 00 00 41 30 30 ff ff ff ff ff ff ff
  Address 0x70: ff ff ff c2 ff ff ff ff ff ff ff ff ff ff ff ff
...
SPMB 0          REV 02   711-041855   ABBV3825          PMB Board
Jedec Code:    0x7fb0          EEPROM Version:    0x01
P/N:          711-041855      S/N:          ABBV3825
Assembly ID:   0x0b29          Assembly Version: 01.02
Date:         08-14-2012      Assembly Flags: 0x00
Version:      REV 02
ID: PMB Board
Board Information Record:
  Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
  Address 0x00: 7f b0 01 ff 0b 29 01 02 52 45 56 20 30 32 00 00
  Address 0x10: 00 00 00 00 37 31 31 2d 30 34 31 38 35 35 00 00
  Address 0x20: 53 2f 4e 20 41 42 42 56 33 38 32 35 00 0e 08 07
  Address 0x30: dc ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
  Address 0x40: ff ff ff ff 00 ff ff ff ff ff ff ff ff ff ff ff
  Address 0x50: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
  Address 0x60: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
  Address 0x70: ff ff ff ff 00 00 00 00 00 00 00 00 00 00 00 00
...
SFB 0          REV 05   711-044466   ABBX5682          Switch Fabric Board
Jedec Code:    0x7fb0          EEPROM Version:    0x02
P/N:          711-044466      S/N:          ABBX5682
Assembly ID:   0x0b25          Assembly Version: 01.05
Date:         09-07-2012      Assembly Flags: 0x00
Version:      REV 05          CLEI Code:     PROTOXCLEI
ID: Switch Fabric Board          FRU Model Number:  PROTO-ASSEMBLY
Board Information Record:

```

```

Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 0b 25 01 05 52 45 56 20 30 35 00 00
Address 0x10: 00 00 00 00 37 31 31 2d 30 34 34 34 36 36 00 00
Address 0x20: 53 2f 4e 20 41 42 42 58 35 36 38 32 00 07 09 07
Address 0x30: dc ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 50 52 4f 54 4f 58 43 4c 45 49 50
Address 0x50: 52 4f 54 4f 2d 41 53 53 45 4d 42 4c 59 00 00 00
Address 0x60: 00 00 00 00 00 00 41 30 30 ff ff ff ff ff ff ff
Address 0x70: ff ff ff c2 00 00 00 01 00 00 00 00 00 00 48 00
...
FPC 0          REV 09    750-037355    CAAF0924          MPC Type 4-2
Jedec Code:    0x7fb0          EEPROM Version:    0x02
P/N:           750-037355      S/N:              CAAF0924
Assembly ID:   0x0b4e          Assembly Version:  01.09
Date:          05-21-2012      Assembly Flags:    0x00
Version:       REV 09          CLEI Code:         PROTOXCLEI
ID: MPC Type 4-2              FRU Model Number: MPC4E-2CGE-8XGE
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 0b 4e 01 09 52 45 56 20 30 39 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 33 37 33 35 35 00 00
Address 0x20: 53 2f 4e 20 43 41 41 46 30 39 32 34 00 15 05 07
Address 0x30: dc ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 50 52 4f 54 4f 58 43 4c 45 49 4d
Address 0x50: 50 43 34 45 2d 32 43 47 45 2d 38 58 47 45 00 00
Address 0x60: 00 00 00 00 00 00 30 39 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff c6 ff ff ff ff ff ff ff ff ff ff ff ff
CPU          REV 08    711-035209    CAAB9842          HMPD PMB 2G
Jedec Code:    0x7fb0          EEPROM Version:    0x01
P/N:           711-035209      S/N:              CAAB9842
Assembly ID:   0x0b04          Assembly Version:  01.08
Date:          05-17-2012      Assembly Flags:    0x00
Version:       REV 08
ID: HMPD PMB 2G
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 01 ff 0b 04 01 08 52 45 56 20 30 38 00 00
Address 0x10: 00 00 00 00 37 31 31 2d 30 33 35 32 30 39 00 00
Address 0x20: 53 2f 4e 20 43 41 41 42 39 38 34 32 00 11 05 07
Address 0x30: dc ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 00 ff ff ff ff ff ff ff ff ff ff ff
Address 0x50: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x60: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x70: ff ff ff ff 00 00 00 00 00 00 00 00 00 00 00 00
PIC 0          BUILTIN    BUILTIN          4x10GE SFPP
Jedec Code:    0x0000          EEPROM Version:    0x00
P/N:           BUILTIN          S/N:              BUILTIN
Assembly ID:   0x0a53          Assembly Version:  00.00
Date:          00-00-0000      Assembly Flags:    0x00
ID: 4x10GE SFPP
Board Information Record:
Address 0x00: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
I2C Hex Data:
Address 0x00: 00 00 00 00 0a 53 00 00 00 00 00 00 00 00 00
Address 0x10: 00 00 00 00 42 55 49 4c 54 49 4e 00 4d 58 43 00
Address 0x20: 42 55 49 4c 54 49 4e 00 4d 58 43 00 00 00 00
Address 0x30: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x40: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

```



```

Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x70: 00 00 00 00 c0 02 ae 64 00 00 00 00 0a 52 00 00
Xcvr 0      REV 01  740-021308  19T511101656  SFP+-10G-SR
Xcvr 1      REV 01  740-031980  AMA04RU      SFP+-10G-SR
Xcvr 2      REV 01  740-031980  193363A00558 SFP+-10G-SR
Xcvr 3      REV 01  740-031980  B10M00202    SFP+-10G-SR
...
ADC 0      REV 13  750-043596  ABBX5532      Adapter Card
Jedec Code: 0x7fb0      EEPROM Version: 0x02
P/N:       750-043596    S/N:         ABBX5532
Assembly ID: 0x0b3d     Assembly Version: 01.13
Date:      09-12-2012   Assembly Flags: 0x00
Version:    REV 13      CLEI Code:    IPUCBA8CAA
ID: Adapter Card      FRU Model Number: MX2000-LC-ADAPTER
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 0b 3d 01 0d 52 45 56 20 31 33 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 34 33 35 39 36 00 00
Address 0x20: 53 2f 4e 20 41 42 42 58 35 35 33 32 00 0c 09 07
Address 0x30: dc ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 49 50 55 43 42 41 38 43 41 41 4d
Address 0x50: 58 32 30 30 30 2d 4c 43 2d 41 44 41 50 54 45 52
Address 0x60: 00 00 00 00 00 00 00 00 41 00 00 ff ff ff ff ff ff
Address 0x70: ff ff ff 3a 00 00 00 00 00 00 00 00 00 00 00 00
...

```

show chassis hardware models (MX2010 Router)

```

user@host > show chassis hardware models
Hardware inventory:

```

| Item | Version | Part number | Serial number | FRU model number |
|------------------|---------|-------------|---------------|--------------------------|
| FPM Board | REV 06 | 711-032349 | ZX8744 | 711-032349 |
| PSM 4 | REV 0C | 740-033727 | VK00254 | 000000000000000000000000 |
| PSM 5 | REV 0B | 740-033727 | VG00015 | 000000000000000000000000 |
| PSM 6 | REV 0B | 740-033727 | VH00097 | 000000000000000000000000 |
| PSM 7 | REV 0C | 740-033727 | VJ00151 | 000000000000000000000000 |
| PSM 8 | REV 0C | 740-033727 | VJ00149 | 000000000000000000000000 |
| PDM 0 | REV 0B | 740-038109 | WA00008 | |
| PDM 1 | REV 0B | 740-038109 | WA00014 | |
| Routing Engine 0 | REV 02 | 740-041821 | 9009094134 | RE-S-1800X4-16G-S |
| Routing Engine 1 | REV 02 | 740-041821 | 9009094141 | RE-S-1800X4-16G-S |
| CB 0 | REV 08 | 750-040257 | CAAB3491 | 750-040257 |
| CB 1 | REV 08 | 750-040257 | CAAB3489 | 750-040257 |
| SFB 0 | REV 06 | 711-032385 | ZV1828 | 711-032385 |
| SFB 1 | REV 07 | 711-032385 | ZZ2568 | 711-032385 |
| SFB 2 | REV 07 | 711-032385 | ZZ2563 | 711-032385 |
| SFB 3 | REV 07 | 711-032385 | ZZ2564 | 711-032385 |
| SFB 4 | REV 07 | 711-032385 | ZZ2580 | 711-032385 |
| SFB 5 | REV 07 | 711-032385 | ZZ2579 | 711-0323856 |
| SFB 6 | REV 07 | 711-032385 | CAAB4882 | 711-044170 |
| SFB 7 | REV 07 | 711-032385 | CAAB4898 | 711-044170 |
| FPC 0 | REV 33 | 750-028467 | CAAB1919 | MPC-3D-16XGE-SFPP |
| FPC 1 | REV 21 | 750-033205 | ZG5027 | MX-MPC3-3D |
| MIC 0 | REV 03 | 750-033307 | ZV6299 | MIC3-3D-10XGE-SFPP |
| MIC 1 | REV 03 | 750-033307 | ZV6268 | MIC3-3D-10XGE-SFPP |
| FPC 8 | REV 22 | 750-031089 | ZT9746 | MX-MPC2-3D |
| MIC 0 | REV 26 | 750-028392 | ABBS1150 | MIC-3D-20GE-SFP |
| MIC 1 | REV 26 | 750-028387 | ABBR9582 | MIC-3D-4XGE-XFP |
| FPC 9 | REV 11 | 750-036284 | ZL3591 | MPCE-3D-16XGE-SFPP |

| | | | | |
|------------|--------|------------|----------|------------|
| ADC 0 | REV 05 | 750-043596 | CAAC2073 | 750-043596 |
| ADC 1 | REV 01 | 750-043596 | ZV4117 | 750-043596 |
| ADC 8 | REV 01 | 750-043596 | ZV4107 | 750-043596 |
| ADC 9 | REV 02 | 750-043596 | ZW1555 | 750-043596 |
| Fan Tray 0 | REV 2A | 760-046960 | ACAY0015 | |
| Fan Tray 1 | REV 2A | 760-046960 | ACAY0019 | |
| Fan Tray 2 | REV 2A | 760-046960 | ACAY0020 | |
| Fan Tray 3 | REV 2A | 760-046960 | ACAY0021 | |

show chassis hardware clei-models (MX2010 Routers)

```

user@host > show chassis hardware clei-models
Hardware inventory:

```

| Item | Version | Part number | CLEI code | FRU model number |
|------------------|---------|-------------|------------|--------------------------|
| FPM Board | REV 06 | 711-032349 | PROTOXCLEI | 711-032349 |
| PSM 4 | REV 0C | 740-033727 | 0000000000 | 000000000000000000000000 |
| PSM 5 | REV 0B | 740-033727 | 0000000000 | 000000000000000000000000 |
| PSM 6 | REV 0B | 740-033727 | 0000000000 | 000000000000000000000000 |
| PSM 7 | REV 0C | 740-033727 | 0000000000 | 000000000000000000000000 |
| PSM 8 | REV 0C | 740-033727 | 0000000000 | 000000000000000000000000 |
| PDM 0 | REV 0B | 740-038109 | | |
| PDM 1 | REV 0B | 740-038109 | | |
| Routing Engine 0 | REV 02 | 740-041821 | | RE-S-1800X4-16G-S |
| Routing Engine 1 | REV 02 | 740-041821 | | RE-S-1800X4-16G-S |
| CB 0 | REV 08 | 750-040257 | PROTOXCLEI | 750-040257 |
| CB 1 | REV 08 | 750-040257 | PROTOXCLEI | 750-040257 |
| SFB 0 | REV 06 | 711-032385 | PROTOXCLEI | 711-032385 |
| SFB 1 | REV 07 | 711-032385 | PROTOXCLEI | 711-032385 |
| SFB 2 | REV 07 | 711-032385 | PROTOXCLEI | 711-032385 |
| SFB 3 | REV 07 | 711-032385 | PROTOXCLEI | 711-032385 |
| SFB 4 | REV 07 | 711-032385 | PROTOXCLEI | 711-032385 |
| SFB 5 | REV 07 | 711-032385 | PROTOXCLEI | 711-0323856 |
| SFB 6 | REV 07 | 711-032385 | PROTOXCLEI | 711-044170 |
| SFB 7 | REV 07 | 711-032385 | PROTOXCLEI | 711-044170 |
| FPC 0 | REV 33 | 750-028467 | | MPC-3D-16XGE-SFPP |
| FPC 1 | REV 21 | 750-033205 | | MX-MPC3-3D |
| MIC 0 | REV 03 | 750-033307 | PROTOXCLEI | MIC3-3D-10XGE-SFPP |
| MIC 1 | REV 03 | 750-033307 | PROTOXCLEI | MIC3-3D-10XGE-SFPP |
| FPC 8 | REV 22 | 750-031089 | COUIBAYBAA | MX-MPC2-3D |
| MIC 0 | REV 26 | 750-028392 | COUIA15BAA | MIC-3D-20GE-SFP |
| MIC 1 | REV 26 | 750-028387 | COUIA16BAA | MIC-3D-4XGE-XFP |
| FPC 9 | REV 11 | 750-036284 | CMUIACGBAA | MPCE-3D-16XGE-SFPP |
| ADC 0 | REV 05 | 750-043596 | PROTOXCLEI | 750-043596 |
| ADC 1 | REV 01 | 750-043596 | PROTOXCLEI | 750-043596 |
| ADC 8 | REV 01 | 750-043596 | PROTOXCLEI | 750-043596 |
| ADC 9 | REV 02 | 750-043596 | PROTOXCLEI | 750-043596 |
| Fan Tray 0 | REV 2A | 760-046960 | | |
| Fan Tray 1 | REV 2A | 760-046960 | | |
| Fan Tray 2 | REV 2A | 760-046960 | | |
| Fan Tray 3 | REV 2A | 760-046960 | | |

show chassis hardware (MX2010 Routers with MPC6E and OTN MIC)

```

user@host> show chassis hardware
Hardware inventory:

```

| Item | Version | Part number | Serial number | Description |
|------------|---------|-------------|---------------|-----------------|
| Chassis | | | JN11C9AFEAFK | MX2010 |
| Midplane | REV 35 | 750-044636 | ABAB9188 | Lower Backplane |
| Midplane 1 | REV 02 | 711-044557 | ABAB8729 | Upper Backplane |
| PMP | REV 04 | 711-032426 | ACAJ2432 | Power Midplane |

| | | | | |
|------------------|-------------|------------|-------------|----------------------|
| FPM Board | REV 09 | 760-044634 | ABCA4314 | Front Panel Display |
| PSM 0 Module | REV 01 | 740-050037 | 1EDB321015C | DC 52V Power Supply |
| PSM 1 Module | REV 01 | 740-050037 | 1EDB321015J | DC 52V Power Supply |
| PSM 2 Module | REV 01 | 740-050037 | 1EDB32000K8 | DC 52V Power Supply |
| PSM 3 Module | REV 01 | 740-050037 | 1EDB32101JW | DC 52V Power Supply |
| PSM 4 Module | REV 01 | 740-050037 | 1EDB321015G | DC 52V Power Supply |
| PSM 5 Module | REV 01 | 740-050037 | 1EDB32101HH | DC 52V Power Supply |
| PSM 6 Module | REV 01 | 740-050037 | 1EDB32101HD | DC 52V Power Supply |
| PSM 7 Module | REV 01 | 740-050037 | 1EDB321015F | DC 52V Power Supply |
| PSM 8 Module | REV 01 | 740-050037 | 1EDB321015B | DC 52V Power Supply |
| PDM 0 | REV 03 | 740-045234 | 1EFA3220433 | DC Power Dist Module |
| PDM 1 | REV 03 | 740-045234 | 1EFA3220425 | DC Power Dist Module |
| Routing Engine 0 | REV 02 | 740-041821 | 9009115685 | RE-S-1800x4 |
| Routing Engine 1 | REV 02 | 740-041821 | 9009099711 | RE-S-1800x4 |
| CB 0 | REV 23 | 750-040257 | CABE8395 | Control Board |
| CB 1 | REV 12 | 750-040257 | CAAD9499 | Control Board |
| SPMB 0 | REV 02 | 711-041855 | ABCG8426 | PMB Board |
| SPMB 1 | REV 02 | 711-041855 | ABBS1481 | PMB Board |
| SFB 0 | REV 06 | 711-044466 | ABCD5013 | Switch Fabric Board |
| SFB 1 | REV 06 | 711-044466 | ABCD5160 | Switch Fabric Board |
| SFB 2 | REV 06 | 711-044466 | ABCD5175 | Switch Fabric Board |
| SFB 3 | REV 06 | 711-044466 | ABCD4938 | Switch Fabric Board |
| SFB 4 | REV 06 | 711-044466 | ABCD4944 | Switch Fabric Board |
| SFB 5 | REV 06 | 711-044466 | ABCD4968 | Switch Fabric Board |
| SFB 6 | REV 06 | 711-044466 | ABCD5267 | Switch Fabric Board |
| SFB 7 | REV 06 | 711-044466 | ABCD4997 | Switch Fabric Board |
| FPC 0 | REV 59 | 750-044130 | ABCT7676 | MPC6E 3D |
| CPU | REV 10 | 711-045719 | ABCK8527 | RMPD PMB |
| XLM 0 | REV 13 | 711-046638 | ABCT7810 | MPC6E XL |
| XLM 1 | REV 13 | 711-046638 | ABCT7811 | MPC6E XL |
| FPC 2 | REV 27 | 750-033205 | ZL6014 | MPCE Type 3 3D |
| CPU | REV 07 | 711-035209 | ZK9068 | HMPD PMB 2G |
| MIC 0 | REV 14 | 750-033196 | CAAW9214 | 1X100GE CXP |
| PIC 0 | | BUILTIN | BUILTIN | 1X100GE CXP |
| Xcvr 0 | REV 01 | 740-046563 | XC49FC030 | CFP2-100G-SR10 |
| MIC 1 | REV 18 | 750-033199 | CAAC3231 | 1X100GE CFP |
| PIC 2 | | BUILTIN | BUILTIN | 1X100GE CFP |
| FPC 3 | REV 59 | 750-044130 | ABCT7682 | MPC6E 3D |
| CPU | REV 10 | 711-045719 | ABCK8531 | RMPD PMB |
| XLM 0 | REV 13 | 711-046638 | ABCT7818 | MPC6E XL |
| XLM 1 | REV 13 | 711-046638 | ABCT7819 | MPC6E XL |
| FPC 4 | REV 33 | 750-044130 | ABBY9278 | MPC6E 3D |
| CPU | REV 09 | 711-045719 | ABBY8677 | RMPD PMB |
| XLM 0 | REV 06.2.00 | 711-046638 | ABBY8844 | MPC6E XL |
| XLM 1 | REV 06.2.00 | 711-046638 | ABBY8830 | MPC6E XL |
| FPC 5 | REV 59 | 750-044130 | ABCT7675 | MPC6E 3D |
| CPU | REV 10 | 711-045719 | ABCK8526 | RMPD PMB |
| XLM 0 | REV 13 | 711-046638 | ABCT7808 | MPC6E XL |
| XLM 1 | REV 13 | 711-046638 | ABCT7809 | MPC6E XL |
| FPC 6 | REV 30 | 750-028467 | ZM4986 | MPC 3D 16x 10GE |
| CPU | REV 10 | 711-029089 | ZP6541 | AMPD PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |

| | | | | |
|------------|-------------|------------|----------------|------------------------|
| Xcvr 0 | REV 01 | 740-021308 | AQ43GAC | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | ALMOA6D | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AQFORB3 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 153363A00333 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021308 | AN10KYE | SFP+-10G-SR |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-021308 | APK04YM | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AQFOH44 | SFP+-10G-SR |
| FPC 8 | REV 38 | 750-031090 | CABF7313 | MPC Type 2 3D EQ |
| CPU | REV 08 | 711-030884 | CABE6727 | MPC PMB 2G |
| MIC 0 | REV 18 | 750-028380 | YK8253 | 3D 2x 10GE XFP |
| PIC 0 | | BUILTIN | BUILTIN | 1x 10GE XFP |
| Xcvr 0 | REV 03 | 740-014289 | AD1148M00TP | XFP-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 1x 10GE XFP |
| QXM 0 | REV 06 | 711-028408 | CABC5614 | MPC QXM |
| QXM 1 | REV 06 | 711-028408 | CABC5550 | MPC QXM |
| FPC 9 | REV 39 | 750-044130 | ABCK1652 | MPC6E 3D |
| CPU | REV 09 | 711-045719 | ABCK1655 | RMPC PMB |
| MIC 0 | REV 09 | 750-049457 | ABCP1230 | 2X100GE CFP2 OTN |
| PIC 0 | | BUILTIN | BUILTIN | 2X100GE CFP2 OTN |
| Xcvr 0 | | NON-JNPR | 37300222WP0002 | CFP2-100G-LR4-D |
| Xcvr 1 | | NON-JNPR | FD46F001Y | CFP2-100G-SR10 |
| MIC 1 | REV 07 | 750-049457 | ABCV6662 | 2X100GE CFP2 OTN |
| PIC 1 | | BUILTIN | BUILTIN | 2X100GE CFP2 OTN |
| Xcvr 0 | | NON-JNPR | UQD0014 | CFP2-100G-LR4-D |
| Xcvr 1 | | NON-JNPR | J13J68335 | CFP2-100G-LR4-D |
| XLM 0 | REV 07.2.00 | 711-046638 | ABCK5491 | MPC6E XL |
| XLM 1 | REV 07.2.00 | 711-046638 | ABCK5475 | MPC6E XL |
| ADC 1 | REV 17 | 750-043596 | ABCG9023 | Adapter Card |
| ADC 2 | REV 01 | 750-043596 | ZV4079 | Adapter Card |
| ADC 6 | REV 17 | 750-043596 | ABCG8866 | Adapter Card |
| ADC 8 | REV 17 | 750-043596 | ABCA8993 | Adapter Card |
| Fan Tray 0 | REV 06 | 760-046960 | ACAY0354 | 172mm FanTray - 6 Fans |
| Fan Tray 1 | REV 06 | 760-046960 | ACAY0831 | 172mm FanTray - 6 Fans |
| Fan Tray 2 | REV 06 | 760-046960 | ACAY0892 | 172mm FanTray - 6 Fans |
| Fan Tray 3 | REV 06 | 760-046960 | ACAY0839 | 172mm FanTray - 6 Fans |

show chassis hardware detail (MX2010 Routers with MPC6E and OTN MIC)

```
user@host> show chassis hardware detail
```

| Hardware inventory: | | | | |
|---------------------|---------|-------------|---------------|---------------------|
| Item | Version | Part number | Serial number | Description |
| Chassis | | | JN11C9AFEAFK | MX2010 |
| Midplane | REV 35 | 750-044636 | ABAB9188 | Lower Backplane |
| Midplane 1 | REV 02 | 711-044557 | ABAB8729 | Upper Backplane |
| PMP | REV 04 | 711-032426 | ACAJ2432 | Power Midplane |
| FPM Board | REV 09 | 760-044634 | ABCA4314 | Front Panel Display |
| PSM 0 | REV 01 | 740-050037 | 1EDB321015C | DC 52V Power Supply |
| Module | | | | |
| PSM 1 | REV 01 | 740-050037 | 1EDB321015J | DC 52V Power Supply |
| Module | | | | |
| PSM 2 | REV 01 | 740-050037 | 1EDB32000K8 | DC 52V Power Supply |
| Module | | | | |
| PSM 3 | REV 01 | 740-050037 | 1EDB32101JW | DC 52V Power Supply |
| Module | | | | |
| PSM 4 | REV 01 | 740-050037 | 1EDB321015G | DC 52V Power Supply |
| Module | | | | |
| PSM 5 | REV 01 | 740-050037 | 1EDB32101HH | DC 52V Power Supply |
| Module | | | | |

| | | | | |
|------------------|-------------|---------------------|----------------------|----------------------|
| PSM 6 Module | REV 01 | 740-050037 | 1EDB32101HD | DC 52V Power Supply |
| PSM 7 Module | REV 01 | 740-050037 | 1EDB321015F | DC 52V Power Supply |
| PSM 8 Module | REV 01 | 740-050037 | 1EDB321015B | DC 52V Power Supply |
| PDM 0 | REV 03 | 740-045234 | 1EFA3220433 | DC Power Dist Module |
| PDM 1 | REV 03 | 740-045234 | 1EFA3220425 | DC Power Dist Module |
| Routing Engine 0 | REV 02 | 740-041821 | 9009115685 | RE-S-1800x4 |
| ad0 3998 MB | | Virtium - TuffDrive | VCF P1T0200274310822 | 191 Compact Flash |
| ad1 30533 MB | | UGB94BPH32H0S1-KCI | 11000043190 | Disk 1 |
| usb0 (addr 1) | | EHCI root hub 0 | Intel | uhub0 |
| usb0 (addr 2) | | product 0x0020 32 | vendor 0x8087 | uhub1 |
| DIMM 0 | | VL31B5263F-F8SD DIE | REV-0 PCB REV-0 | MFR ID-ce80 |
| DIMM 1 | | VL31B5263F-F8SD DIE | REV-0 PCB REV-0 | MFR ID-ce80 |
| DIMM 2 | | VL31B5263F-F8SD DIE | REV-0 PCB REV-0 | MFR ID-ce80 |
| DIMM 3 | | VL31B5263F-F8SD DIE | REV-0 PCB REV-0 | MFR ID-ce80 |
| Routing Engine 1 | REV 02 | 740-041821 | 9009099711 | RE-S-1800x4 |
| ad0 3998 MB | | Virtium - TuffDrive | VCF P1T0200262860208 | 30 Compact Flash |
| ad1 30533 MB | | UGB94ARF32H0S3-KC | UNIGEN-499551-000146 | Disk 1 |
| CB 0 | REV 23 | 750-040257 | CABE8395 | Control Board |
| CB 1 | REV 12 | 750-040257 | CAAD9499 | Control Board |
| SPMB 0 | REV 02 | 711-041855 | ABCG8426 | PMB Board |
| SPMB 1 | REV 02 | 711-041855 | ABBS1481 | PMB Board |
| SFB 0 | REV 06 | 711-044466 | ABCD5013 | Switch Fabric Board |
| SFB 1 | REV 06 | 711-044466 | ABCD5160 | Switch Fabric Board |
| SFB 2 | REV 06 | 711-044466 | ABCD5175 | Switch Fabric Board |
| SFB 3 | REV 06 | 711-044466 | ABCD4938 | Switch Fabric Board |
| SFB 4 | REV 06 | 711-044466 | ABCD4944 | Switch Fabric Board |
| SFB 5 | REV 06 | 711-044466 | ABCD4968 | Switch Fabric Board |
| SFB 6 | REV 06 | 711-044466 | ABCD5267 | Switch Fabric Board |
| SFB 7 | REV 06 | 711-044466 | ABCD4997 | Switch Fabric Board |
| FPC 0 | REV 59 | 750-044130 | ABCT7676 | MPC6E 3D |
| CPU | REV 10 | 711-045719 | ABCK8527 | RMPK PMB |
| XLM 0 | REV 13 | 711-046638 | ABCT7810 | MPC6E XL |
| XLM 1 | REV 13 | 711-046638 | ABCT7811 | MPC6E XL |
| FPC 2 | REV 27 | 750-033205 | ZL6014 | MPCE Type 3 3D |
| CPU | REV 07 | 711-035209 | ZK9068 | HMPK PMB 2G |
| MIC 0 | REV 14 | 750-033196 | CAAW9214 | 1X100GE CXP |
| PIC 0 | | BUILTIN | BUILTIN | 1X100GE CXP |
| Xcvr 0 | REV 01 | 740-046563 | XC49FC030 | CFP2-100G-SR10 |
| MIC 1 | REV 18 | 750-033199 | CAAC3231 | 1X100GE CFP |
| PIC 2 | | BUILTIN | BUILTIN | 1X100GE CFP |
| FPC 3 | REV 59 | 750-044130 | ABCT7682 | MPC6E 3D |
| CPU | REV 10 | 711-045719 | ABCK8531 | RMPK PMB |
| XLM 0 | REV 13 | 711-046638 | ABCT7818 | MPC6E XL |
| XLM 1 | REV 13 | 711-046638 | ABCT7819 | MPC6E XL |
| FPC 4 | REV 33 | 750-044130 | ABBY9278 | MPC6E 3D |
| CPU | REV 09 | 711-045719 | ABBY8677 | RMPK PMB |
| XLM 0 | REV 06.2.00 | 711-046638 | ABBY8844 | MPC6E XL |
| XLM 1 | REV 06.2.00 | 711-046638 | ABBY8830 | MPC6E XL |
| FPC 5 | REV 59 | 750-044130 | ABCT7675 | MPC6E 3D |
| CPU | REV 10 | 711-045719 | ABCK8526 | RMPK PMB |
| XLM 0 | REV 13 | 711-046638 | ABCT7808 | MPC6E XL |
| XLM 1 | REV 13 | 711-046638 | ABCT7809 | MPC6E XL |
| FPC 6 | REV 30 | 750-028467 | ZM4986 | MPC 3D 16x 10GE |
| CPU | REV 10 | 711-029089 | ZP6541 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-021308 | AQ43GAC | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | ALMOA6D | SFP+-10G-SR |

| | | | | |
|------------|-------------|------------|----------------|------------------------|
| Xcvr 1 | REV 01 | 740-031980 | AQFORB3 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 153363A00333 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021308 | AN10KYE | SFP+-10G-SR |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-021308 | APK04YM | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AQFOH44 | SFP+-10G-SR |
| FPC 8 | REV 38 | 750-031090 | CABF7313 | MPC Type 2 3D EQ |
| CPU | REV 08 | 711-030884 | CABE6727 | MPC PMB 2G |
| MIC 0 | REV 18 | 750-028380 | YK8253 | 3D 2x 10GE XFP |
| PIC 0 | | BUILTIN | BUILTIN | 1x 10GE XFP |
| Xcvr 0 | REV 03 | 740-014289 | AD1148M00TP | XFP-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 1x 10GE XFP |
| QXM 0 | REV 06 | 711-028408 | CABC5614 | MPC QXM |
| QXM 1 | REV 06 | 711-028408 | CABC5550 | MPC QXM |
| FPC 9 | REV 39 | 750-044130 | ABCK1652 | MPC6E 3D |
| CPU | REV 09 | 711-045719 | ABCK1655 | RMPC PMB |
| MIC 0 | REV 09 | 750-049457 | ABCP1230 | 2X100GE CFP2 OTN |
| PIC 0 | | BUILTIN | BUILTIN | 2X100GE CFP2 OTN |
| Xcvr 0 | | NON-JNPR | 37300222WP0002 | CFP2-100G-LR4-D |
| Xcvr 1 | | NON-JNPR | FD46F001Y | CFP2-100G-SR10 |
| MIC 1 | REV 07 | 750-049457 | ABCV6662 | 2X100GE CFP2 OTN |
| PIC 1 | | BUILTIN | BUILTIN | 2X100GE CFP2 OTN |
| Xcvr 0 | | NON-JNPR | UQD0014 | CFP2-100G-LR4-D |
| Xcvr 1 | | NON-JNPR | J13J68335 | CFP2-100G-LR4-D |
| XLM 0 | REV 07.2.00 | 711-046638 | ABCK5491 | MPC6E XL |
| XLM 1 | REV 07.2.00 | 711-046638 | ABCK5475 | MPC6E XL |
| ADC 1 | REV 17 | 750-043596 | ABCG9023 | Adapter Card |
| ADC 2 | REV 01 | 750-043596 | ZV4079 | Adapter Card |
| ADC 6 | REV 17 | 750-043596 | ABCG8866 | Adapter Card |
| ADC 8 | REV 17 | 750-043596 | ABCA8993 | Adapter Card |
| Fan Tray 0 | REV 06 | 760-046960 | ACAY0354 | 172mm FanTray - 6 Fans |
| Fan Tray 1 | REV 06 | 760-046960 | ACAY0831 | 172mm FanTray - 6 Fans |
| Fan Tray 2 | REV 06 | 760-046960 | ACAY0892 | 172mm FanTray - 6 Fans |
| Fan Tray 3 | REV 06 | 760-046960 | ACAY0839 | 172mm FanTray - 6 Fans |

show chassis hardware extensive (MX2010 Routers with MPC6E and OTN MIC)

```

user@host> show chassis hardware extensive
Hardware inventory:
Item          Version  Part number  Serial number  Description
Chassis                               JN11C9AFEAFK  MX2010
Jedec Code:   0x7fb0                  EEPROM Version: 0x02
S/N:          JN11C9AFEAFK
Assembly ID:  0x0557                  Assembly Version: 00.00
Date:         00-00-0000              Assembly Flags:  0x00
ID: MX2010
Board Information Record:
Address 0x00: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
I2C Hex Data:
Address 0x00: 7f b0 02 ff 05 57 00 00 00 00 00 00 00 00 00 00
Address 0x10: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x20: 4a 4e 31 31 43 39 41 46 45 41 46 4b 00 00 00 00
Address 0x30: 00 00 00 ff 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x40: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x70: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Midplane      REV 35   750-044636  ABAB9188      Lower Backplane
Jedec Code:   0x7fb0                  EEPROM Version: 0x02
P/N:         750-044636              S/N:          ABAB9188

```

```

Assembly ID: 0x0b66      Assembly Version: 01.35
Date:          06-21-2013  Assembly Flags: 0x00
Version:       REV 35      CLEI Code:      IPMU810ARA
ID: Lower Backplane      FRU Model Number: CHAS-BP-MX2010-S
Board Information Record:
  Address 0x00: ad 01 08 00 3c 8a b0 38 68 00 ff ff ff ff ff ff
I2C Hex Data:
  Address 0x00: 7f b0 02 ff 0b 66 01 23 52 45 56 20 33 35 00 00
  Address 0x10: 00 00 00 00 37 35 30 2d 30 34 34 36 33 36 00 00
  Address 0x20: 53 2f 4e 20 41 42 41 42 39 31 38 38 00 15 06 07
  Address 0x30: dd ff ff ff ad 01 08 00 3c 8a b0 38 68 00 ff ff
  Address 0x40: ff ff ff ff 01 49 50 4d 55 38 31 30 41 52 41 43
  Address 0x50: 48 41 53 2d 42 50 2d 4d 58 32 30 31 30 2d 53 00
  Address 0x60: 00 00 00 00 00 00 30 36 00 ff ff ff ff ff ff ff
  Address 0x70: ff ff ff f8 ff ff ff ff ff ff ff ff ff ff ff ff
Midplane 1      REV 02      711-044557      ABAB8729      Upper Backplane
Jedec Code: 0x7fb0      EEPROM Version: 0x01
P/N: 711-044557      S/N: ABAB8729
Assembly ID: 0x0b65      Assembly Version: 01.02
Date: 03-21-2013      Assembly Flags: 0x00
Version: REV 02
ID: Upper Backplane
Board Information Record:
  Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
  Address 0x00: 7f b0 01 ff 0b 65 01 02 52 45 56 20 30 32 00 00
  Address 0x10: 00 00 00 00 37 31 31 2d 30 34 34 35 35 37 00 00
  Address 0x20: 53 2f 4e 20 41 42 41 42 38 37 32 39 00 15 03 07
  Address 0x30: dd ff ff ff ff ff ff ff ff ff ff ff ff ff ff
  Address 0x40: ff ff ff ff 01 00 00 00 00 00 00 00 00 00 00 00
  Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
  Address 0x60: 00 00 00 00 00 00 ff ff ff ff ff ff ff ff ff ff
  Address 0x70: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
PMP      REV 04      711-032426      ACAJ2432      Power Midplane
Jedec Code: 0x7fb0      EEPROM Version: 0x01
P/N: 711-032426      S/N: ACAJ2432
Assembly ID: 0x045d      Assembly Version: 01.04
Date: 03-28-2013      Assembly Flags: 0x00
Version: REV 04
ID: Power Midplane
Board Information Record:
  Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
  Address 0x00: 7f b0 01 ff 04 5d 01 04 52 45 56 20 30 34 00 00
  Address 0x10: 00 00 00 00 37 31 31 2d 30 33 32 34 32 36 00 00
  Address 0x20: 53 2f 4e 20 41 43 41 4a 32 34 33 32 00 1c 03 07
  Address 0x30: dd ff ff ff ff ff ff ff ff ff ff ff ff ff ff
  Address 0x40: ff ff ff ff 01 00 00 00 00 00 00 00 00 00 00 00
  Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
  Address 0x60: 00 00 00 00 00 00 ff ff ff ff ff ff ff ff ff ff
  Address 0x70: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
FPM Board      REV 09      760-044634      ABCA4314      Front Panel Display
Jedec Code: 0x7fb0      EEPROM Version: 0x02
P/N: 760-044634      S/N: ABCA4314
Assembly ID: 0x0b64      Assembly Version: 01.09
Date: 03-28-2013      Assembly Flags: 0x00
Version: REV 09      CLEI Code:      IPMYA4EJRA
ID: Front Panel Display      FRU Model Number: MX2010-CRAFT-S
Board Information Record:
  Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:

```

```

Address 0x00: 7f b0 02 ff 0b 64 01 09 52 45 56 20 30 39 00 00
Address 0x10: 00 00 00 00 37 36 30 2d 30 34 34 36 33 34 00 00
Address 0x20: 53 2f 4e 20 41 42 43 41 34 33 31 34 00 1c 03 07
Address 0x30: dd ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 49 50 4d 59 41 34 45 4a 52 41 4d
Address 0x50: 58 32 30 31 30 2d 43 52 41 46 54 2d 53 00 00 00
Address 0x60: 00 00 00 00 00 00 41 00 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff 93 ff ff ff ff ff ff ff ff ff ff ff ff
PSM 0          REV 01  740-050037  1EDB321015C      DC 52V Power Supply
Module
Jedec Code:    0x7fb0          EEPROM Version: 0x02
P/N:           740-050037      S/N:           1EDB321015C
Assembly ID:   0x0478          Assembly Version: 01.01
Date:          05-28-2013      Assembly Flags: 0x00
Version:       REV 01          CLEI Code:     IPUPAKRKAA
ID: DC 52V Power Supply Module FRU Model Number: MX2000-PSM-DC-S
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 04 78 01 01 52 45 56 20 30 31 00 00
Address 0x10: 00 00 00 00 37 34 30 2d 30 35 30 30 33 37 00 00
Address 0x20: 31 45 44 42 33 32 31 30 31 35 43 00 00 1c 05 07
Address 0x30: dd ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 49 50 55 50 41 4b 52 4b 41 41 4d
Address 0x50: 58 32 30 30 30 2d 50 53 4d 2d 44 43 2d 53 00 00
Address 0x60: 00 00 00 00 00 00 31 30 31 ff ff ff ff ff ff ff
Address 0x70: ff ff ff 2a 00 00 00 00 00 00 00 00 00 00 00 00
PSM 1          REV 01  740-050037  1EDB321015J      DC 52V Power Supply
Module
Jedec Code:    0x7fb0          EEPROM Version: 0x02
P/N:           740-050037      S/N:           1EDB321015J
Assembly ID:   0x0478          Assembly Version: 01.01
Date:          05-28-2013      Assembly Flags: 0x00
Version:       REV 01          CLEI Code:     IPUPAKRKAA
ID: DC 52V Power Supply Module FRU Model Number: MX2000-PSM-DC-S
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 04 78 01 01 52 45 56 20 30 31 00 00
Address 0x10: 00 00 00 00 37 34 30 2d 30 35 30 30 33 37 00 00
Address 0x20: 31 45 44 42 33 32 31 30 31 35 4a 00 00 1c 05 07
Address 0x30: dd ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 49 50 55 50 41 4b 52 4b 41 41 4d
Address 0x50: 58 32 30 30 30 2d 50 53 4d 2d 44 43 2d 53 00 00
Address 0x60: 00 00 00 00 00 00 31 30 31 ff ff ff ff ff ff ff
Address 0x70: ff ff ff 2a 00 00 00 00 00 00 00 00 00 00 00 00
PSM 2          REV 01  740-050037  1EDB32000K8      DC 52V Power Supply
Module
Jedec Code:    0x7fb0          EEPROM Version: 0x02
P/N:           740-050037      S/N:           1EDB32000K8
Assembly ID:   0x0478          Assembly Version: 01.01
Date:          05-23-2013      Assembly Flags: 0x00
Version:       REV 01          CLEI Code:     IPUPAKRKAA
ID: DC 52V Power Supply Module FRU Model Number: MX2000-PSM-DC-S
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 04 78 01 01 52 45 56 20 30 31 00 00
Address 0x10: 00 00 00 00 37 34 30 2d 30 35 30 30 33 37 00 00
Address 0x20: 31 45 44 42 33 32 30 30 30 4b 38 00 00 17 05 07
Address 0x30: dd ff ff ff ff ff ff ff ff ff ff ff ff ff ff

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Address 0x40: ff ff ff ff 01 49 50 55 50 41 4b 52 4b 41 41 4d
Address 0x50: 58 32 30 30 30 2d 50 53 4d 2d 44 43 2d 53 00 00
Address 0x60: 00 00 00 00 00 00 31 30 31 ff ff ff ff ff ff ff
Address 0x70: ff ff ff 2a 00 00 00 00 00 00 00 00 00 00 00 00
PSM 3          REV 01   740-050037   1EDB32101JW   DC 52V Power Supply
Module
Jedec Code:   0x7fb0           EEPROM Version:   0x02
P/N:          740-050037       S/N:              1EDB32101JW
Assembly ID:  0x0478           Assembly Version: 01.01
Date:         05-30-2013       Assembly Flags:   0x00
Version:      REV 01           CLEI Code:        IPUPAKRKAA
ID: DC 52V Power Supply Module FRU Model Number: MX2000-PSM-DC-S
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 04 78 01 01 52 45 56 20 30 31 00 00
Address 0x10: 00 00 00 00 37 34 30 2d 30 35 30 30 33 37 00 00
Address 0x20: 31 45 44 42 33 32 31 30 31 4a 57 00 00 1e 05 07
Address 0x30: dd ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 49 50 55 50 41 4b 52 4b 41 41 4d
Address 0x50: 58 32 30 30 30 2d 50 53 4d 2d 44 43 2d 53 00 00
Address 0x60: 00 00 00 00 00 00 31 30 31 ff ff ff ff ff ff ff
Address 0x70: ff ff ff 2a 00 00 00 00 00 00 00 00 00 00 00 00
PSM 4          REV 01   740-050037   1EDB321015G   DC 52V Power Supply
Module
Jedec Code:   0x7fb0           EEPROM Version:   0x02
P/N:          740-050037       S/N:              1EDB321015G
Assembly ID:  0x0478           Assembly Version: 01.01
Date:         05-28-2013       Assembly Flags:   0x00
Version:      REV 01           CLEI Code:        IPUPAKRKAA
ID: DC 52V Power Supply Module FRU Model Number: MX2000-PSM-DC-S
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 04 78 01 01 52 45 56 20 30 31 00 00
Address 0x10: 00 00 00 00 37 34 30 2d 30 35 30 30 33 37 00 00
Address 0x20: 31 45 44 42 33 32 31 30 31 35 47 00 00 1c 05 07
Address 0x30: dd ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 49 50 55 50 41 4b 52 4b 41 41 4d
Address 0x50: 58 32 30 30 30 2d 50 53 4d 2d 44 43 2d 53 00 00
Address 0x60: 00 00 00 00 00 00 31 30 31 ff ff ff ff ff ff ff
Address 0x70: ff ff ff 2a 00 00 00 00 00 00 00 00 00 00 00 00
PSM 5          REV 01   740-050037   1EDB32101HH   DC 52V Power Supply
Module
Jedec Code:   0x7fb0           EEPROM Version:   0x02
P/N:          740-050037       S/N:              1EDB32101HH
Assembly ID:  0x0478           Assembly Version: 01.01
Date:         05-30-2013       Assembly Flags:   0x00
Version:      REV 01           CLEI Code:        IPUPAKRKAA
ID: DC 52V Power Supply Module FRU Model Number: MX2000-PSM-DC-S
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 04 78 01 01 52 45 56 20 30 31 00 00
Address 0x10: 00 00 00 00 37 34 30 2d 30 35 30 30 33 37 00 00
Address 0x20: 31 45 44 42 33 32 31 30 31 48 48 00 00 1e 05 07
Address 0x30: dd ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 49 50 55 50 41 4b 52 4b 41 41 4d
Address 0x50: 58 32 30 30 30 2d 50 53 4d 2d 44 43 2d 53 00 00
Address 0x60: 00 00 00 00 00 00 31 30 31 ff ff ff ff ff ff ff
Address 0x70: ff ff ff 2a 00 00 00 00 00 00 00 00 00 00 00 00

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PSM 6          REV 01  740-050037  1EDB32101HD      DC 52V Power Supply
Module
Jedec Code:    0x7fb0          EEPROM Version:    0x02
P/N:           740-050037      S/N:              1EDB32101HD
Assembly ID:   0x0478          Assembly Version:  01.01
Date:          05-30-2013      Assembly Flags:    0x00
Version:       REV 01          CLEI Code:         IPUPAKRKAA
ID: DC 52V Power Supply Module FRU Model Number: MX2000-PSM-DC-S
Board Information Record:
  Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
  Address 0x00: 7f b0 02 ff 04 78 01 01 52 45 56 20 30 31 00 00
  Address 0x10: 00 00 00 00 37 34 30 2d 30 35 30 30 33 37 00 00
  Address 0x20: 31 45 44 42 33 32 31 30 31 48 44 00 00 1e 05 07
  Address 0x30: dd ff ff ff ff ff ff ff ff ff ff ff ff ff ff
  Address 0x40: ff ff ff ff 01 49 50 55 50 41 4b 52 4b 41 41 4d
  Address 0x50: 58 32 30 30 30 2d 50 53 4d 2d 44 43 2d 53 00 00
  Address 0x60: 00 00 00 00 00 00 31 30 31 ff ff ff ff ff ff ff
  Address 0x70: ff ff ff 2a 00 00 00 00 00 00 00 00 00 00 00 00
PSM 7          REV 01  740-050037  1EDB321015F      DC 52V Power Supply
Module
Jedec Code:    0x7fb0          EEPROM Version:    0x02
P/N:           740-050037      S/N:              1EDB321015F
Assembly ID:   0x0478          Assembly Version:  01.01
Date:          05-28-2013      Assembly Flags:    0x00
Version:       REV 01          CLEI Code:         IPUPAKRKAA
ID: DC 52V Power Supply Module FRU Model Number: MX2000-PSM-DC-S
Board Information Record:
  Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
  Address 0x00: 7f b0 02 ff 04 78 01 01 52 45 56 20 30 31 00 00
  Address 0x10: 00 00 00 00 37 34 30 2d 30 35 30 30 33 37 00 00
  Address 0x20: 31 45 44 42 33 32 31 30 31 35 46 00 00 1c 05 07
  Address 0x30: dd ff ff ff ff ff ff ff ff ff ff ff ff ff ff
  Address 0x40: ff ff ff ff 01 49 50 55 50 41 4b 52 4b 41 41 4d
  Address 0x50: 58 32 30 30 30 2d 50 53 4d 2d 44 43 2d 53 00 00
  Address 0x60: 00 00 00 00 00 00 31 30 31 ff ff ff ff ff ff ff
  Address 0x70: ff ff ff 2a 00 00 00 00 00 00 00 00 00 00 00 00
PSM 8          REV 01  740-050037  1EDB321015B      DC 52V Power Supply
Module
Jedec Code:    0x7fb0          EEPROM Version:    0x02
P/N:           740-050037      S/N:              1EDB321015B
Assembly ID:   0x0478          Assembly Version:  01.01
Date:          05-28-2013      Assembly Flags:    0x00
Version:       REV 01          CLEI Code:         IPUPAKRKAA
ID: DC 52V Power Supply Module FRU Model Number: MX2000-PSM-DC-S
Board Information Record:
  Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
  Address 0x00: 7f b0 02 ff 04 78 01 01 52 45 56 20 30 31 00 00
  Address 0x10: 00 00 00 00 37 34 30 2d 30 35 30 30 33 37 00 00
  Address 0x20: 31 45 44 42 33 32 31 30 31 35 42 00 00 1c 05 07
  Address 0x30: dd ff ff ff ff ff ff ff ff ff ff ff ff ff ff
  Address 0x40: ff ff ff ff 01 49 50 55 50 41 4b 52 4b 41 41 4d
  Address 0x50: 58 32 30 30 30 2d 50 53 4d 2d 44 43 2d 53 00 00
  Address 0x60: 00 00 00 00 00 00 31 30 31 ff ff ff ff ff ff ff
  Address 0x70: ff ff ff 2a 00 00 00 00 00 00 00 00 00 00 00 00
PSM 0          REV 03  740-045234  1EFA3220433      DC Power Dist Module
Jedec Code:    0x7fb0          EEPROM Version:    0x02
P/N:           740-045234      S/N:              1EFA3220433
Assembly ID:   0x047b          Assembly Version:  01.03

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Date:          05-30-2013      Assembly Flags:  0x00
Version:       REV 03         CLEI Code:       IPUPAJSKAA
ID: DC Power Dist Module      FRU Model Number:  MX2000-PDM-DC-S
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 04 7b 01 03 52 45 56 20 30 33 00 00
Address 0x10: 00 00 00 00 37 34 30 2d 30 34 35 32 33 34 00 00
Address 0x20: 31 45 46 41 33 32 32 30 34 33 33 00 00 1e 05 07
Address 0x30: dd ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 49 50 55 50 41 4a 53 4b 41 41 4d
Address 0x50: 58 32 30 30 30 2d 50 44 4d 2d 44 43 2d 53 00 00
Address 0x60: 00 00 00 00 00 00 00 31 30 33 ff ff ff ff ff ff
Address 0x70: ff ff ff 1d 00 00 00 00 00 00 00 00 00 00 00 00
PDM 1          REV 03      740-045234      1EFA3220425      DC Power Dist Module
Jedec Code:    0x7fb0      EEPROM Version:  0x02
P/N:          740-045234   S/N:            1EFA3220425
Assembly ID:   0x047b      Assembly Version: 01.03
Date:         05-30-2013   Assembly Flags:  0x00
Version:       REV 03      CLEI Code:       IPUPAJSKAA
ID: DC Power Dist Module   FRU Model Number:  MX2000-PDM-DC-S
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
..

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show chassis hardware (MX2020 Router)

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user@host > show chassis hardware
Hardware inventory:
Item          Version  Part number  Serial number  Description
Chassis                               JN11E2227AFJ  MX2020
Midplane      REV 27   750-040240   ABAB9384      Lower Power Midplane
Midplane 1    REV 04   711-032386   ABAB9386      Upper Backplane
PMP 1         REV 05   711-032428   ACAJ1579      Upper Power Midplane
PMP 0         REV 04   711-032426   ACAJ1524      Lower Power Midplane
FPM Board     REV 06   760-040242   ABBT8837      Front Panel Display
PSM 0         REV 01   740-045050   1E022240056   DC 52V Power Supply
Module
PSM 1         REV 01   740-045050   1E022240054   DC 52V Power Supply
Module
PSM 2         REV 01   740-045050   1E02224005H   DC 52V Power Supply
Module
PSM 3         REV 01   740-045050   1E022240053   DC 52V Power Supply
Module
PSM 4         REV 01   740-045050   1E02224004K   DC 52V Power Supply
Module
PSM 7         REV 01   740-045050   1E02224006W   DC 52V Power Supply
Module
PSM 8         REV 01   740-045050   1E022240062   DC 52V Power Supply
Module
PSM 9         REV 01   740-045050   1E02224005B   DC 52V Power Supply
Module
PSM 10        REV 01   740-045050   1E02224005A   DC 52V Power Supply
Module
PSM 11        REV 01   740-045050   1E022240052   DC 52V Power Supply
Module
PSM 12        REV 01   740-045050   1E022240051   DC 52V Power Supply
Module
PSM 13        REV 01   740-045050   1E022240058   DC 52V Power Supply
Module
PSM 14        REV 01   740-045050   1E02224004L   DC 52V Power Supply

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|------------------|--------|------------|-------------|----------------------|
| Module | | | | |
| PSM 15 | REV 01 | 740-045050 | 1E02224005M | DC 52V Power Supply |
| Module | | | | |
| PSM 16 | REV 01 | 740-045050 | 1E02224006S | DC 52V Power Supply |
| Module | | | | |
| PSM 17 | REV 01 | 740-045050 | 1E02224005Z | DC 52V Power Supply |
| Module | | | | |
| PDM 0 | REV 01 | 740-045234 | 1E012150033 | DC Power Dist Module |
| PDM 1 | REV 01 | 740-045234 | 1E012150027 | DC Power Dist Module |
| PDM 2 | REV 01 | 740-045234 | 1E012150028 | DC Power Dist Module |
| PDM 3 | REV 01 | 740-045234 | 1E012150045 | DC Power Dist Module |
| Routing Engine 0 | REV 02 | 740-041821 | 9009089704 | RE-S-1800x4 |
| Routing Engine 1 | REV 02 | 740-041821 | 9009094138 | RE-S-1800x4 |
| CB 0 | REV 14 | 750-040257 | CAAF8430 | Control Board |
| CB 1 | REV 08 | 750-040257 | CAAB3482 | Control Board |
| SPMB 0 | REV 01 | 711-041855 | ZS2290 | PMB Board |
| SPMB 1 | REV 02 | 711-041855 | CAA6141 | PMB Board |
| SFB 0 | REV 03 | 711-044466 | ABBV6789 | Switch Fabric Board |
| SFB 1 | REV 05 | 711-044466 | ABBX5666 | Switch Fabric Board |
| SFB 2 | REV 05 | 711-044466 | ABBX5678 | Switch Fabric Board |
| SFB 3 | REV 05 | 711-044466 | ABBX5687 | Switch Fabric Board |
| SFB 4 | REV 05 | 711-044466 | ABBX5609 | Switch Fabric Board |
| SFB 5 | REV 05 | 711-044466 | ABBX5675 | Switch Fabric Board |
| SFB 6 | REV 03 | 711-044466 | ABBV6805 | Switch Fabric Board |
| SFB 7 | REV 05 | 711-044466 | ABBX5701 | Switch Fabric Board |
| FPC 0 | REV 30 | 750-028467 | ABBN0284 | MPC 3D 16x 10GE |
| CPU | REV 10 | 711-029089 | ABBN0507 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11E00990 | SFP+-10G-USR |
| Xcvr 1 | REV 01 | 740-030658 | B11E04357 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11F01327 | SFP+-10G-USR |
| Xcvr 3 | REV 01 | 740-030658 | B11E04375 | SFP+-10G-USR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11E02760 | SFP+-10G-USR |
| Xcvr 1 | REV 01 | 740-030658 | B11E02904 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11E03963 | SFP+-10G-USR |
| Xcvr 3 | REV 01 | 740-030658 | B11E00756 | SFP+-10G-USR |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11E04418 | SFP+-10G-USR |
| Xcvr 1 | REV 01 | 740-030658 | B11E01077 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11E01128 | SFP+-10G-USR |
| Xcvr 3 | REV 01 | 740-030658 | B11F01253 | SFP+-10G-USR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11E01140 | SFP+-10G-USR |
| Xcvr 1 | REV 01 | 740-030658 | B11F01626 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11E01075 | SFP+-10G-USR |
| Xcvr 3 | REV 01 | 740-030658 | B11E01177 | SFP+-10G-USR |
| FPC 1 | REV 30 | 750-028467 | ABBN0208 | MPC 3D 16x 10GE |
| CPU | REV 10 | 711-029089 | ABBJ1084 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11E04745 | SFP+-10G-USR |
| Xcvr 1 | REV 01 | 740-030658 | B11F01570 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11E04388 | SFP+-10G-USR |
| Xcvr 3 | REV 01 | 740-030658 | B11F01439 | SFP+-10G-USR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11E04739 | SFP+-10G-USR |
| Xcvr 1 | REV 01 | 740-030658 | B11F01869 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11F01675 | SFP+-10G-USR |
| Xcvr 3 | REV 01 | 740-030658 | B11F01901 | SFP+-10G-USR |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11F01346 | SFP+-10G-USR |

| | | | | |
|--------|--------|------------|-----------|-------------------|
| Xcvr 1 | REV 01 | 740-030658 | B11F01288 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11F01824 | SFP+-10G-USR |
| Xcvr 3 | REV 01 | 740-030658 | B11E04312 | SFP+-10G-USR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11E02811 | SFP+-10G-USR |
| Xcvr 1 | REV 01 | 740-030658 | B11E03847 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11F01495 | SFP+-10G-USR |
| Xcvr 3 | REV 01 | 740-030658 | B11F01265 | SFP+-10G-USR |
| FPC 2 | REV 30 | 750-028467 | ZM5111 | MPC 3D 16x 10GE |
| CPU | REV 10 | 711-029089 | ZP6607 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80LJA | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AK80MFZ | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AK80NKL | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AK80KF4 | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80FBJ | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AK80MM2 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AK80LJV | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AK80NXV | SFP+-10G-SR |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80N1H | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AK80NLS | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AK80FL5 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AK80NL9 | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80NG2 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AK80KDU | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AK80MG1 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AK80MM0 | SFP+-10G-SR |
| FPC 3 | REV 30 | 750-028467 | ABB0302 | MPC 3D 16x 10GE |
| CPU | REV 10 | 711-029089 | ABB0495 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11F01581 | SFP+-10G-USR |
| Xcvr 1 | REV 01 | 740-030658 | B11E01176 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11F01251 | SFP+-10G-USR |
| Xcvr 3 | REV 01 | 740-030658 | B11E02752 | SFP+-10G-USR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11E00786 | SFP+-10G-USR |
| Xcvr 1 | REV 01 | 740-030658 | B11E01020 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11E01023 | SFP+-10G-USR |
| Xcvr 3 | REV 01 | 740-030658 | B11E02819 | SFP+-10G-USR |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11E02812 | SFP+-10G-USR |
| Xcvr 1 | REV 01 | 740-030658 | B11D04437 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11F01279 | SFP+-10G-USR |
| Xcvr 3 | REV 01 | 740-030658 | B11F01333 | SFP+-10G-USR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11E00978 | SFP+-10G-USR |
| Xcvr 1 | REV 01 | 740-030658 | B11E01018 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11F01784 | SFP+-10G-USR |
| Xcvr 3 | REV 01 | 740-031980 | AK80NKP | SFP+-10G-SR |
| FPC 4 | REV 30 | 750-028467 | ABB0308 | MPC 3D 16x 10GE |
| CPU | REV 10 | 711-029089 | ABB1095 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11E04305 | SFP+-10G-USR |
| Xcvr 1 | REV 01 | 740-030658 | B11E01147 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11E01195 | SFP+-10G-USR |
| Xcvr 3 | REV 01 | 740-030658 | B11F01743 | SFP+-10G-USR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11F01892 | SFP+-10G-USR |

| | | | | |
|--------|--------|------------|-----------|-------------------|
| Xcvr 1 | REV 01 | 740-030658 | B11E02880 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11E00725 | SFP+-10G-USR |
| Xcvr 3 | REV 01 | 740-030658 | B11E01057 | SFP+-10G-USR |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11E02816 | SFP+-10G-USR |
| Xcvr 1 | REV 01 | 740-030658 | B11C04501 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11E02764 | SFP+-10G-USR |
| Xcvr 3 | REV 01 | 740-030658 | B11E00789 | SFP+-10G-USR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11F01250 | SFP+-10G-USR |
| Xcvr 1 | REV 01 | 740-030658 | B11E02847 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11E00787 | SFP+-10G-USR |
| Xcvr 3 | REV 01 | 740-030658 | B11E03803 | SFP+-10G-USR |
| FPC 5 | REV 30 | 750-028467 | ABBN0316 | MPC 3D 16x 10GE |
| CPU | REV 10 | 711-029089 | ABBJ1082 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | B11K00523 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | B11K01848 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | B11K01865 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | B11K00540 | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | B11K00422 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | B11K00428 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | B11K00423 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | B11K01855 | SFP+-10G-SR |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | B11K01847 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | B11K00526 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | B11K00529 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | B11K00525 | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | B11K00425 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | B11K00530 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | B11K01851 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | B11K00528 | SFP+-10G-SR |
| FPC 6 | REV 32 | 750-028467 | ABBN6832 | MPC 3D 16x 10GE |
| CPU | REV 10 | 711-029089 | ABBK6534 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80MB4 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AK80FQ6 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AK80N1F | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AK80NLQ | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80KDR | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AK80FGJ | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AK80N5G | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AK80KD8 | SFP+-10G-SR |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80LET | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AK80N1X | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AK80NRF | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AK80NL2 | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80N3D | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AK80MRB | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AK80LEQ | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AK80LER | SFP+-10G-SR |
| FPC 7 | REV 32 | 750-028467 | ABBN6811 | MPC 3D 16x 10GE |
| CPU | REV 10 | 711-029089 | ABBN7288 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80NK8 | SFP+-10G-SR |

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|--------|--------|------------|--------------|-------------------|
| Xcvr 1 | REV 01 | 740-031980 | AK80LJG | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AK80LBU | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AK80N21 | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80LEU | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AK80NLM | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AK80NL6 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AK80LES | SFP+-10G-SR |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80LEN | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AK80ME0 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AK80LMG | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AK80MM1 | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80MG7 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AK80KF9 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AK80NRQ | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AK80NLE | SFP+-10G-SR |
| FPC 8 | REV 23 | 750-028467 | YN2977 | MPC 3D 16x 10GE |
| CPU | REV 10 | 711-029089 | YP1856 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | 183363A00875 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | 183363A00851 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 183363A00772 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | 183363A00882 | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | 183363A00735 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | 183363A00169 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 183363A00726 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | 183363A00077 | SFP+-10G-SR |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | 183363A00168 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | 183363A00676 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 183363A00732 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | 183363A00091 | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | 183363A00725 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | 183363A00642 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 183363A00871 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | 183363A00853 | SFP+-10G-SR |
| FPC 9 | REV 32 | 750-028467 | ABBN6798 | MPC 3D 16x 10GE |
| CPU | REV 10 | 711-029089 | ABBK6556 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-021308 | 9ZDZ06A00055 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | 183363A00239 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-021308 | AD0915E003K | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021308 | AD0915E003A | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80MRC | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AK80NL5 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AK80NKN | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AK80N3U | SFP+-10G-SR |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80N1T | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AJ808DJ | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AK80NG4 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AK80FND | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80FKQ | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AK80NLT | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AK80NKR | SFP+-10G-SR |

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| Xcvr 3 | REV 01 | 740-031980 | AK80LKM | SFP+-10G-SR |
| FPC 10 | REV 32 | 750-028467 | ABBN6813 | MPC 3D 16x 10GE |
| CPU | REV 10 | 711-029089 | ABBK6542 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80NA3 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AK80NLF | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AK80MRH | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AK80KE4 | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-021308 | 973152A00030 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AK80L9H | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AK80ME8 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AK80NLR | SFP+-10G-SR |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80NG1 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AK80MCA | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AK80LFC | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AK80LEM | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80N9X | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AK80LAC | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AK80LF2 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AK80N8T | SFP+-10G-SR |
| FPC 11 | REV 30 | 750-028467 | ABBN0281 | MPC 3D 16x 10GE |
| CPU | REV 10 | 711-029089 | ABBN0526 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11F01326 | SFP+-10G-USR |
| Xcvr 1 | REV 01 | 740-030658 | B11E03973 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11E00950 | SFP+-10G-USR |
| Xcvr 3 | REV 01 | 740-030658 | B11E00674 | SFP+-10G-USR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11E00775 | SFP+-10G-USR |
| Xcvr 1 | REV 01 | 740-030658 | B11E04461 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11E01074 | SFP+-10G-USR |
| Xcvr 3 | REV 01 | 740-030658 | B11E02821 | SFP+-10G-USR |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11E04501 | SFP+-10G-USR |
| Xcvr 1 | REV 01 | 740-030658 | B11E00757 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11F01623 | SFP+-10G-USR |
| Xcvr 3 | REV 01 | 740-030658 | B11E01022 | SFP+-10G-USR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11E04359 | SFP+-10G-USR |
| Xcvr 1 | REV 01 | 740-030658 | B11E02751 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11E02736 | SFP+-10G-USR |
| Xcvr 3 | REV 01 | 740-030658 | B11E01178 | SFP+-10G-USR |
| FPC 12 | REV 32 | 750-028467 | ABBN6796 | MPC 3D 16x 10GE |
| CPU | REV 10 | 711-029089 | ABBN7259 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | B11K01856 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | B11K01853 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | B11K01863 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | 163363A02863 | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | 163363A02668 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | 163363A02881 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 163363A01671 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | 163363A02627 | SFP+-10G-SR |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | 163363A02725 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | 163363A02692 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 163363A02730 | SFP+-10G-SR |

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| Xcvr 3 | REV 01 | 740-031980 | 163363A03081 | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | 163363A02736 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | 163363A02568 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 163363A02747 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | 163363A02579 | SFP+-10G-SR |
| FPC 13 | REV 30 | 750-028467 | ABBN0270 | MPC 3D 16x 10GE |
| CPU | REV 10 | 711-029089 | ABBJ0966 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80NL1 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AK80NXW | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AK80KD2 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AK80FMD | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80NKQ | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AK80MGH | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AK80N38 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AK80NL7 | SFP+-10G-SR |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80LEL | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AK80NKD | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AK80KCY | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AK80LHK | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80M5J | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AK80MBE | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AK80NLG | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AK80LFH | SFP+-10G-SR |
| FPC 14 | REV 32 | 750-028467 | ABBN6790 | MPC 3D 16x 10GE |
| CPU | REV 10 | 711-029089 | ABBK6515 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80LZM | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AK80MCC | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AK80KCM | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AK80KE0 | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-021310 | C10F99155 | SFP+-10G-LRM |
| Xcvr 1 | REV 01 | 740-021310 | C10F99049 | SFP+-10G-LRM |
| Xcvr 2 | REV 01 | 740-021310 | C10F99128 | SFP+-10G-LRM |
| Xcvr 3 | REV 01 | 740-021310 | C10F99169 | SFP+-10G-LRM |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80LF3 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | 163363A02597 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 163363A03060 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | 163363A03057 | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80LEX | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AK80FEU | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AK80FNM | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021308 | AJQQQ5G | SFP+-10G-SR |
| FPC 15 | REV 32 | 750-028467 | ABBN6791 | MPC 3D 16x 10GE |
| CPU | REV 10 | 711-029089 | ABBN7289 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | B11K00424 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | B11K01849 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | B11K01862 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | B11K01852 | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | B11K00427 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | B11K00430 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | B11K01854 | SFP+-10G-SR |

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| Xcvr 3 | REV 01 | 740-031980 | B11K00426 | SFP+-10G-SR |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | B11K00429 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | B11K01864 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | B11K01850 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | B11K00522 | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11E01144 | SFP+-10G-USR |
| Xcvr 1 | REV 01 | 740-030658 | B11E00985 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11E00796 | SFP+-10G-USR |
| Xcvr 3 | REV 01 | 740-031980 | B11K01866 | SFP+-10G-SR |
| FPC 16 | REV 30 | 750-028467 | ABBM4592 | MPC 3D 16x 10GE |
| CPU | REV 10 | 711-029089 | ABBN0465 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11F01435 | SFP+-10G-USR |
| Xcvr 1 | REV 01 | 740-030658 | B11E01052 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11F01328 | SFP+-10G-USR |
| Xcvr 3 | REV 01 | 740-030658 | B11F01254 | SFP+-10G-USR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11E02738 | SFP+-10G-USR |
| Xcvr 1 | REV 01 | 740-030658 | B11E02881 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11F01624 | SFP+-10G-USR |
| Xcvr 3 | REV 01 | 740-030658 | B11E00889 | SFP+-10G-USR |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11E02883 | SFP+-10G-USR |
| Xcvr 1 | REV 01 | 740-030658 | B11E00681 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11E04306 | SFP+-10G-USR |
| Xcvr 3 | REV 01 | 740-030658 | B11E02813 | SFP+-10G-USR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11F01801 | SFP+-10G-USR |
| Xcvr 1 | REV 01 | 740-030658 | B11E02753 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11E01156 | SFP+-10G-USR |
| Xcvr 3 | REV 01 | 740-030658 | B11E04324 | SFP+-10G-USR |
| FPC 17 | REV 32 | 750-028467 | ABBN6810 | MPC 3D 16x 10GE |
| CPU | REV 10 | 711-029089 | ABBN7237 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | 163363A02638 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | 163363A02082 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 163363A01674 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | 163363A03058 | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | 163363A03048 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | 163363A02729 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 163363A02566 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | 163363A02567 | SFP+-10G-SR |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | 163363A02878 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | 163363A02739 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 163363A01959 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | 163363A02660 | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | 163363A02731 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | 163363A02588 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 163363A02673 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | 163363A02654 | SFP+-10G-SR |
| FPC 18 | REV 30 | 750-028467 | ABBM4739 | MPC 3D 16x 10GE |
| CPU | REV 10 | 711-029089 | ABBN0487 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | 163363A02569 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | 163363A02886 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 163363A03082 | SFP+-10G-SR |

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| Xcvr 3 | REV 01 | 740-031980 | 133363A00297 | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | 163363A02726 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | 163363A03050 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 163363A02884 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | 163363A03076 | SFP+-10G-SR |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | 163363A02581 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | 163363A02873 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 163363A02582 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | 163363A03083 | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031981 | UL70BU6 | SFP+-10G-LR |
| Xcvr 1 | REV 01 | 740-031981 | UL50QC6 | SFP+-10G-LR |
| Xcvr 2 | REV 01 | 740-031981 | UL708N6 | SFP+-10G-LR |
| Xcvr 3 | REV 01 | 740-031981 | UL603KK | SFP+-10G-LR |
| FPC 19 | REV 32 | 750-028467 | ABBN6827 | MPC 3D 16x 10GE |
| CPU | REV 10 | 711-029089 | ABBK6508 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | 163363A01688 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | 163363A01724 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 163363A01773 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | 163363A02593 | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | 163363A03061 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | 163363A03056 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 163363A02669 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | 163363A03070 | SFP+-10G-SR |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | 163363A02572 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | 163363A02697 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 163363A02585 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | 163363A03052 | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | 163363A02591 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | 163363A02649 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 163363A02577 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | 163363A02698 | SFP+-10G-SR |
| ADC 0 | REV 13 | 750-043596 | ABBX5561 | Adapter Card |
| ADC 1 | REV 13 | 750-043596 | ABBX5546 | Adapter Card |
| ADC 2 | REV 13 | 750-043596 | ABBX5535 | Adapter Card |
| ADC 3 | REV 13 | 750-043596 | ABBX5552 | Adapter Card |
| ADC 4 | REV 13 | 750-043596 | ABBX5581 | Adapter Card |
| ADC 5 | REV 13 | 750-043596 | ABBX5545 | Adapter Card |
| ADC 6 | REV 13 | 750-043596 | ABBX5554 | Adapter Card |
| ADC 7 | REV 07 | 750-043596 | ABBV7194 | Adapter Card |
| ADC 8 | REV 07 | 750-043596 | ABBV7251 | Adapter Card |
| ADC 9 | REV 07 | 750-043596 | ABBV7202 | Adapter Card |
| ADC 10 | REV 13 | 750-043596 | ABBX5538 | Adapter Card |
| ADC 11 | REV 13 | 750-043596 | ABBX5566 | Adapter Card |
| ADC 12 | REV 13 | 750-043596 | ABBX5542 | Adapter Card |
| ADC 13 | REV 13 | 750-043596 | ABBX5539 | Adapter Card |
| ADC 14 | REV 13 | 750-043596 | ABBX5555 | Adapter Card |
| ADC 15 | REV 13 | 750-043596 | ABBX5557 | Adapter Card |
| ADC 16 | REV 13 | 750-043596 | ABBX5536 | Adapter Card |
| ADC 17 | REV 13 | 750-043596 | ABBX5559 | Adapter Card |
| ADC 18 | REV 13 | 750-043596 | ABBX5537 | Adapter Card |
| ADC 19 | REV 11 | 750-043596 | ABBW5685 | Adapter Card |
| Fan Tray 0 | REV 2A | 760-046960 | ACAY0030 | 172mm FanTray - 6 Fans |
| Fan Tray 1 | REV 2A | 760-046960 | ACAY0039 | 172mm FanTray - 6 Fans |

| | | | | |
|------------|--------|------------|----------|------------------------|
| Fan Tray 2 | REV 2A | 760-046960 | ACAY0033 | 172mm FanTray - 6 Fans |
| Fan Tray 3 | REV 2A | 760-046960 | ACAY0062 | 172mm FanTray - 6 Fans |

show chassis hardware detail (MX2020 Router)

```
user@host> show chassis hardware detail
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Hardware inventory:
```

| Item | Version | Part number | Serial number | Description |
|------------------|------------------------|-------------|-------------------------------|----------------------|
| Chassis | | | JN11E2227AFJ | MX2020 |
| Midplane | REV 27 | 750-040240 | ABAB9384 | Lower Power Midplane |
| Midplane 1 | REV 04 | 711-032386 | ABAB9386 | Upper Backplane |
| PMP 1 | REV 05 | 711-032428 | ACAJ1821 | Upper Power Midplane |
| PMP 0 | REV 04 | 711-032426 | ACAJ1524 | Lower Power Midplane |
| FPM Board | REV 06 | 760-040242 | ABBT8837 | Front Panel Display |
| PSM 0 | REV 01 | 740-045050 | 1E02224006G | DC 52V Power Supply |
| Module | | | | |
| PSM 1 | REV 01 | 740-045050 | 1E022240053 | DC 52V Power Supply |
| Module | | | | |
| PSM 2 | REV 01 | 740-045050 | 1E02224004K | DC 52V Power Supply |
| Module | | | | |
| PSM 3 | REV 01 | 740-045050 | 1E022240056 | DC 52V Power Supply |
| Module | | | | |
| PSM 4 | REV 01 | 740-045050 | 1E022240054 | DC 52V Power Supply |
| Module | | | | |
| PSM 5 | REV 01 | 740-045050 | 1E02224005H | DC 52V Power Supply |
| Module | | | | |
| PSM 6 | REV 01 | 740-045050 | 1E02224006S | DC 52V Power Supply |
| Module | | | | |
| PSM 7 | REV 01 | 740-045050 | 1E02224005M | DC 52V Power Supply |
| Module | | | | |
| PSM 8 | REV 01 | 740-045050 | 1E022240062 | DC 52V Power Supply |
| Module | | | | |
| PSM 9 | REV 03 | 740-045050 | 1EDB2350095 | DC 52V Power Supply |
| Module | | | | |
| PSM 10 | REV 03 | 740-045050 | 1EDB235009L | DC 52V Power Supply |
| Module | | | | |
| PSM 11 | REV 03 | 740-045050 | 1EDB2350092 | DC 52V Power Supply |
| Module | | | | |
| PSM 12 | REV 03 | 740-045050 | 1EDB23500AT | DC 52V Power Supply |
| Module | | | | |
| PSM 13 | REV 03 | 740-045050 | 1EDB2350094 | DC 52V Power Supply |
| Module | | | | |
| PSM 15 | REV 03 | 740-045050 | 1EDB235008X | DC 52V Power Supply |
| Module | | | | |
| PDM 0 | REV 01 | 740-045234 | 1E012150033 | DC Power Dist Module |
| PDM 1 | REV 01 | 740-045234 | 1E012150027 | DC Power Dist Module |
| PDM 2 | REV 01 | 740-045234 | 1E262250072 | DC Power Dist Module |
| Routing Engine 0 | REV 02 | 740-041821 | 9009094138 | RE-S-1800x4 |
| ad0 3998 MB | Virtium - TuffDisk | | VCF3 20110825A021D0000064 | Compact Flash |
| ad1 30533 MB | UGB94ARF32H0S3-KC | | UNIGEN-499551-000347 | Disk 1 |
| usb0 (addr 1) | EHCI root hub 0 | | Intel | uhub0 |
| usb0 (addr 2) | product 0x0020 32 | | vendor 0x8087 | uhub1 |
| DIMM 0 | SGU04G72H1BD2SA-BB DIE | | REV-52 PCB REV-54 MFR ID-ce80 | |
| DIMM 1 | SGU04G72H1BD2SA-BB DIE | | REV-52 PCB REV-54 MFR ID-ce80 | |
| DIMM 2 | SGU04G72H1BD2SA-BB DIE | | REV-52 PCB REV-54 MFR ID-ce80 | |
| DIMM 3 | SGU04G72H1BD2SA-BB DIE | | REV-52 PCB REV-54 MFR ID-ce80 | |
| Routing Engine 1 | REV 02 | 740-041821 | 9009089709 | RE-S-1800x4 |
| ad0 3831 MB | UGB30SFA4000T1 | | SFA4000T1 00000113 | Compact Flash |
| ad1 30533 MB | UGB94ARF32H0S3-KC | | UNIGEN-478612-001044 | Disk 1 |
| CB 0 | REV 08 | 750-040257 | CAAB3482 | Control Board |
| CB 1 | REV 04 | 750-040257 | ZT2864 | Control Board |

| | | | | |
|--------|--------|------------|-----------|---------------------|
| SPMB 0 | REV 02 | 711-041855 | CAAA6141 | PMB Board |
| SPMB 1 | REV 01 | 711-041855 | ZS2275 | PMB Board |
| SFB 0 | REV 05 | 711-044466 | ABBT2161 | Switch Fabric Board |
| SFB 1 | REV 05 | 711-044466 | ABBT2159 | Switch Fabric Board |
| SFB 2 | REV 05 | 711-044466 | ABBX3718 | Switch Fabric Board |
| SFB 3 | REV 05 | 711-044466 | ABBT2152 | Switch Fabric Board |
| SFB 4 | REV 05 | 711-044466 | ABBT2160 | Switch Fabric Board |
| SFB 5 | REV 05 | 711-044466 | ABBT2145 | Switch Fabric Board |
| SFB 6 | REV 05 | 711-044466 | ABBT2150 | Switch Fabric Board |
| SFB 7 | REV 05 | 711-044466 | ABBT2163 | Switch Fabric Board |
| FPC 0 | REV 30 | 750-028467 | ABBN0284 | MPC 3D 16x 10GE |
| CPU | REV 10 | 711-029089 | ABBN0507 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11E00990 | SFP+-10G-USR |
| Xcvr 1 | REV 01 | 740-030658 | B11E04357 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11F01327 | SFP+-10G-USR |
| Xcvr 3 | REV 01 | 740-030658 | B11E04375 | SFP+-10G-USR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11E02760 | SFP+-10G-USR |
| Xcvr 1 | REV 01 | 740-030658 | B11E02904 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11E03963 | SFP+-10G-USR |
| Xcvr 3 | REV 01 | 740-030658 | B11E00756 | SFP+-10G-USR |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11E04418 | SFP+-10G-USR |
| Xcvr 1 | REV 01 | 740-030658 | B11E01077 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11E01128 | SFP+-10G-USR |
| Xcvr 3 | REV 01 | 740-030658 | B11F01253 | SFP+-10G-USR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11E01140 | SFP+-10G-USR |
| Xcvr 1 | REV 01 | 740-030658 | B11F01626 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11E01075 | SFP+-10G-USR |
| Xcvr 3 | REV 01 | 740-030658 | B11E01177 | SFP+-10G-USR |
| FPC 1 | REV 30 | 750-028467 | ABBN0308 | MPC 3D 16x 10GE |
| CPU | REV 10 | 711-029089 | ABBJ1095 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11E04305 | SFP+-10G-USR |
| Xcvr 1 | REV 01 | 740-030658 | B11E01147 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11E01195 | SFP+-10G-USR |
| Xcvr 3 | REV 01 | 740-030658 | B11F01743 | SFP+-10G-USR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11F01892 | SFP+-10G-USR |
| Xcvr 1 | REV 01 | 740-030658 | B11E02880 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11E00725 | SFP+-10G-USR |
| Xcvr 3 | REV 01 | 740-030658 | B11E01057 | SFP+-10G-USR |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11E02816 | SFP+-10G-USR |
| Xcvr 1 | REV 01 | 740-030658 | B11C04501 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11E02764 | SFP+-10G-USR |
| Xcvr 3 | REV 01 | 740-030658 | B11E00789 | SFP+-10G-USR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11F01250 | SFP+-10G-USR |
| Xcvr 1 | REV 01 | 740-030658 | B11E02847 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11E00787 | SFP+-10G-USR |
| Xcvr 3 | REV 01 | 740-030658 | B11E03803 | SFP+-10G-USR |
| FPC 2 | REV 30 | 750-028467 | ABBN0316 | MPC 3D 16x 10GE |
| CPU | REV 10 | 711-029089 | ABBJ1082 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | B11K00523 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | B11K01848 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | B11K01865 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | B11K00540 | SFP+-10G-SR |

| | | | | | |
|--------|--------|------------|-----------|-----------------|-------------------|
| PIC 1 | | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | B11K00422 | SFP+-10G-SR | |
| Xcvr 1 | REV 01 | 740-031980 | B11K00428 | SFP+-10G-SR | |
| Xcvr 2 | REV 01 | 740-031980 | B11K00423 | SFP+-10G-SR | |
| Xcvr 3 | REV 01 | 740-031980 | B11K01855 | SFP+-10G-SR | |
| PIC 2 | | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | B11K01847 | SFP+-10G-SR | |
| Xcvr 1 | REV 01 | 740-031980 | B11K00526 | SFP+-10G-SR | |
| Xcvr 2 | REV 01 | 740-031980 | B11K00529 | SFP+-10G-SR | |
| Xcvr 3 | REV 01 | 740-031980 | B11K00525 | SFP+-10G-SR | |
| PIC 3 | | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | B11K00425 | SFP+-10G-SR | |
| Xcvr 1 | REV 01 | 740-031980 | B11K00530 | SFP+-10G-SR | |
| Xcvr 2 | REV 01 | 740-031980 | B11K01851 | SFP+-10G-SR | |
| Xcvr 3 | REV 01 | 740-031980 | B11K00528 | SFP+-10G-SR | |
| FPC 3 | REV 32 | 750-028467 | ABBN6832 | MPC 3D 16x 10GE | |
| CPU | REV 10 | 711-029089 | ABBN6534 | AMPC PMB | |
| PIC 0 | | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80MB4 | SFP+-10G-SR | |
| Xcvr 1 | REV 01 | 740-031980 | AK80FQ6 | SFP+-10G-SR | |
| Xcvr 2 | REV 01 | 740-031980 | AK80N1F | SFP+-10G-SR | |
| Xcvr 3 | REV 01 | 740-031980 | AK80NLQ | SFP+-10G-SR | |
| PIC 1 | | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80KDR | SFP+-10G-SR | |
| Xcvr 1 | REV 01 | 740-031980 | AK80FGJ | SFP+-10G-SR | |
| Xcvr 2 | REV 01 | 740-031980 | AK80N5G | SFP+-10G-SR | |
| Xcvr 3 | REV 01 | 740-031980 | AK80KD8 | SFP+-10G-SR | |
| PIC 2 | | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80LET | SFP+-10G-SR | |
| Xcvr 1 | REV 01 | 740-031980 | AK80N1X | SFP+-10G-SR | |
| Xcvr 2 | REV 01 | 740-031980 | AK80NRF | SFP+-10G-SR | |
| Xcvr 3 | REV 01 | 740-031980 | AK80NL2 | SFP+-10G-SR | |
| PIC 3 | | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80N3D | SFP+-10G-SR | |
| Xcvr 1 | REV 01 | 740-031980 | AK80MRB | SFP+-10G-SR | |
| Xcvr 2 | REV 01 | 740-031980 | AK80LEQ | SFP+-10G-SR | |
| Xcvr 3 | REV 01 | 740-031980 | AK80LER | SFP+-10G-SR | |
| FPC 4 | REV 32 | 750-028467 | ABBN6811 | MPC 3D 16x 10GE | |
| CPU | REV 10 | 711-029089 | ABBN7288 | AMPC PMB | |
| PIC 0 | | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80NK8 | SFP+-10G-SR | |
| Xcvr 1 | REV 01 | 740-031980 | AK80LJG | SFP+-10G-SR | |
| Xcvr 2 | REV 01 | 740-031980 | AK80LBU | SFP+-10G-SR | |
| Xcvr 3 | REV 01 | 740-031980 | AK80N21 | SFP+-10G-SR | |
| PIC 1 | | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80LEU | SFP+-10G-SR | |
| Xcvr 1 | REV 01 | 740-031980 | AK80NLM | SFP+-10G-SR | |
| Xcvr 2 | REV 01 | 740-031980 | AK80NL6 | SFP+-10G-SR | |
| Xcvr 3 | REV 01 | 740-031980 | AK80LES | SFP+-10G-SR | |
| PIC 2 | | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80LEN | SFP+-10G-SR | |
| Xcvr 1 | REV 01 | 740-031980 | AK80ME0 | SFP+-10G-SR | |
| Xcvr 2 | REV 01 | 740-031980 | AK80LMG | SFP+-10G-SR | |
| Xcvr 3 | REV 01 | 740-031980 | AK80MM1 | SFP+-10G-SR | |
| PIC 3 | | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80MG7 | SFP+-10G-SR | |
| Xcvr 1 | REV 01 | 740-031980 | AK80KF9 | SFP+-10G-SR | |
| Xcvr 2 | REV 01 | 740-031980 | AK80NRQ | SFP+-10G-SR | |
| Xcvr 3 | REV 01 | 740-031980 | AK80NLE | SFP+-10G-SR | |
| FPC 5 | REV 32 | 750-028467 | ABBN6791 | MPC 3D 16x 10GE | |
| CPU | REV 10 | 711-029089 | ABBN7289 | AMPC PMB | |

| | | | | | |
|--------|--------|------------|--------------|-----------------|-------------------|
| PIC 0 | | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | B11K00424 | SFP+-10G-SR | |
| Xcvr 1 | REV 01 | 740-031980 | B11K01849 | SFP+-10G-SR | |
| Xcvr 2 | REV 01 | 740-031980 | B11K01862 | SFP+-10G-SR | |
| Xcvr 3 | REV 01 | 740-031980 | B11K01852 | SFP+-10G-SR | |
| PIC 1 | | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP |
| Xcvr 0 | REV 01 | 740-031980 | B11K00427 | SFP+-10G-SR | |
| Xcvr 1 | REV 01 | 740-031980 | B11K00430 | SFP+-10G-SR | |
| Xcvr 2 | REV 01 | 740-031980 | B11K01854 | SFP+-10G-SR | |
| Xcvr 3 | REV 01 | 740-031980 | B11K00426 | SFP+-10G-SR | |
| PIC 2 | | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | B11K00429 | SFP+-10G-SR | |
| Xcvr 1 | REV 01 | 740-031980 | B11K01864 | SFP+-10G-SR | |
| Xcvr 2 | REV 01 | 740-031980 | B11K01850 | SFP+-10G-SR | |
| Xcvr 3 | REV 01 | 740-031980 | B11K00522 | SFP+-10G-SR | |
| PIC 3 | | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11E01144 | SFP+-10G-USR | |
| Xcvr 1 | REV 01 | 740-030658 | B11E00985 | SFP+-10G-USR | |
| Xcvr 2 | REV 01 | 740-030658 | B11E00796 | SFP+-10G-USR | |
| Xcvr 3 | REV 01 | 740-031980 | B11K01866 | SFP+-10G-SR | |
| FPC 6 | REV 30 | 750-028467 | ABBM4592 | MPC 3D 16x 10GE | |
| CPU | REV 10 | 711-029089 | ABBN0465 | AMPC PMB | |
| PIC 0 | | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11F01435 | SFP+-10G-USR | |
| Xcvr 1 | REV 01 | 740-030658 | B11E01052 | SFP+-10G-USR | |
| Xcvr 2 | REV 01 | 740-030658 | B11F01328 | SFP+-10G-USR | |
| Xcvr 3 | REV 01 | 740-030658 | B11F01254 | SFP+-10G-USR | |
| PIC 1 | | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11E02738 | SFP+-10G-USR | |
| Xcvr 1 | REV 01 | 740-030658 | B11E02881 | SFP+-10G-USR | |
| Xcvr 2 | REV 01 | 740-030658 | B11F01624 | SFP+-10G-USR | |
| Xcvr 3 | REV 01 | 740-030658 | B11E00889 | SFP+-10G-USR | |
| PIC 2 | | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11E02883 | SFP+-10G-USR | |
| Xcvr 1 | REV 01 | 740-030658 | B11E00681 | SFP+-10G-USR | |
| Xcvr 2 | REV 01 | 740-030658 | B11E04306 | SFP+-10G-USR | |
| Xcvr 3 | REV 01 | 740-030658 | B11E02813 | SFP+-10G-USR | |
| PIC 3 | | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11F01801 | SFP+-10G-USR | |
| Xcvr 1 | REV 01 | 740-030658 | B11E02753 | SFP+-10G-USR | |
| Xcvr 2 | REV 01 | 740-030658 | B11E01156 | SFP+-10G-USR | |
| Xcvr 3 | REV 01 | 740-030658 | B11E04324 | SFP+-10G-USR | |
| FPC 7 | REV 32 | 750-028467 | ABBN6810 | MPC 3D 16x 10GE | |
| CPU | REV 10 | 711-029089 | ABBN7237 | AMPC PMB | |
| PIC 0 | | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | 163363A03058 | SFP+-10G-SR | |
| Xcvr 1 | REV 01 | 740-031980 | 163363A02082 | SFP+-10G-SR | |
| Xcvr 2 | REV 01 | 740-031980 | 163363A01674 | SFP+-10G-SR | |
| Xcvr 3 | REV 01 | 740-031980 | 163363A02638 | SFP+-10G-SR | |
| PIC 1 | | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | 163363A03048 | SFP+-10G-SR | |
| Xcvr 1 | REV 01 | 740-031980 | 163363A02729 | SFP+-10G-SR | |
| Xcvr 2 | REV 01 | 740-031980 | 163363A02566 | SFP+-10G-SR | |
| Xcvr 3 | REV 01 | 740-031980 | 163363A02567 | SFP+-10G-SR | |
| PIC 2 | | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | 163363A02878 | SFP+-10G-SR | |
| Xcvr 1 | REV 01 | 740-031980 | 163363A02739 | SFP+-10G-SR | |
| Xcvr 2 | REV 01 | 740-031980 | 163363A01959 | SFP+-10G-SR | |
| Xcvr 3 | REV 01 | 740-031980 | 163363A02660 | SFP+-10G-SR | |
| PIC 3 | | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | 163363A02731 | SFP+-10G-SR | |

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| Xcvr 1 | REV 01 | 740-031980 | 163363A02588 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 163363A02673 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | 163363A02654 | SFP+-10G-SR |
| FPC 8 | REV 30 | 750-028467 | ABBM4739 | MPC 3D 16x 10GE |
| CPU | REV 10 | 711-029089 | ABBN0487 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | 163363A02569 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | 163363A02886 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 163363A03082 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | 133363A00297 | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | 163363A02726 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | 163363A03050 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 163363A02884 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | 163363A03076 | SFP+-10G-SR |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | 163363A02581 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | 163363A02873 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 163363A02582 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | 163363A03083 | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031981 | UL70BU6 | SFP+-10G-LR |
| Xcvr 1 | REV 01 | 740-031981 | UL50QC6 | SFP+-10G-LR |
| Xcvr 2 | REV 01 | 740-031981 | UL708N6 | SFP+-10G-LR |
| Xcvr 3 | REV 01 | 740-031981 | UL603KK | SFP+-10G-LR |
| FPC 9 | REV 32 | 750-028467 | ABBN6827 | MPC 3D 16x 10GE |
| CPU | REV 10 | 711-029089 | ABBK6508 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | 163363A01688 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | 163363A01724 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 163363A01773 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | 163363A02593 | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | 163363A03061 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | 163363A03056 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 163363A02669 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | 163363A03070 | SFP+-10G-SR |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | 163363A02572 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | 163363A02697 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 163363A02585 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | 163363A03052 | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | 163363A02591 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | 163363A02649 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 163363A02577 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | 163363A02698 | SFP+-10G-SR |
| FPC 10 | REV 30 | 750-028467 | ABBN0302 | MPC 3D 16x 10GE |
| CPU | REV 10 | 711-029089 | ABBN0495 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11F01581 | SFP+-10G-USR |
| Xcvr 1 | REV 01 | 740-030658 | B11E01176 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11F01251 | SFP+-10G-USR |
| Xcvr 3 | REV 01 | 740-030658 | B11E02752 | SFP+-10G-USR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11E00786 | SFP+-10G-USR |
| Xcvr 1 | REV 01 | 740-030658 | B11E01020 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11E01023 | SFP+-10G-USR |
| Xcvr 3 | REV 01 | 740-030658 | B11E02819 | SFP+-10G-USR |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11E02812 | SFP+-10G-USR |

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| Xcvr 1 | REV 01 | 740-030658 | B11D04437 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11F01279 | SFP+-10G-USR |
| Xcvr 3 | REV 01 | 740-030658 | B11F01333 | SFP+-10G-USR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11E00978 | SFP+-10G-USR |
| Xcvr 1 | REV 01 | 740-030658 | B11E01018 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11F01784 | SFP+-10G-USR |
| Xcvr 3 | REV 01 | 740-031980 | AK80NKP | SFP+-10G-SR |
| FPC 11 | REV 32 | 750-028467 | ABBN6790 | MPC 3D 16x 10GE |
| CPU | REV 10 | 711-029089 | ABBK6515 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80LZM | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AK80MCC | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AK80KCM | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AK80KE0 | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-021310 | C10F99155 | SFP+-10G-LRM |
| Xcvr 1 | REV 01 | 740-021310 | C10F99049 | SFP+-10G-LRM |
| Xcvr 2 | REV 01 | 740-021310 | C10F99128 | SFP+-10G-LRM |
| Xcvr 3 | REV 01 | 740-021310 | C10F99169 | SFP+-10G-LRM |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80LF3 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | 163363A02597 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 163363A03060 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | 163363A03057 | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80LEX | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AK80FEU | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AK80FNM | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021308 | AJQQQ5G | SFP+-10G-SR |
| FPC 12 | REV 30 | 750-028467 | ZM5111 | MPC 3D 16x 10GE |
| CPU | REV 10 | 711-029089 | ZP6607 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80LJA | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AK80MFZ | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AK80NKL | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AK80KF4 | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80FBJ | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AK80MM2 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AK80LJV | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AK80NXV | SFP+-10G-SR |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80N1H | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AK80NLS | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AK80FL5 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AK80NL9 | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80NG2 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AK80KDU | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AK80MG1 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AK80MM0 | SFP+-10G-SR |
| FPC 13 | REV 30 | 750-028467 | ABBN0208 | MPC 3D 16x 10GE |
| CPU | REV 10 | 711-029089 | ABBJ1084 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11E04745 | SFP+-10G-USR |
| Xcvr 1 | REV 01 | 740-030658 | B11F01570 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11E04388 | SFP+-10G-USR |
| Xcvr 3 | REV 01 | 740-030658 | B11F01439 | SFP+-10G-USR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11E04739 | SFP+-10G-USR |

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| Xcvr 1 | REV 01 | 740-030658 | B11F01869 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11F01675 | SFP+-10G-USR |
| Xcvr 3 | REV 01 | 740-030658 | B11F01901 | SFP+-10G-USR |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11F01346 | SFP+-10G-USR |
| Xcvr 1 | REV 01 | 740-030658 | B11F01288 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11F01824 | SFP+-10G-USR |
| Xcvr 3 | REV 01 | 740-030658 | B11E04312 | SFP+-10G-USR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11E02811 | SFP+-10G-USR |
| Xcvr 1 | REV 01 | 740-030658 | B11E03847 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11F01495 | SFP+-10G-USR |
| Xcvr 3 | REV 01 | 740-030658 | B11F01265 | SFP+-10G-USR |
| FPC 14 | REV 23 | 750-028467 | YN2977 | MPC 3D 16x 10GE |
| CPU | REV 10 | 711-029089 | YP1856 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | 183363A00875 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | 183363A00851 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 183363A00772 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | 183363A00882 | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | 183363A00735 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | 183363A00169 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 183363A00726 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | 183363A00077 | SFP+-10G-SR |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | 183363A00168 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | 183363A00676 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 183363A00732 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | 183363A00091 | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | 183363A00725 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | 183363A00642 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 183363A00871 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | 183363A00853 | SFP+-10G-SR |
| FPC 15 | REV 32 | 750-028467 | ABBN6798 | MPC 3D 16x 10GE |
| CPU | REV 10 | 711-029089 | ABBK6556 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-021308 | 9ZD06A00055 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | 183363A00239 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-021308 | AD0915E003K | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021308 | AD0915E003A | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80MRC | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AK80NL5 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AK80NKN | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AK80N3U | SFP+-10G-SR |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80N1T | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AJ808DJ | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AK80NG4 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AK80FND | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80FKQ | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AK80NLT | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AK80NKR | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AK80LKM | SFP+-10G-SR |
| FPC 16 | REV 30 | 750-028467 | ABBN0270 | MPC 3D 16x 10GE |
| CPU | REV 10 | 711-029089 | ABB0966 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80NL1 | SFP+-10G-SR |

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| Xcvr 1 | REV 01 | 740-031980 | AK80NXW | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AK80KD2 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AK80FMD | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80NKQ | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AK80MGH | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AK80N38 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AK80NL7 | SFP+-10G-SR |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80M5J | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AK80NKD | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AK80KCY | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AK80LHK | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80LEL | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AK80MBE | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AK80NLG | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AK80LFH | SFP+-10G-SR |
| FPC 17 | REV 32 | 750-028467 | ABBN6796 | MPC 3D 16x 10GE |
| CPU | REV 10 | 711-029089 | ABBN7259 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | B11K01856 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | B11K01853 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | B11K01863 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | 163363A02863 | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | 163363A02668 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | 163363A02881 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 163363A01671 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | 163363A02627 | SFP+-10G-SR |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | 163363A02725 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | 163363A02692 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 163363A02730 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | 163363A03081 | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | 163363A02736 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | 163363A02568 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 163363A02747 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | 163363A02579 | SFP+-10G-SR |
| FPC 18 | REV 30 | 750-028467 | ABBN0281 | MPC 3D 16x 10GE |
| CPU | REV 10 | 711-029089 | ABBN0526 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11F01326 | SFP+-10G-USR |
| Xcvr 1 | REV 01 | 740-030658 | B11E03973 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11E00950 | SFP+-10G-USR |
| Xcvr 3 | REV 01 | 740-030658 | B11E00674 | SFP+-10G-USR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11E00775 | SFP+-10G-USR |
| Xcvr 1 | REV 01 | 740-030658 | B11E04461 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11E01074 | SFP+-10G-USR |
| Xcvr 3 | REV 01 | 740-030658 | B11E02821 | SFP+-10G-USR |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11E04501 | SFP+-10G-USR |
| Xcvr 1 | REV 01 | 740-030658 | B11E00757 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11F01623 | SFP+-10G-USR |
| Xcvr 3 | REV 01 | 740-030658 | B11E01022 | SFP+-10G-USR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-030658 | B11E04359 | SFP+-10G-USR |
| Xcvr 1 | REV 01 | 740-030658 | B11E02751 | SFP+-10G-USR |
| Xcvr 2 | REV 01 | 740-030658 | B11E02736 | SFP+-10G-USR |

| | | | | |
|------------|--------|------------|--------------|------------------------|
| Xcvr 3 | REV 01 | 740-030658 | B11E01178 | SFP+-10G-USR |
| FPC 19 | REV 32 | 750-028467 | ABBN6813 | MPC 3D 16x 10GE |
| CPU | REV 10 | 711-029089 | ABBK6542 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80NA3 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AK80NLF | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AK80MRH | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AK80KE4 | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-021308 | 973152A00030 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AK80L9H | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AK80ME8 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AK80NLR | SFP+-10G-SR |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80NG1 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AK80MCA | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AK80LFC | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AK80LEM | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80N9X | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AK80LAC | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AK80LF2 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AK80N8T | SFP+-10G-SR |
| ADC 0 | REV 13 | 750-043596 | ABBX5561 | Adapter Card |
| ADC 1 | REV 13 | 750-043596 | ABBX5546 | Adapter Card |
| ADC 2 | REV 13 | 750-043596 | ABBX5535 | Adapter Card |
| ADC 3 | REV 13 | 750-043596 | ABBX5552 | Adapter Card |
| ADC 4 | REV 13 | 750-043596 | ABBX5581 | Adapter Card |
| ADC 5 | REV 13 | 750-043596 | ABBX5545 | Adapter Card |
| ADC 6 | REV 13 | 750-043596 | ABBX5554 | Adapter Card |
| ADC 7 | REV 07 | 750-043596 | ABBV7194 | Adapter Card |
| ADC 8 | REV 07 | 750-043596 | ABBV7251 | Adapter Card |
| ADC 9 | REV 07 | 750-043596 | ABBV7202 | Adapter Card |
| ADC 10 | REV 13 | 750-043596 | ABBX5579 | Adapter Card |
| ADC 11 | REV 13 | 750-043596 | ABBX5548 | Adapter Card |
| ADC 12 | REV 13 | 750-043596 | ABBX5575 | Adapter Card |
| ADC 13 | REV 13 | 750-043596 | ABBX5539 | Adapter Card |
| ADC 14 | REV 13 | 750-043596 | ABBX5555 | Adapter Card |
| ADC 15 | REV 13 | 750-043596 | ABBX5557 | Adapter Card |
| ADC 16 | REV 13 | 750-043596 | ABBX5536 | Adapter Card |
| ADC 17 | REV 13 | 750-043596 | ABBX5559 | Adapter Card |
| ADC 18 | REV 13 | 750-043596 | ABBX5537 | Adapter Card |
| ADC 19 | REV 11 | 750-043596 | ABBW5685 | Adapter Card |
| Fan Tray 0 | REV 04 | 760-046960 | ACAY0090 | 172mm FanTray - 6 Fans |
| Fan Tray 1 | REV 04 | 760-046960 | ACAY0088 | 172mm FanTray - 6 Fans |
| Fan Tray 2 | REV 04 | 760-046960 | ACAY0089 | 172mm FanTray - 6 Fans |
| Fan Tray 3 | REV 04 | 760-046960 | ACAY0108 | 172mm FanTray - 6 Fans |

show chassis hardware models (MX2020 Router)

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user@host > show chassis hardware models
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Hardware inventory:
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| Item | Version | Part number | Serial number | FRU model number |
|-----------|---------|-------------|---------------|----------------------|
| Midplane | REV 27 | 750-040240 | ABAB9384 | 750-040240 |
| FPM Board | REV 06 | 760-040242 | ABBT8837 | 760-040242 |
| PSM 0 | REV 01 | 740-045050 | 1E02224006G | MX2000-PSM-HC-DC-S-A |
| PSM 1 | REV 01 | 740-045050 | 1E022240053 | MX2000-PSM-HC-DC-S-A |
| PSM 2 | REV 01 | 740-045050 | 1E02224004K | MX2000-PSM-HC-DC-S-A |
| PSM 3 | REV 01 | 740-045050 | 1E022240056 | MX2000-PSM-HC-DC-S-A |
| PSM 4 | REV 01 | 740-045050 | 1E022240054 | MX2000-PSM-HC-DC-S-A |
| PSM 5 | REV 01 | 740-045050 | 1E02224005H | MX2000-PSM-HC-DC-S-A |

| | | | | |
|------------------|--------|------------|-------------|----------------------|
| PSM 6 | REV 01 | 740-045050 | 1E02224006S | MX2000-PSM-HC-DC-S-A |
| PSM 7 | REV 01 | 740-045050 | 1E02224005M | MX2000-PSM-HC-DC-S-A |
| PSM 8 | REV 01 | 740-045050 | 1E022240062 | MX2000-PSM-HC-DC-S-A |
| PSM 9 | REV 03 | 740-045050 | 1EDB2350095 | MX2000-PSM-DC-S-A |
| PSM 10 | REV 03 | 740-045050 | 1EDB235009L | MX2000-PSM-DC-S-A |
| PSM 11 | REV 03 | 740-045050 | 1EDB2350092 | MX2000-PSM-DC-S-A |
| PSM 12 | REV 03 | 740-045050 | 1EDB23500AT | MX2000-PSM-DC-S-A |
| PSM 13 | REV 03 | 740-045050 | 1EDB2350094 | MX2000-PSM-DC-S-A |
| PSM 15 | REV 03 | 740-045050 | 1EDB235008X | MX2000-PSM-DC-S-A |
| PDM 0 | REV 01 | 740-045234 | 1E012150033 | |
| PDM 1 | REV 01 | 740-045234 | 1E012150027 | |
| PDM 2 | REV 01 | 740-045234 | 1E262250072 | MX2000-PDM-DC-S-A |
| Routing Engine 0 | REV 02 | 740-041821 | 9009094138 | RE-S-1800X4-16G-S |
| Routing Engine 1 | REV 02 | 740-041821 | 9009089709 | RE-S-1800X4-16G-S |
| CB 0 | REV 08 | 750-040257 | CAAB3482 | 750-040257 |
| CB 1 | REV 04 | 750-040257 | ZT2864 | 750-040257 |
| SFB 0 | REV 05 | 711-044466 | ABBT2161 | MX2000-SFB-S |
| SFB 1 | REV 05 | 711-044466 | ABBT2159 | MX2000-SFB-S |
| SFB 2 | REV 05 | 711-044466 | ABBX3718 | MX2000-SFB-S |
| SFB 4 | REV 05 | 711-044466 | ABBT2160 | MX2000-SFB-S |
| SFB 5 | REV 05 | 711-044466 | ABBT2145 | MX2000-SFB-S |
| SFB 7 | REV 05 | 711-044466 | ABBT2163 | MX2000-SFB-S |
| FPC 0 | REV 30 | 750-028467 | ABBN0284 | MPC-3D-16XGE-SFPP |
| FPC 1 | REV 30 | 750-028467 | ABBN0308 | MPC-3D-16XGE-SFPP |
| FPC 2 | REV 30 | 750-028467 | ABBN0316 | MPC-3D-16XGE-SFPP |
| FPC 3 | REV 32 | 750-028467 | ABBN6832 | MPC-3D-16XGE-SFPP |
| FPC 4 | REV 32 | 750-028467 | ABBN6811 | MPC-3D-16XGE-SFPP |
| FPC 5 | REV 32 | 750-028467 | ABBN6791 | MPC-3D-16XGE-SFPP |
| FPC 6 | REV 30 | 750-028467 | ABBM4592 | MPC-3D-16XGE-SFPP |
| FPC 7 | REV 32 | 750-028467 | ABBN6810 | MPC-3D-16XGE-SFPP |
| FPC 8 | REV 30 | 750-028467 | ABBM4739 | MPC-3D-16XGE-SFPP |
| FPC 9 | REV 32 | 750-028467 | ABBN6827 | MPC-3D-16XGE-SFPP |
| FPC 10 | REV 30 | 750-028467 | ABBN0302 | MPC-3D-16XGE-SFPP |
| FPC 11 | REV 32 | 750-028467 | ABBN6790 | MPC-3D-16XGE-SFPP |
| FPC 12 | REV 30 | 750-028467 | ZM5111 | MPC-3D-16XGE-SFPP |
| FPC 13 | REV 30 | 750-028467 | ABBN0208 | MPC-3D-16XGE-SFPP |
| FPC 14 | REV 23 | 750-028467 | YN2977 | MPC-3D-16XGE-SFPP |
| FPC 15 | REV 32 | 750-028467 | ABBN6798 | MPC-3D-16XGE-SFPP |
| FPC 16 | REV 30 | 750-028467 | ABBN0270 | MPC-3D-16XGE-SFPP |
| FPC 17 | REV 32 | 750-028467 | ABBN6796 | MPC-3D-16XGE-SFPP |
| FPC 18 | REV 30 | 750-028467 | ABBN0281 | MPC-3D-16XGE-SFPP |
| FPC 19 | REV 32 | 750-028467 | ABBN6813 | MPC-3D-16XGE-SFPP |
| ADC 0 | REV 13 | 750-043596 | ABBX5561 | PROTO-ASSEMBLY |
| ADC 1 | REV 13 | 750-043596 | ABBX5546 | PROTO-ASSEMBLY |
| ADC 2 | REV 13 | 750-043596 | ABBX5535 | MX2000-LC-ADAPTER |
| ADC 3 | REV 13 | 750-043596 | ABBX5552 | MX2000-LC-ADAPTER |
| ADC 4 | REV 13 | 750-043596 | ABBX5581 | MX2000-LC-ADAPTER |
| ADC 5 | REV 13 | 750-043596 | ABBX5545 | PROTO-ASSEMBLY |
| ADC 6 | REV 13 | 750-043596 | ABBX5554 | PROTO-ASSEMBLY |
| ADC 7 | REV 07 | 750-043596 | ABBV7194 | MX2000-LC-ADAPTER |
| ADC 8 | REV 07 | 750-043596 | ABBV7251 | MX2000-LC-ADAPTER |
| ADC 9 | REV 07 | 750-043596 | ABBV7202 | MX2000-LC-ADAPTER |
| ADC 10 | REV 13 | 750-043596 | ABBX5579 | MX2000-LC-ADAPTER |
| ADC 12 | REV 13 | 750-043596 | ABBX5575 | MX2000-LC-ADAPTER |
| ADC 13 | REV 13 | 750-043596 | ABBX5539 | PROTO-ASSEMBLY |
| ADC 14 | REV 13 | 750-043596 | ABBX5555 | PROTO-ASSEMBLY |
| ADC 15 | REV 13 | 750-043596 | ABBX5557 | MX2000-LC-ADAPTER |
| ADC 16 | REV 13 | 750-043596 | ABBX5536 | PROTO-ASSEMBLY |
| ADC 17 | REV 13 | 750-043596 | ABBX5559 | PROTO-ASSEMBLY |
| ADC 18 | REV 13 | 750-043596 | ABBX5537 | PROTO-ASSEMBLY |
| ADC 19 | REV 11 | 750-043596 | ABBW5685 | PROTO-ASSEMBLY |

| | | | |
|------------|--------|------------|----------|
| Fan Tray 0 | REV 04 | 760-046960 | ACAY0090 |
| Fan Tray 1 | REV 04 | 760-046960 | ACAY0088 |
| Fan Tray 2 | REV 04 | 760-046960 | ACAY0089 |
| Fan Tray 3 | REV 04 | 760-046960 | ACAY0108 |

show chassis hardware clei-models (MX2020 Router)

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user@ host > show chassis hardware clei-models
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Hardware inventory:
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| Item | Version | Part number | CLEI code | FRU model number |
|------------------|---------|-------------|------------|----------------------|
| Midplane | REV 27 | 750-040240 | PROTOXCLEI | 750-040240 |
| FPM Board | REV 06 | 760-040242 | PROTOXCLEI | 760-040242 |
| PSM 0 | REV 01 | 740-045050 | IPUPAJMKAA | MX2000-PSM-HC-DC-S-A |
| PSM 1 | REV 01 | 740-045050 | IPUPAJMKAA | MX2000-PSM-HC-DC-S-A |
| PSM 2 | REV 01 | 740-045050 | IPUPAJMKAA | MX2000-PSM-HC-DC-S-A |
| PSM 3 | REV 01 | 740-045050 | IPUPAJMKAA | MX2000-PSM-HC-DC-S-A |
| PSM 4 | REV 01 | 740-045050 | IPUPAJMKAA | MX2000-PSM-HC-DC-S-A |
| PSM 5 | REV 01 | 740-045050 | IPUPAJMKAA | MX2000-PSM-HC-DC-S-A |
| PSM 6 | REV 01 | 740-045050 | IPUPAJMKAA | MX2000-PSM-HC-DC-S-A |
| PSM 7 | REV 01 | 740-045050 | IPUPAJMKAA | MX2000-PSM-HC-DC-S-A |
| PSM 8 | REV 01 | 740-045050 | IPUPAJMKAA | MX2000-PSM-HC-DC-S-A |
| PSM 9 | REV 03 | 740-045050 | IPUPAJMKAA | MX2000-PSM-DC-S-A |
| PSM 10 | REV 03 | 740-045050 | IPUPAJMKAA | MX2000-PSM-DC-S-A |
| PSM 11 | REV 03 | 740-045050 | IPUPAJMKAA | MX2000-PSM-DC-S-A |
| PSM 12 | REV 03 | 740-045050 | IPUPAJMKAA | MX2000-PSM-DC-S-A |
| PSM 13 | REV 03 | 740-045050 | IPUPAJMKAA | MX2000-PSM-DC-S-A |
| PSM 15 | REV 03 | 740-045050 | IPUPAJMKAA | MX2000-PSM-DC-S-A |
| PDM 0 | REV 01 | 740-045234 | | |
| PDM 1 | REV 01 | 740-045234 | | |
| PDM 2 | REV 01 | 740-045234 | IPUPAJSKAA | MX2000-PDM-DC-S-A |
| Routing Engine 0 | REV 02 | 740-041821 | | RE-S-1800X4-16G-S |
| Routing Engine 1 | REV 02 | 740-041821 | | RE-S-1800X4-16G-S |
| CB 0 | REV 08 | 750-040257 | PROTOXCLEI | 750-040257 |
| CB 1 | REV 04 | 750-040257 | PROTOXCLEI | 750-040257 |
| SFB 0 | REV 05 | 711-044466 | IPUCBA6CAA | MX2000-SFB-S |
| SFB 1 | REV 05 | 711-044466 | IPUCBA6CAA | MX2000-SFB-S |
| SFB 2 | REV 05 | 711-044466 | IPUCBA6CAA | MX2000-SFB-S |
| SFB 4 | REV 05 | 711-044466 | IPUCBA6CAA | MX2000-SFB-S |
| SFB 5 | REV 05 | 711-044466 | IPUCBA6CAA | MX2000-SFB-S |
| SFB 7 | REV 05 | 711-044466 | IPUCBA6CAA | MX2000-SFB-S |
| FPC 0 | REV 30 | 750-028467 | | MPC-3D-16XGE-SFPP |
| FPC 1 | REV 30 | 750-028467 | | MPC-3D-16XGE-SFPP |
| FPC 2 | REV 30 | 750-028467 | | MPC-3D-16XGE-SFPP |
| FPC 3 | REV 32 | 750-028467 | | MPC-3D-16XGE-SFPP |
| FPC 4 | REV 32 | 750-028467 | | MPC-3D-16XGE-SFPP |
| FPC 5 | REV 32 | 750-028467 | | MPC-3D-16XGE-SFPP |
| FPC 6 | REV 30 | 750-028467 | | MPC-3D-16XGE-SFPP |
| FPC 7 | REV 32 | 750-028467 | | MPC-3D-16XGE-SFPP |
| FPC 8 | REV 30 | 750-028467 | | MPC-3D-16XGE-SFPP |
| FPC 9 | REV 32 | 750-028467 | | MPC-3D-16XGE-SFPP |
| FPC 10 | REV 30 | 750-028467 | | MPC-3D-16XGE-SFPP |
| FPC 11 | REV 32 | 750-028467 | | MPC-3D-16XGE-SFPP |
| FPC 12 | REV 30 | 750-028467 | | MPC-3D-16XGE-SFPP |
| FPC 13 | REV 30 | 750-028467 | | MPC-3D-16XGE-SFPP |
| FPC 14 | REV 23 | 750-028467 | | MPC-3D-16XGE-SFPP |
| FPC 15 | REV 32 | 750-028467 | | MPC-3D-16XGE-SFPP |
| FPC 16 | REV 30 | 750-028467 | | MPC-3D-16XGE-SFPP |
| FPC 17 | REV 32 | 750-028467 | | MPC-3D-16XGE-SFPP |
| FPC 18 | REV 30 | 750-028467 | | MPC-3D-16XGE-SFPP |
| FPC 19 | REV 32 | 750-028467 | | MPC-3D-16XGE-SFPP |
| ADC 0 | REV 13 | 750-043596 | PROTOXCLEI | PROTO-ASSEMBLY |

| | | | | |
|------------|--------|------------|------------|-------------------|
| ADC 1 | REV 13 | 750-043596 | PROTOXCLEI | PROTO-ASSEMBLY |
| ADC 2 | REV 13 | 750-043596 | IPUCBA8CAA | MX2000-LC-ADAPTER |
| ADC 3 | REV 13 | 750-043596 | IPUCBA8CAA | MX2000-LC-ADAPTER |
| ADC 4 | REV 13 | 750-043596 | IPUCBA8CAA | MX2000-LC-ADAPTER |
| ADC 5 | REV 13 | 750-043596 | PROTOXCLEI | PROTO-ASSEMBLY |
| ADC 6 | REV 13 | 750-043596 | PROTOXCLEI | PROTO-ASSEMBLY |
| ADC 7 | REV 07 | 750-043596 | PROTOXCLEI | MX2000-LC-ADAPTER |
| ADC 8 | REV 07 | 750-043596 | PROTOXCLEI | MX2000-LC-ADAPTER |
| ADC 9 | REV 07 | 750-043596 | PROTOXCLEI | MX2000-LC-ADAPTER |
| ADC 10 | REV 13 | 750-043596 | IPUCBA8CAA | MX2000-LC-ADAPTER |
| ADC 12 | REV 13 | 750-043596 | IPUCBA8CAA | MX2000-LC-ADAPTER |
| ADC 13 | REV 13 | 750-043596 | PROTOXCLEI | PROTO-ASSEMBLY |
| ADC 14 | REV 13 | 750-043596 | PROTOXCLEI | PROTO-ASSEMBLY |
| ADC 15 | REV 13 | 750-043596 | IPUCBA8CAA | MX2000-LC-ADAPTER |
| ADC 16 | REV 13 | 750-043596 | PROTOXCLEI | PROTO-ASSEMBLY |
| ADC 17 | REV 13 | 750-043596 | PROTOXCLEI | PROTO-ASSEMBLY |
| ADC 18 | REV 13 | 750-043596 | PROTOXCLEI | PROTO-ASSEMBLY |
| ADC 19 | REV 11 | 750-043596 | PROTOXCLEI | PROTO-ASSEMBLY |
| Fan Tray 0 | REV 04 | 760-046960 | | |
| Fan Tray 1 | REV 04 | 760-046960 | | |
| Fan Tray 2 | REV 04 | 760-046960 | | |
| Fan Tray 3 | REV 04 | 760-046960 | | |

show chassis hardware (MX2020 Router with MPC5EQ and MPC6E)

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user@host> show chassis hardware
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Hardware inventory:
```

| Item | Version | Part number | Serial number | Description |
|------------|---------|-------------|---------------|----------------------|
| Chassis | | | JN120BADBAFJ | MX2020 |
| Midplane | REV 51 | 750-040240 | ABAB9243 | Lower Backplane |
| Midplane 1 | REV 04 | 711-032386 | ABAB9399 | Upper Backplane |
| PMP 1 | REV 05 | 711-032428 | ACAJ2541 | Upper Power Midplane |
| PMP 0 | REV 04 | 711-032426 | ACAJ2194 | Lower Power Midplane |
| FPM Board | REV 13 | 760-040242 | ABCA8835 | Front Panel Display |
| PSM 0 | REV 01 | 740-050037 | 1EDB32403L5 | DC 52V Power Supply |
| Module | | | | |
| PSM 1 | REV 01 | 740-050037 | 1EDB32403L3 | DC 52V Power Supply |
| Module | | | | |
| PSM 2 | REV 01 | 740-050037 | 1EDB32403KM | DC 52V Power Supply |
| Module | | | | |
| PSM 3 | REV 01 | 740-050037 | 1EDB3130079 | DC 52V Power Supply |
| Module | | | | |
| PSM 4 | REV 01 | 740-050037 | 1EDB3130077 | DC 52V Power Supply |
| Module | | | | |
| PSM 5 | REV 01 | 740-050037 | 1EDB3130020 | DC 52V Power Supply |
| Module | | | | |
| PSM 6 | REV 01 | 740-050037 | 1EDB313009S | DC 52V Power Supply |
| Module | | | | |
| PSM 7 | REV 01 | 740-050037 | 1EDB313008E | DC 52V Power Supply |
| Module | | | | |
| PSM 8 | REV 01 | 740-050037 | 1EDB3130063 | DC 52V Power Supply |
| Module | | | | |
| PSM 12 | REV 01 | 740-050037 | 1EDB3130026 | DC 52V Power Supply |
| Module | | | | |
| PSM 13 | REV 01 | 740-050037 | 1EDB3130074 | DC 52V Power Supply |
| Module | | | | |
| PSM 14 | REV 01 | 740-050037 | 1EDB313009D | DC 52V Power Supply |
| Module | | | | |
| PSM 15 | REV 01 | 740-050037 | 1EDB3130024 | DC 52V Power Supply |
| Module | | | | |
| PSM 16 | REV 01 | 740-050037 | 1EDB3130054 | DC 52V Power Supply |

| | | | | |
|------------------|--------|------------|--------------|------------------------|
| Module | | | | |
| PSM 17 | REV 01 | 740-050037 | 1EDB3130080 | DC 52V Power Supply |
| Module | | | | |
| PDM 0 | REV 03 | 740-045234 | 1EGA3170144 | DC Power Dist Module |
| PDM 1 | REV 03 | 740-045234 | 1EGA3170158 | DC Power Dist Module |
| PDM 2 | REV 03 | 740-045234 | 1EGA3170182 | DC Power Dist Module |
| PDM 3 | REV 03 | 740-045234 | 1EGA3170207 | DC Power Dist Module |
| Routing Engine 0 | REV 02 | 740-041821 | 9009112112 | RE-S-1800x4 |
| Routing Engine 1 | REV 02 | 740-041821 | 9009112087 | RE-S-1800x4 |
| CB 0 | REV 23 | 750-040257 | CABA2295 | Control Board |
| CB 1 | REV 23 | 750-040257 | CABE8379 | Control Board |
| SPMB 0 | REV 02 | 711-041855 | ABCE8851 | PMB Board |
| SPMB 1 | REV 02 | 711-041855 | ABCE8839 | PMB Board |
| SFB 0 | REV 06 | 711-044466 | ABCD5001 | Switch Fabric Board |
| SFB 1 | REV 06 | 711-044466 | ABCD5034 | Switch Fabric Board |
| SFB 2 | REV 06 | 711-044466 | ABCH3899 | Switch Fabric Board |
| SFB 3 | REV 06 | 711-044466 | ABCD5020 | Switch Fabric Board |
| SFB 4 | REV 06 | 711-044466 | ABCD4975 | Switch Fabric Board |
| SFB 5 | REV 06 | 711-044466 | ABCH3881 | Switch Fabric Board |
| SFB 6 | REV 06 | 711-044466 | ABCD5026 | Switch Fabric Board |
| SFB 7 | REV 06 | 711-044466 | ABCD5032 | Switch Fabric Board |
| FPC 0 | REV 39 | 750-045715 | CACD1902 | MPC5E 3D Q 24XGE+6XLGE |
| CPU | REV 09 | 711-045719 | CACB1933 | RMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 12X10GE SFPP OTN |
| Xcvr 0 | REV 01 | 740-031980 | B11F00361 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-021308 | 19T511101854 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021308 | 19T511100377 | SFP+-10G-SR |
| Xcvr 4 | REV 01 | 740-031980 | ANT0878 | SFP+-10G-SR |
| Xcvr 5 | REV 01 | 740-021308 | 19T511100398 | SFP+-10G-SR |
| Xcvr 6 | REV 01 | 740-021308 | AQ4363J | SFP+-10G-SR |
| Xcvr 7 | REV 01 | 740-021308 | 19T511101377 | SFP+-10G-SR |
| Xcvr 8 | REV 01 | 740-031980 | ANT072M | SFP+-10G-SR |
| Xcvr 9 | REV 01 | 740-021308 | AG90C7N | SFP+-10G-SR |
| Xcvr 10 | REV 01 | 740-031980 | AM30M09 | SFP+-10G-SR |
| Xcvr 11 | REV 01 | 740-031980 | B10E01016 | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 12X10GE SFPP OTN |
| Xcvr 0 | REV 01 | 740-031980 | B10L04151 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | 19T511101379 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-021308 | AQ5036J | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021308 | AG90C4M | SFP+-10G-SR |
| Xcvr 4 | REV 01 | 740-021308 | 19T511101104 | SFP+-10G-SR |
| Xcvr 5 | REV 01 | 740-021308 | AQ502ZM | SFP+-10G-SR |
| Xcvr 6 | REV 01 | 740-021308 | AN10KY2 | SFP+-10G-SR |
| Xcvr 7 | REV 01 | 740-021308 | AQ43G41 | SFP+-10G-SR |
| Xcvr 8 | REV 01 | 740-021308 | AQ41F04 | SFP+-10G-SR |
| Xcvr 9 | REV 01 | 740-031980 | AMS16N3 | SFP+-10G-SR |
| Xcvr 10 | REV 01 | 740-021308 | AMH04Y3 | SFP+-10G-SR |
| Xcvr 11 | REV 01 | 740-021308 | ANA093E | SFP+-10G-SR |
| PIC 2 | | BUILTIN | BUILTIN | 3X40GE QSFPP |
| PIC 3 | | BUILTIN | BUILTIN | 3X40GE QSFPP |
| WAN MEZZ | REV 09 | 750-049136 | CABN0410 | MPC5E 24XGE OTN Mezz |
| FPC 1 | REV 11 | 750-045372 | CABK8112 | MPCE Type 3 3D |
| CPU | REV 08 | 711-035209 | CABJ6621 | HMPC PMB 2G |
| MIC 0 | REV 07 | 750-033307 | CAAZ2897 | 10X10GE SFPP |
| PIC 0 | | BUILTIN | BUILTIN | 10X10GE SFPP |
| Xcvr 0 | REV 01 | 740-021308 | AQ501VK | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | AQ501YC | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-021308 | AQ43HJF | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021308 | AQ43H8D | SFP+-10G-SR |
| Xcvr 4 | REV 01 | 740-021308 | 19T511100370 | SFP+-10G-SR |
| Xcvr 5 | REV 01 | 740-031980 | 153363A00763 | SFP+-10G-SR |

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|--------|--------|------------|-----------|----------------------|
| Xcvr 6 | REV 01 | 740-021308 | APH2LXB | SFP+-10G-SR |
| Xcvr 7 | REV 01 | 740-031980 | AMCOLVV | SFP+-10G-SR |
| Xcvr 8 | REV 01 | 740-031980 | B11F00230 | SFP+-10G-SR |
| MIC 1 | REV 14 | 750-033196 | CAAP1390 | 1X100GE CXP |
| PIC 2 | | BUILTIN | BUILTIN | 1X100GE CXP |
| Xcvr 0 | REV 01 | 740-032166 | XB11F000M | CFP2-100G-SR10 |
| FPC 2 | REV 17 | 750-037355 | CAAS5826 | MPC4E 3D 2CGE+8XGE |
| CPU | REV 08 | 711-035209 | CAAR3986 | HMPC PMB 2G |
| PIC 0 | | BUILTIN | BUILTIN | 4x10GE SFPP |
| Xcvr 0 | REV 01 | 740-021308 | T09F43722 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | ALP0KXF | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-021308 | AQ502FG | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021308 | AQ502T7 | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 1X100GE CFP |
| Xcvr 0 | REV 01 | 740-035329 | X12J00571 | CFP-100G-SR10 |
| PIC 2 | | BUILTIN | BUILTIN | 4x10GE SFPP |
| Xcvr 0 | REV 01 | 740-031980 | AJ71KEH | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | B11E01355 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | B11F00249 | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 1X100GE CFP |
| FPC 3 | REV 05 | 750-044444 | CAAY9920 | MPCE Type 2 3D P |
| CPU | REV 04 | 711-038484 | CAAW3639 | MPCE PMB 2G |
| MIC 0 | REV 28 | 750-028387 | CAAX1083 | 3D 4x 10GE XFP |
| PIC 0 | | BUILTIN | BUILTIN | 2x 10GE XFP |
| Xcvr 0 | | NON-JNPR | CC07BK05B | XFP-10G-SR |
| Xcvr 1 | REV 01 | 740-011571 | C728XJ00U | XFP-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 2x 10GE XFP |
| Xcvr 0 | | NON-JNPR | T12L92339 | XFP-10G-SR |
| QXM 0 | REV 06 | 711-028408 | CAAW4915 | MPC QXM |
| QXM 1 | REV 06 | 711-028408 | CAAW4894 | MPC QXM |
| FPC 4 | REV 18 | 750-046005 | CACH5661 | MPC5E 3D Q 2CGE+4XGE |
| CPU | REV 09 | 711-045719 | CACF2880 | RMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 2X10GE SFPP OTN |
| PIC 1 | | BUILTIN | BUILTIN | 1X100GE CFP2 OTN |
| Xcvr 0 | REV 01 | 740-046563 | XD16FC03Y | CFP2-100G-SR10 |
| PIC 2 | | BUILTIN | BUILTIN | 2X10GE SFPP OTN |
| PIC 3 | | BUILTIN | BUILTIN | 1X100GE CFP2 OTN |
| Xcvr 0 | REV 01 | 740-049775 | J13K72997 | CFP2-100G-LR4-D |
| FPC 5 | REV 35 | 750-028467 | CAAR2623 | MPC 3D 16x 10GE |
| CPU | REV 11 | 711-029089 | CAAR0491 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-021308 | AQ5027T | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | AQ502J0 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-021308 | AQ5027S | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021308 | AQ501Y7 | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-021308 | AQ501YB | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | AQ503EB | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-021308 | AQ43HJH | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021308 | AQ43J0Y | SFP+-10G-SR |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-021308 | AQ50352 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | AQ501X6 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-021308 | AQ502NV | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021308 | AQ502ZJ | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-021308 | AQ502H4 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | AQ43HJK | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AJ30CU7 | SFP+-10G-SR |
| FPC 9 | REV 30 | 750-044130 | ABCF5773 | MPC6E 3D |
| CPU | REV 09 | 711-045719 | ABCF1270 | RMPC PMB |

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|---------|-------------|------------|-----------|------------------|
| MIC 0 | REV 05 | 750-049457 | ABCD7829 | 2X100GE CFP2 OTN |
| PIC 0 | | BUILTIN | BUILTIN | 2X100GE CFP2 OTN |
| Xcvr 0 | | NON-JNPR | FE13F000K | CFP2-100G-SR10 |
| Xcvr 1 | REV 01 | 740-048813 | XD32FE017 | CFP2-100G-LR-D |
| MIC 1 | REV 07 | 750-049457 | ABCK2812 | 2X100GE CFP2 OTN |
| PIC 1 | | BUILTIN | BUILTIN | 2X100GE CFP2 OTN |
| Xcvr 0 | REV 01 | 740-048813 | XD32FE018 | CFP2-100G-SR10 |
| Xcvr 1 | | NON-JNPR | FE13F000E | CFP2-100G-LR4-D |
| XLM 0 | REV 05.2.00 | 711-046638 | ABCF5915 | MPC6E XL |
| XLM 1 | REV 05.2.00 | 711-046638 | ABCF5916 | MPC6E XL |
| FPC 10 | REV 36 | 750-044130 | ABCS8602 | MPC6E 3D |
| CPU | REV 09 | 711-045719 | ABCS8779 | RMPK PMB |
| MIC 0 | REV 06 | 750-049979 | ABCK2656 | 24X10GE SFPP OTN |
| PIC 0 | | BUILTIN | BUILTIN | 24X10GE SFPP OTN |
| Xcvr 0 | REV 01 | 740-021308 | AQ43J08 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | AQE1Y2E | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-021308 | AQE1UW4 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021308 | AQE1MQF | SFP+-10G-SR |
| Xcvr 4 | REV 01 | 740-021308 | AQGOMN1 | SFP+-10G-SR |
| Xcvr 5 | REV 01 | 740-021308 | AQE1L9M | SFP+-10G-SR |
| Xcvr 6 | REV 01 | 740-021308 | AQGOMPD | SFP+-10G-SR |
| Xcvr 7 | REV 01 | 740-021308 | AQE1Y2B | SFP+-10G-SR |
| Xcvr 8 | REV 01 | 740-021308 | AQGOLT5 | SFP+-10G-SR |
| Xcvr 9 | REV 01 | 740-021308 | AQD2ET4 | SFP+-10G-SR |
| Xcvr 10 | REV 01 | 740-021308 | AQGOMPC | SFP+-10G-SR |
| Xcvr 11 | REV 01 | 740-021308 | AQGOM63 | SFP+-10G-SR |
| Xcvr 12 | REV 01 | 740-021308 | AQGOLT1 | SFP+-10G-SR |
| Xcvr 13 | REV 01 | 740-021308 | AQGOM4L | SFP+-10G-SR |
| Xcvr 14 | REV 01 | 740-021308 | AQGOLS7 | SFP+-10G-SR |
| Xcvr 15 | REV 01 | 740-021308 | AQE1MQB | SFP+-10G-SR |
| Xcvr 16 | REV 01 | 740-021308 | AQGOLZP | SFP+-10G-SR |
| Xcvr 17 | REV 01 | 740-021308 | AQE1LU9 | SFP+-10G-SR |
| Xcvr 18 | REV 01 | 740-021308 | AQGOMRZ | SFP+-10G-SR |
| Xcvr 19 | REV 01 | 740-021308 | AQE1MQ9 | SFP+-10G-SR |
| Xcvr 20 | REV 01 | 740-021308 | AQGOLRX | SFP+-10G-SR |
| Xcvr 21 | REV 01 | 740-021308 | AQE1UWD | SFP+-10G-SR |
| Xcvr 22 | REV 01 | 740-021308 | AQGOLT4 | SFP+-10G-SR |
| Xcvr 23 | REV 01 | 740-021308 | AQE1MQL | SFP+-10G-SR |
| MIC 1 | REV 12 | 750-050008 | ABCK5372 | 4X100GE CXP |
| PIC 1 | | BUILTIN | BUILTIN | 4X100GE CXP |
| Xcvr 3 | REV 01 | 740-046563 | XD16FC02Z | CFP2-100G-SR10 |
| XLM 0 | REV 07.2.00 | 711-046638 | ABCK3481 | MPC6E XL |
| XLM 1 | REV 07.2.00 | 711-046638 | ABCK4725 | MPC6E XL |
| FPC 17 | REV 28 | 750-044130 | ABBZ3873 | MPC6E 3D |
| CPU | REV 08 | 711-045719 | ABBZ3770 | RMPK PMB |
| MIC 0 | REV 11 | 750-046535 | ABCC7731 | 24X10GE SFPP |
| PIC 0 | | BUILTIN | BUILTIN | 24X10GE SFPP |
| Xcvr 1 | REV 01 | 740-021308 | APK0543 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | B10G01119 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021308 | AQ502SX | SFP+-10G-SR |
| Xcvr 4 | REV 01 | 740-021308 | AQ43H84 | SFP+-10G-SR |
| Xcvr 5 | REV 01 | 740-021308 | AQ501TB | SFP+-10G-SR |
| Xcvr 6 | REV 01 | 740-021308 | AQ502JZ | SFP+-10G-SR |
| Xcvr 7 | REV 01 | 740-021308 | AQ502SC | SFP+-10G-SR |
| Xcvr 8 | REV 01 | 740-021308 | AQ502JW | SFP+-10G-SR |
| Xcvr 9 | REV 01 | 740-021308 | AQ502RM | SFP+-10G-SR |
| Xcvr 10 | REV 01 | 740-031980 | AHK013B | SFP+-10G-SR |
| Xcvr 11 | REV 01 | 740-021308 | AQGOMRT | SFP+-10G-SR |
| Xcvr 13 | REV 01 | 740-031980 | AMC0JTC | SFP+-10G-SR |
| Xcvr 14 | REV 01 | 740-021308 | ANA0MQ0 | SFP+-10G-SR |
| Xcvr 15 | REV 01 | 740-021308 | AQ502GS | SFP+-10G-SR |

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|------------|-------------|------------|--------------|------------------------|
| Xcvr 16 | REV 01 | 740-021308 | AQGOM0J | SFP+-10G-SR |
| Xcvr 17 | REV 01 | 740-021308 | AQGOMUR | SFP+-10G-SR |
| Xcvr 18 | REV 01 | 740-021308 | AQGOMRR | SFP+-10G-SR |
| Xcvr 19 | REV 01 | 740-021308 | AQGOM0F | SFP+-10G-SR |
| Xcvr 20 | REV 01 | 740-021308 | AQ50312 | SFP+-10G-SR |
| Xcvr 21 | REV 01 | 740-021308 | AQ5032U | SFP+-10G-SR |
| Xcvr 22 | REV 01 | 740-021308 | APE17B5 | SFP+-10G-SR |
| Xcvr 23 | REV 01 | 740-021309 | 91D104A00011 | SFP+-10G-LR |
| MIC 1 | REV 03 | 750-050008 | ABCC4522 | 4X100GE CXP |
| PIC 1 | | BUILTIN | BUILTIN | 4X100GE CXP |
| Xcvr 0 | REV 01 | 740-046563 | XD16FC02U | CFP2-100G-SR10 |
| Xcvr 1 | REV 01 | 740-046563 | XC42FC03K | CFP2-100G-SR10 |
| Xcvr 2 | REV 01 | 740-046563 | XC42FC01Z | CFP2-100G-SR10 |
| Xcvr 3 | REV 01 | 740-046563 | XC42FC02U | CFP2-100G-SR10 |
| XLM 0 | REV 04.2.00 | 711-046638 | ABBZ3779 | MPC6E XL |
| XLM 1 | REV 04.2.00 | 711-046638 | ABBZ3780 | MPC6E XL |
| FPC 18 | REV 39 | 750-045715 | CACD1910 | MPC5E 3D Q 24XGE+6XLGE |
| CPU | REV 09 | 711-045719 | CACD1817 | RMP C PMB |
| PIC 0 | | BUILTIN | BUILTIN | 12X10GE SFPP OTN |
| PIC 1 | | BUILTIN | BUILTIN | 12X10GE SFPP OTN |
| PIC 2 | | BUILTIN | BUILTIN | 3X40GE QSFPP |
| Xcvr 0 | REV 01 | 740-046565 | QD130194 | QSFP+-40G-SR4 |
| Xcvr 1 | REV 01 | 740-046565 | QD130193 | QSFP+-40G-SR4 |
| Xcvr 2 | REV 01 | 740-046565 | QD130196 | QSFP+-40G-SR4 |
| PIC 3 | | BUILTIN | BUILTIN | 3X40GE QSFPP |
| Xcvr 0 | REV 01 | 740-046565 | QD130191 | QSFP+-40G-SR4 |
| Xcvr 1 | REV 01 | 740-046565 | QD130198 | QSFP+-40G-SR4 |
| Xcvr 2 | REV 01 | 740-046565 | QD130192 | QSFP+-40G-SR4 |
| WAN MEZZ | REV 09 | 750-049136 | CABN0411 | MPC5E 24XGE OTN Mezz |
| FPC 19 | REV 39 | 750-045715 | CACD1908 | MPC5E 3D Q 24XGE+6XLGE |
| CPU | REV 09 | 711-045719 | CACD1820 | RMP C PMB |
| PIC 0 | | BUILTIN | BUILTIN | 12X10GE SFPP OTN |
| Xcvr 0 | REV 01 | 740-021308 | AQA0EXJ | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | AQGOM6D | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-021308 | AQGOLW7 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021308 | AQA0JKB | SFP+-10G-SR |
| Xcvr 4 | REV 01 | 740-021308 | AQGOMTM | SFP+-10G-SR |
| Xcvr 5 | REV 01 | 740-021308 | AQA07NE | SFP+-10G-SR |
| Xcvr 6 | REV 01 | 740-021308 | AQGOM41 | SFP+-10G-SR |
| Xcvr 7 | REV 01 | 740-021308 | AQGOMU7 | SFP+-10G-SR |
| Xcvr 8 | REV 01 | 740-021308 | AQGOMUG | SFP+-10G-SR |
| Xcvr 9 | REV 01 | 740-021308 | AQGOMMX | SFP+-10G-SR |
| Xcvr 10 | REV 01 | 740-021308 | AQGOM5K | SFP+-10G-SR |
| Xcvr 11 | REV 01 | 740-021308 | AQGOLVZ | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 12X10GE SFPP OTN |
| PIC 2 | | BUILTIN | BUILTIN | 3X40GE QSFPP |
| PIC 3 | | BUILTIN | BUILTIN | 3X40GE QSFPP |
| Xcvr 0 | REV 01 | 740-046565 | QD130242 | QSFP+-40G-SR4 |
| Xcvr 1 | REV 01 | 740-046565 | QD130245 | QSFP+-40G-SR4 |
| Xcvr 2 | REV 01 | 740-046565 | QD130613 | QSFP+-40G-SR4 |
| WAN MEZZ | REV 09 | 750-049136 | CABN0418 | MPC5E 24XGE OTN Mezz |
| ADC 0 | REV 17 | 750-043596 | ABCD5378 | Adapter Card |
| ADC 1 | REV 17 | 750-043596 | ABCD5465 | Adapter Card |
| ADC 2 | REV 17 | 750-043596 | ABCD5431 | Adapter Card |
| ADC 3 | REV 17 | 750-043596 | ABCD5356 | Adapter Card |
| ADC 4 | REV 02 | 750-043596 | ZW1545 | Adapter Card |
| ADC 5 | REV 17 | 750-043596 | ABCD5517 | Adapter Card |
| ADC 18 | REV 17 | 750-043596 | ABCD5535 | Adapter Card |
| ADC 19 | REV 01 | 750-043596 | ZV4127 | Adapter Card |
| Fan Tray 0 | REV 06 | 760-046960 | ACAY0791 | 172mm FanTray - 6 Fans |
| Fan Tray 1 | REV 06 | 760-046960 | ACAY0788 | 172mm FanTray - 6 Fans |

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|------------|--------|------------|----------|------------------------|
| Fan Tray 2 | REV 06 | 760-046960 | ACAY0755 | 172mm FanTray - 6 Fans |
| Fan Tray 3 | REV 06 | 760-046960 | ACAY0441 | 172mm FanTray - 6 Fans |

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Hardware inventory:

| Item | Version | Part number | Serial number | Description |
|------------------|---------|--|----------------------|----------------------|
| Chassis | | | JN120BADBAFJ | MX2020 |
| Midplane | | | | Lower Backplane |
| Midplane 1 | REV 04 | 711-032386 | ABAB9399 | Upper Backplane |
| PMP 1 | REV 05 | 711-032428 | ACAJ2541 | Upper Power Midplane |
| PMP 0 | REV 04 | 711-032426 | ACAJ2194 | Lower Power Midplane |
| FPM Board | REV 13 | 760-040242 | ABCA8835 | Front Panel Display |
| PSM 0 | REV 01 | 740-050037 | 1EDB32403L5 | DC 52V Power Supply |
| Module | | | | |
| PSM 1 | REV 01 | 740-050037 | 1EDB32403L3 | DC 52V Power Supply |
| Module | | | | |
| PSM 2 | REV 01 | 740-050037 | 1EDB32403KM | DC 52V Power Supply |
| Module | | | | |
| PSM 3 | REV 01 | 740-050037 | 1EDB3130079 | DC 52V Power Supply |
| Module | | | | |
| PSM 4 | REV 01 | 740-050037 | 1EDB3130077 | DC 52V Power Supply |
| Module | | | | |
| PSM 5 | REV 01 | 740-050037 | 1EDB3130020 | DC 52V Power Supply |
| Module | | | | |
| PSM 6 | REV 01 | 740-050037 | 1EDB313009S | DC 52V Power Supply |
| Module | | | | |
| PSM 7 | REV 01 | 740-050037 | 1EDB313008E | DC 52V Power Supply |
| Module | | | | |
| PSM 8 | REV 01 | 740-050037 | 1EDB3130063 | DC 52V Power Supply |
| Module | | | | |
| PSM 12 | REV 01 | 740-050037 | 1EDB3130026 | DC 52V Power Supply |
| Module | | | | |
| PSM 13 | REV 01 | 740-050037 | 1EDB3130074 | DC 52V Power Supply |
| Module | | | | |
| PSM 14 | REV 01 | 740-050037 | 1EDB313009D | DC 52V Power Supply |
| Module | | | | |
| PSM 15 | REV 01 | 740-050037 | 1EDB3130024 | DC 52V Power Supply |
| Module | | | | |
| PSM 16 | REV 01 | 740-050037 | 1EDB3130054 | DC 52V Power Supply |
| Module | | | | |
| PSM 17 | REV 01 | 740-050037 | 1EDB3130080 | DC 52V Power Supply |
| Module | | | | |
| PDM 0 | REV 03 | 740-045234 | 1EGA3170144 | DC Power Dist Module |
| PDM 1 | REV 03 | 740-045234 | 1EGA3170158 | DC Power Dist Module |
| PDM 2 | REV 03 | 740-045234 | 1EGA3170182 | DC Power Dist Module |
| PDM 3 | REV 03 | 740-045234 | 1EGA3170207 | DC Power Dist Module |
| Routing Engine 0 | REV 02 | 740-041821 | 9009112112 | RE-S-1800x4 |
| ad0 3998 MB | | Virtium - TuffDrive | VCF P1T0200274310822 | 113 Compact Flash |
| ad1 30533 MB | | UGB94BPH32H0S1-KCI | 11000031656 | Disk 1 |
| usb0 (addr 1) | | EHCI root hub 0 | Intel | uhub0 |
| usb0 (addr 2) | | product 0x0020 32 | vendor 0x8087 | uhub1 |
| DIMM 0 | | SGU04G72H1BD2SA-BB DIE REV-52 PCB REV-54 | | MFR ID-ce80 |
| DIMM 1 | | SGU04G72H1BD2SA-BB DIE REV-52 PCB REV-54 | | MFR ID-ce80 |
| DIMM 2 | | SGU04G72H1BD2SA-BB DIE REV-52 PCB REV-54 | | MFR ID-ce80 |
| DIMM 3 | | SGU04G72H1BD2SA-BB DIE REV-52 PCB REV-54 | | MFR ID-ce80 |
| Routing Engine 1 | REV 02 | 740-041821 | 9009112087 | RE-S-1800x4 |
| ad0 3998 MB | | Virtium - TuffDrive | VCF P1T0200274310822 | 366 Compact Flash |
| ad1 30533 MB | | UGB94BPH32H0S1-KCI | 11000039979 | Disk 1 |
| CB 0 | REV 23 | 750-040257 | CABA2295 | Control Board |

| | | | | |
|------------|--------|------------|----------|------------------------|
| CB 1 | REV 23 | 750-040257 | CABE8379 | Control Board |
| SPMB 0 | | | | |
| SPMB 1 | | | | |
| FPC 0 | REV 39 | 750-045715 | CACD1902 | MPC5E 3D Q 24XGE+6XLGE |
| CPU | | | | |
| FPC 1 | REV 11 | 750-045372 | CABK8112 | MPC5E Type 3 3D |
| CPU | | | | |
| FPC 2 | REV 17 | 750-037355 | CAAS5826 | MPC4E 3D 2CGE+8XGE |
| CPU | | | | |
| FPC 3 | REV 05 | 750-044444 | CAAY9920 | MPC5E Type 2 3D P |
| CPU | | | | |
| FPC 4 | REV 18 | 750-046005 | CACH5661 | MPC5E 3D Q 2CGE+4XGE |
| CPU | | | | |
| FPC 5 | REV 35 | 750-028467 | CAAR2623 | MPC 3D 16x 10GE |
| CPU | | | | |
| FPC 9 | REV 30 | 750-044130 | ABCF5773 | MPC6E 3D |
| CPU | | | | |
| FPC 10 | REV 36 | 750-044130 | ABCS8602 | MPC6E 3D |
| CPU | | | | |
| FPC 17 | REV 28 | 750-044130 | ABBZ3873 | MPC6E 3D |
| CPU | | | | |
| FPC 18 | REV 39 | 750-045715 | CACD1910 | MPC5E 3D Q 24XGE+6XLGE |
| CPU | | | | |
| FPC 19 | REV 39 | 750-045715 | CACD1908 | MPC5E 3D Q 24XGE+6XLGE |
| CPU | | | | |
| Fan Tray 0 | REV 06 | 760-046960 | ACAY0791 | 172mm FanTray - 6 Fans |
| Fan Tray 1 | REV 06 | 760-046960 | ACAY0788 | 172mm FanTray - 6 Fans |
| Fan Tray 2 | REV 06 | 760-046960 | ACAY0755 | 172mm FanTray - 6 Fans |
| Fan Tray 3 | REV 06 | 760-046960 | ACAY0441 | 172mm FanTray - 6 Fans |

show chassis hardware extensive (MX2020 Router with MPC5EQ and MPC6E)

```

user@host> show chassis hardware extensive
Hardware inventory:
Item          Version  Part number  Serial number  Description
Chassis
Jedec Code:   0x7fb0          EEPROM Version: 0x02
S/N:          JN120BADBAFJ
Assembly ID:  0x0557          Assembly Version: 00.00
Date:         00-00-0000      Assembly Flags:  0x00
ID: MX2020
Board Information Record:
Address 0x00: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
I2C Hex Data:
Address 0x00: 7f b0 02 ff 05 57 00 00 00 00 00 00 00 00 00 00
Address 0x10: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x20: 4a 4e 31 32 30 42 41 44 42 41 46 4a 00 00 00 00
Address 0x30: 00 00 00 ff 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x40: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x70: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Midplane      REV 51      750-040240  ABAB9243      Lower Backplane
Jedec Code:   0x7fb0          EEPROM Version: 0x02
P/N:         750-040240      S/N:          ABAB9243
Assembly ID:  0x0b22          Assembly Version: 01.51
Date:         05-30-2013      Assembly Flags:  0x00
Version:      REV 51          CLEI Code:     IPMU710ARA
ID: Lower Backplane          FRU Model Number: CHAS-BP-MX2020-S
Board Information Record:
Address 0x00: ad 01 10 00 4c 96 14 72 30 08 ff ff ff ff ff ff

```

```

I2C Hex Data:
Address 0x00: 7f b0 02 ff 0b 22 01 33 52 45 56 20 35 31 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 34 30 32 34 30 00 00
Address 0x20: 53 2f 4e 20 41 42 41 42 39 32 34 33 00 1e 05 07
Address 0x30: dd ff ff ff ad 01 10 00 4c 96 14 72 30 08 ff ff
Address 0x40: ff ff ff ff 01 49 50 4d 55 37 31 30 41 52 41 43
Address 0x50: 48 41 53 2d 42 50 2d 4d 58 32 30 32 30 2d 53 00
Address 0x60: 00 00 00 00 00 00 41 00 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff d3 ff ff ff ff ff ff ff ff ff ff ff ff

Midplane 1      REV 04      711-032386      ABAB9399      Upper Backplane
Jedec Code:    0x7fb0      EEPROM Version:    0x01
P/N:           711-032386      S/N:              ABAB9399
Assembly ID:   0x0b23      Assembly Version:  01.04
Date:          10-22-2012      Assembly Flags:    0x00
Version:       REV 04
ID: Upper Backplane
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 01 fe 0b 23 01 04 52 45 56 20 30 34 00 00
Address 0x10: 00 00 00 00 37 31 31 2d 30 33 32 33 38 36 00 00
Address 0x20: 53 2f 4e 20 41 42 41 42 39 33 39 39 00 16 0a 07
Address 0x30: dc ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 00 ff ff ff ff ff ff ff ff ff ff ff
Address 0x50: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x60: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x70: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff

PMP 1          REV 05      711-032428      ACAJ2541      Upper Power Midplane
Jedec Code:    0x7fb0      EEPROM Version:    0x01
P/N:           711-032428      S/N:              ACAJ2541
Assembly ID:   0x045c      Assembly Version:  01.05
Date:          04-26-2013      Assembly Flags:    0x00
Version:       REV 05
ID: Upper Power Midplane
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 01 ff 04 5c 01 05 52 45 56 20 30 35 00 00
Address 0x10: 00 00 00 00 37 31 31 2d 30 33 32 34 32 38 00 00
Address 0x20: 53 2f 4e 20 41 43 41 4a 32 35 34 31 00 1a 04 07
Address 0x30: dd ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 00 ff ff ff ff ff ff ff ff ff ff ff
Address 0x50: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x60: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x70: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff

PMP 0          REV 04      711-032426      ACAJ2194      Lower Power Midplane
Jedec Code:    0x7fb0      EEPROM Version:    0x01
P/N:           711-032426      S/N:              ACAJ2194
Assembly ID:   0x045d      Assembly Version:  01.04
Date:          01-29-2013      Assembly Flags:    0x00
Version:       REV 04
ID: Lower Power Midplane
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 01 ff 04 5d 01 04 52 45 56 20 30 34 00 00
Address 0x10: 00 00 00 00 37 31 31 2d 30 33 32 34 32 36 00 00
Address 0x20: 53 2f 4e 20 41 43 41 4a 32 31 39 34 00 1d 01 07
Address 0x30: dd ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 00 ff ff ff ff ff ff ff ff ff ff ff
Address 0x50: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff

```

```

Address 0x60: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x70: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
FPM Board      REV 13    760-040242    ABCA8835      Front Panel Display
Jedec Code:    0x7fb0      EEPROM Version: 0x02
P/N:           760-040242    S/N:           ABCA8835
Assembly ID:   0x0b24      Assembly Version: 01.13
Date:          04-13-2013    Assembly Flags: 0x00
Version:       REV 13      CLEI Code:     IPMYAESJRA
ID: Front Panel Display    FRU Model Number: MX2020-CRAFT-S
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 0b 24 01 0d 52 45 56 20 31 33 00 00
Address 0x10: 00 00 00 00 37 36 30 2d 30 34 30 32 34 32 00 00
Address 0x20: 53 2f 4e 20 41 42 43 41 38 38 33 35 00 0d 04 07
Address 0x30: dd ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 49 50 4d 59 41 45 35 4a 52 41 4d
Address 0x50: 58 32 30 32 30 2d 43 52 41 46 54 2d 53 00 00 00
Address 0x60: 00 00 00 00 00 00 41 00 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff 95 ff ff ff ff ff ff ff ff ff ff ff ff
PSM 0          REV 01    740-050037    1EDB32403L5    DC 52V Power Supply
Module
Jedec Code:    0x7fb0      EEPROM Version: 0x02
P/N:           740-050037    S/N:           1EDB32403L5
Assembly ID:   0x0478      Assembly Version: 01.01
Date:          06-21-2013    Assembly Flags: 0x00
Version:       REV 01      CLEI Code:     IPUPAKRKAA
ID: DC 52V Power Supply Module FRU Model Number: MX2000-PSM-DC-S
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 04 78 01 01 52 45 56 20 30 31 00 00
Address 0x10: 00 00 00 00 37 34 30 2d 30 35 30 30 33 37 00 00
Address 0x20: 31 45 44 42 33 32 34 30 33 4c 35 00 00 15 06 07
Address 0x30: dd ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 49 50 55 50 41 4b 52 4b 41 41 4d
Address 0x50: 58 32 30 30 30 2d 50 53 4d 2d 44 43 2d 53 00 00
Address 0x60: 00 00 00 00 00 00 31 30 31 ff ff ff ff ff ff ff
Address 0x70: ff ff ff 2a 00 00 00 00 00 00 00 00 00 00 00 00
PSM 1          REV 01    740-050037    1EDB32403L3    DC 52V Power Supply
Module
Jedec Code:    0x7fb0      EEPROM Version: 0x02
P/N:           740-050037    S/N:           1EDB32403L3
Assembly ID:   0x0478      Assembly Version: 01.01
Date:          06-21-2013    Assembly Flags: 0x00
Version:       REV 01      CLEI Code:     IPUPAKRKAA
ID: DC 52V Power Supply Module FRU Model Number: MX2000-PSM-DC-S
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 04 78 01 01 52 45 56 20 30 31 00 00
Address 0x10: 00 00 00 00 37 34 30 2d 30 35 30 30 33 37 00 00
Address 0x20: 31 45 44 42 33 32 34 30 33 4c 33 00 00 15 06 07
Address 0x30: dd ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 49 50 55 50 41 4b 52 4b 41 41 4d
Address 0x50: 58 32 30 30 30 2d 50 53 4d 2d 44 43 2d 53 00 00
Address 0x60: 00 00 00 00 00 00 31 30 31 ff ff ff ff ff ff ff
Address 0x70: ff ff ff 2a 00 00 00 00 00 00 00 00 00 00 00 00
PSM 2          REV 01    740-050037    1EDB32403KM    DC 52V Power Supply
Module
Jedec Code:    0x7fb0      EEPROM Version: 0x02

```

P/N: 740-050037 S/N: 1EDB32403KM
Assembly ID: 0x0478 Assembly Version: 01.01
Date: 06-21-2013 Assembly Flags: 0x00
Version: REV 01 CLEI Code: IPUPAKRKAA
ID: DC 52V Power Supply Module FRU Model Number: MX2000-PSM-DC-S
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 04 78 01 01 52 45 56 20 30 31 00 00
Address 0x10: 00 00 00 00 37 34 30 2d 30 35 30 30 33 37 00 00
Address 0x20: 31 45 44 42 33 32 34 30 33 4b 4d 00 00 15 06 07
Address 0x30: dd ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 49 50 55 50 41 4b 52 4b 41 41 4d
Address 0x50: 58 32 30 30 30 2d 50 53 4d 2d 44 43 2d 53 00 00
Address 0x60: 00 00 00 00 00 00 31 30 31 ff ff ff ff ff ff ff
Address 0x70: ff ff ff 2a 00 00 00 00 00 00 00 00 00 00 00 00
PSM 3 REV 01 740-050037 1EDB3130079 DC 52V Power Supply
Module
Jedec Code: 0x7fb0 EEPROM Version: 0x02
P/N: 740-050037 S/N: 1EDB3130079
Assembly ID: 0x0478 Assembly Version: 01.01
Date: 05-16-2013 Assembly Flags: 0x00
Version: REV 01 CLEI Code: IPUPAKRKAA
ID: DC 52V Power Supply Module FRU Model Number: MX2000-PSM-DC-S
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 04 78 01 01 52 45 56 20 30 31 00 00
Address 0x10: 00 00 00 00 37 34 30 2d 30 35 30 30 33 37 00 00
Address 0x20: 31 45 44 42 33 31 33 30 30 37 39 00 00 10 05 07
Address 0x30: dd ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 49 50 55 50 41 4b 52 4b 41 41 4d
Address 0x50: 58 32 30 30 30 2d 50 53 4d 2d 44 43 2d 53 00 00
Address 0x60: 00 00 00 00 00 00 31 30 31 ff ff ff ff ff ff ff
Address 0x70: ff ff ff 2a 00 00 00 00 00 00 00 00 00 00 00 00
PSM 4 REV 01 740-050037 1EDB3130077 DC 52V Power Supply
Module
Jedec Code: 0x7fb0 EEPROM Version: 0x02
P/N: 740-050037 S/N: 1EDB3130077
Assembly ID: 0x0478 Assembly Version: 01.01
Date: 05-17-2013 Assembly Flags: 0x00
Version: REV 01 CLEI Code: IPUPAKRKAA
ID: DC 52V Power Supply Module FRU Model Number: MX2000-PSM-DC-S
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 04 78 01 01 52 45 56 20 30 31 00 00
Address 0x10: 00 00 00 00 37 34 30 2d 30 35 30 30 33 37 00 00
Address 0x20: 31 45 44 42 33 31 33 30 30 37 37 00 00 11 05 07
Address 0x30: dd ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 49 50 55 50 41 4b 52 4b 41 41 4d
Address 0x50: 58 32 30 30 30 2d 50 53 4d 2d 44 43 2d 53 00 00
Address 0x60: 00 00 00 00 00 00 31 30 31 ff ff ff ff ff ff ff
Address 0x70: ff ff ff 2a 00 00 00 00 00 00 00 00 00 00 00 00
PSM 5 REV 01 740-050037 1EDB3130020 DC 52V Power Supply
Module
Jedec Code: 0x7fb0 EEPROM Version: 0x02
P/N: 740-050037 S/N: 1EDB3130020
Assembly ID: 0x0478 Assembly Version: 01.01
Date: 05-16-2013 Assembly Flags: 0x00
Version: REV 01 CLEI Code: IPUPAKRKAA

ID: DC 52V Power Supply Module FRU Model Number: MX2000-PSM-DC-S

Board Information Record:

Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff

I2C Hex Data:

Address 0x00: 7f b0 02 ff 04 78 01 01 52 45 56 20 30 31 00 00

Address 0x10: 00 00 00 00 37 34 30 2d 30 35 30 30 33 37 00 00

Address 0x20: 31 45 44 42 33 31 33 30 30 32 30 00 00 10 05 07

Address 0x30: dd ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff

Address 0x40: ff ff ff ff 01 49 50 55 50 41 4b 52 4b 41 41 4d

Address 0x50: 58 32 30 30 30 2d 50 53 4d 2d 44 43 2d 53 00 00

Address 0x60: 00 00 00 00 00 00 31 30 31 ff ff ff ff ff ff ff

Address 0x70: ff ff ff 2a 00 00 00 00 00 00 00 00 00 00 00 00

PSM 6 REV 01 740-050037 1EDB313009S DC 52V Power Supply
Module

Jedec Code: 0x7fb0 EEPROM Version: 0x02

P/N: 740-050037 S/N: 1EDB313009S

Assembly ID: 0x0478 Assembly Version: 01.01

Date: 05-17-2013 Assembly Flags: 0x00

Version: REV 01 CLEI Code: IPUPAKRKAA

ID: DC 52V Power Supply Module FRU Model Number: MX2000-PSM-DC-S

Board Information Record:

Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff

I2C Hex Data:

Address 0x00: 7f b0 02 ff 04 78 01 01 52 45 56 20 30 31 00 00

Address 0x10: 00 00 00 00 37 34 30 2d 30 35 30 30 33 37 00 00

Address 0x20: 31 45 44 42 33 31 33 30 30 39 53 00 00 11 05 07

Address 0x30: dd ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff

Address 0x40: ff ff ff ff 01 49 50 55 50 41 4b 52 4b 41 41 4d

Address 0x50: 58 32 30 30 30 2d 50 53 4d 2d 44 43 2d 53 00 00

Address 0x60: 00 00 00 00 00 00 31 30 31 ff ff ff ff ff ff ff

Address 0x70: ff ff ff 2a 00 00 00 00 00 00 00 00 00 00 00 00

PSM 7 REV 01 740-050037 1EDB313008E DC 52V Power Supply
Module

Jedec Code: 0x7fb0 EEPROM Version: 0x02

P/N: 740-050037 S/N: 1EDB313008E

Assembly ID: 0x0478 Assembly Version: 01.01

Date: 05-17-2013 Assembly Flags: 0x00

Version: REV 01 CLEI Code: IPUPAKRKAA

ID: DC 52V Power Supply Module FRU Model Number: MX2000-PSM-DC-S

Board Information Record:

Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff

I2C Hex Data:

Address 0x00: 7f b0 02 ff 04 78 01 01 52 45 56 20 30 31 00 00

Address 0x10: 00 00 00 00 37 34 30 2d 30 35 30 30 33 37 00 00

Address 0x20: 31 45 44 42 33 31 33 30 30 38 45 00 00 11 05 07

Address 0x30: dd ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff

Address 0x40: ff ff ff ff 01 49 50 55 50 41 4b 52 4b 41 41 4d

Address 0x50: 58 32 30 30 30 2d 50 53 4d 2d 44 43 2d 53 00 00

Address 0x60: 00 00 00 00 00 00 31 30 31 ff ff ff ff ff ff ff

Address 0x70: ff ff ff 2a 00 00 00 00 00 00 00 00 00 00 00 00

PSM 8 REV 01 740-050037 1EDB3130063 DC 52V Power Supply
Module

Jedec Code: 0x7fb0 EEPROM Version: 0x02

P/N: 740-050037 S/N: 1EDB3130063

Assembly ID: 0x0478 Assembly Version: 01.01

Date: 05-17-2013 Assembly Flags: 0x00

Version: REV 01 CLEI Code: IPUPAKRKAA

ID: DC 52V Power Supply Module FRU Model Number: MX2000-PSM-DC-S

Board Information Record:

Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff

I2C Hex Data:

```

Address 0x00: 7f b0 02 ff 04 78 01 01 52 45 56 20 30 31 00 00
Address 0x10: 00 00 00 00 37 34 30 2d 30 35 30 30 33 37 00 00
Address 0x20: 31 45 44 42 33 31 33 30 30 36 33 00 00 11 05 07
Address 0x30: dd ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 49 50 55 50 41 4b 52 4b 41 41 4d
Address 0x50: 58 32 30 30 30 2d 50 53 4d 2d 44 43 2d 53 00 00
Address 0x60: 00 00 00 00 00 00 00 00 31 30 31 ff ff ff ff ff ff
Address 0x70: ff ff ff 2a 00 00 00 00 00 00 00 00 00 00 00 00
PSM 12          REV 01   740-050037   1EDB3130026       DC 52V Power Supply
Module
Jedec Code:    0x7fb0          EEPROM Version:  0x02
P/N:           740-050037      S/N:             1EDB3130026
Assembly ID:   0x0478          Assembly Version: 01.01
Date:          05-16-2013      Assembly Flags:   0x00
Version:       REV 01          CLEI Code:        IPUPAKRKAA
ID: DC 52V Power Supply Module FRU Model Number: MX2000-PSM-DC-S
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 04 78 01 01 52 45 56 20 30 31 00 00
Address 0x10: 00 00 00 00 37 34 30 2d 30 35 30 30 33 37 00 00
Address 0x20: 31 45 44 42 33 31 33 30 30 32 36 00 00 10 05 07
Address 0x30: dd ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 49 50 55 50 41 4b 52 4b 41 41 4d
Address 0x50: 58 32 30 30 30 2d 50 53 4d 2d 44 43 2d 53 00 00
Address 0x60: 00 00 00 00 00 00 00 00 31 30 31 ff ff ff ff ff ff
Address 0x70: ff ff ff 2a 00 00 00 00 00 00 00 00 00 00 00 00
PSM 13          REV 01   740-050037   1EDB3130074       DC 52V Power Supply
Module
Jedec Code:    0x7fb0          EEPROM Version:  0x02
P/N:           740-050037      S/N:             1EDB3130074
Assembly ID:   0x0478          Assembly Version: 01.01
Date:          05-17-2013      Assembly Flags:   0x00
Version:       REV 01          CLEI Code:        IPUPAKRKAA
ID: DC 52V Power Supply Module FRU Model Number: MX2000-PSM-DC-S
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 04 78 01 01 52 45 56 20 30 31 00 00
Address 0x10: 00 00 00 00 37 34 30 2d 30 35 30 30 33 37 00 00
Address 0x20: 31 45 44 42 33 31 33 30 30 37 34 00 00 11 05 07
Address 0x30: dd ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 49 50 55 50 41 4b 52 4b 41 41 4d
Address 0x50: 58 32 30 30 30 2d 50 53 4d 2d 44 43 2d 53 00 00
Address 0x60: 00 00 00 00 00 00 00 00 31 30 31 ff ff ff ff ff ff
Address 0x70: ff ff ff 2a 00 00 00 00 00 00 00 00 00 00 00 00
PSM 14          REV 01   740-050037   1EDB313009D       DC 52V Power Supply
Module
Jedec Code:    0x7fb0          EEPROM Version:  0x02
P/N:           740-050037      S/N:             1EDB313009D
Assembly ID:   0x0478          Assembly Version: 01.01
Date:          05-17-2013      Assembly Flags:   0x00
Version:       REV 01          CLEI Code:        IPUPAKRKAA
ID: DC 52V Power Supply Module FRU Model Number: MX2000-PSM-DC-S
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 04 78 01 01 52 45 56 20 30 31 00 00
Address 0x10: 00 00 00 00 37 34 30 2d 30 35 30 30 33 37 00 00
Address 0x20: 31 45 44 42 33 31 33 30 30 39 44 00 00 11 05 07
Address 0x30: dd ff ff ff ff ff ff ff ff ff ff ff ff ff ff

```

```

Address 0x40: ff ff ff ff 01 49 50 55 50 41 4b 52 4b 41 41 4d
Address 0x50: 58 32 30 30 30 2d 50 53 4d 2d 44 43 2d 53 00 00
Address 0x60: 00 00 00 00 00 00 31 30 31 ff ff ff ff ff ff ff
Address 0x70: ff ff ff 2a 00 00 00 00 00 00 00 00 00 00 00 00
PSM 15          REV 01    740-050037    1EDB3130024    DC 52V Power Supply
Module
Jedec Code:    0x7fb0          EEPROM Version:    0x02
P/N:           740-050037      S/N:              1EDB3130024
Assembly ID:   0x0478          Assembly Version:  01.01
Date:          05-16-2013      Assembly Flags:    0x00
Version:       REV 01          CLEI Code:         IPUPAKRKAA
ID: DC 52V Power Supply Module FRU Model Number: MX2000-PSM-DC-S
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 04 78 01 01 52 45 56 20 30 31 00 00
...
```

show chassis hardware models (MX2020 Routers with MPC5EQ and MPC6E)

```

user@host> show chassis hardware models
Hardware inventory:
Item          Version  Part number  Serial number  FRU model number
Midplane      REV 51    750-040240   ABAB9243      CHAS-BP-MX2020-S
FPM Board     REV 13    760-040242   ABCA8835      MX2020-CRAFT-S
PSM 0         REV 01    740-050037   1EDB32403L5   MX2000-PSM-DC-S
PSM 1         REV 01    740-050037   1EDB32403L3   MX2000-PSM-DC-S
PSM 2         REV 01    740-050037   1EDB32403KM   MX2000-PSM-DC-S
PSM 3         REV 01    740-050037   1EDB3130079   MX2000-PSM-DC-S
PSM 4         REV 01    740-050037   1EDB3130077   MX2000-PSM-DC-S
PSM 5         REV 01    740-050037   1EDB3130020   MX2000-PSM-DC-S
PSM 6         REV 01    740-050037   1EDB313009S   MX2000-PSM-DC-S
PSM 7         REV 01    740-050037   1EDB313008E   MX2000-PSM-DC-S
PSM 8         REV 01    740-050037   1EDB3130063   MX2000-PSM-DC-S
PSM 12        REV 01    740-050037   1EDB3130026   MX2000-PSM-DC-S
PSM 13        REV 01    740-050037   1EDB3130074   MX2000-PSM-DC-S
PSM 14        REV 01    740-050037   1EDB313009D   MX2000-PSM-DC-S
PSM 15        REV 01    740-050037   1EDB3130024   MX2000-PSM-DC-S
PSM 16        REV 01    740-050037   1EDB3130054   MX2000-PSM-DC-S
PSM 17        REV 01    740-050037   1EDB3130080   MX2000-PSM-DC-S
PDM 0         REV 03    740-045234   1EGA3170144   MX2000-PDM-DC-S
PDM 1         REV 03    740-045234   1EGA3170158   MX2000-PDM-DC-S
PDM 2         REV 03    740-045234   1EGA3170182   MX2000-PDM-DC-S
PDM 3         REV 03    740-045234   1EGA3170207   MX2000-PDM-DC-S
Routing Engine 0 REV 02    740-041821   9009112112    RE-MX2000-1800X4-S
Routing Engine 1 REV 02    740-041821   9009112087    RE-MX2000-1800X4-S
CB 0          REV 23    750-040257   CABA2295      RE-MX2000-1800X4-S
CB 1          REV 23    750-040257   CABE8379      RE-MX2000-1800X4-S
SFB 0         REV 06    711-044466   ABCD5001      MX2000-SFB-S
SFB 1         REV 06    711-044466   ABCD5034      MX2000-SFB-S
SFB 2         REV 06    711-044466   ABCH3899      MX2000-SFB-S
SFB 3         REV 06    711-044466   ABCD5020      MX2000-SFB-S
SFB 4         REV 06    711-044466   ABCD4975      MX2000-SFB-S
SFB 5         REV 06    711-044466   ABCH3881      MX2000-SFB-S
SFB 6         REV 06    711-044466   ABCD5026      MX2000-SFB-S
SFB 7         REV 06    711-044466   ABCD5032      MX2000-SFB-S
FPC 0         REV 39    750-045715   CACD1902      PROTO-ASSEMBLY
FPC 1         REV 11    750-045372   CABK8112      MX-MPC3E-3D
FPC 2         REV 17    750-037355   CAAS5826      MPC4E-3D-2CGE-8XGE
FPC 3         REV 05    750-044444   CAAY9920      MX-MPC2E-3D-P
FPC 4         REV 18    750-046005   CACH5661      PROTO-ASSEMBLY
```

| | | | | |
|------------|--------|------------|----------|-------------------|
| FPC 5 | REV 35 | 750-028467 | CAAR2623 | MPC-3D-16XGE-SFPP |
| FPC 9 | REV 30 | 750-044130 | ABCF5773 | PROTO-ASSEMBLY |
| FPC 10 | REV 36 | 750-044130 | ABCS8602 | PROTO-ASSEMBLY |
| FPC 17 | REV 28 | 750-044130 | ABBZ3873 | PROTO-ASSEMBLY |
| FPC 18 | REV 39 | 750-045715 | CACD1910 | PROTO-ASSEMBLY |
| FPC 19 | REV 39 | 750-045715 | CACD1908 | PROTO-ASSEMBLY |
| ADC 0 | REV 17 | 750-043596 | ABCD5378 | MX2000-LC-ADAPTER |
| ADC 1 | REV 17 | 750-043596 | ABCD5465 | MX2000-LC-ADAPTER |
| ADC 2 | REV 17 | 750-043596 | ABCD5431 | MX2000-LC-ADAPTER |
| ADC 3 | REV 17 | 750-043596 | ABCD5356 | MX2000-LC-ADAPTER |
| ADC 4 | REV 02 | 750-043596 | ZW1545 | 750-043596 |
| ADC 5 | REV 17 | 750-043596 | ABCD5517 | MX2000-LC-ADAPTER |
| ADC 18 | REV 17 | 750-043596 | ABCD5535 | MX2000-LC-ADAPTER |
| ADC 19 | REV 01 | 750-043596 | ZV4127 | 750-043596 |
| Fan Tray 0 | REV 06 | 760-046960 | ACAY0791 | MX2000-FANTRAY-S |
| Fan Tray 1 | REV 06 | 760-046960 | ACAY0788 | MX2000-FANTRAY-S |
| Fan Tray 2 | REV 06 | 760-046960 | ACAY0755 | MX2000-FANTRAY-S |
| Fan Tray 3 | REV 06 | 760-046960 | ACAY0441 | MX2000-FANTRAY-S |

show chassis hardware clei-models (MX2020 Router with MPC5EQ and MPC6E)

```

user@host> show chassis hardware clei-models
Hardware inventory:

```

| Item | Version | Part number | CLEI code | FRU model number |
|-----------|---------|-------------|------------|--------------------|
| Midplane | REV 51 | 750-040240 | IPMU710ARA | CHAS-BP-MX2020-S |
| FPM Board | REV 13 | 760-040242 | IPMYAE5JRA | MX2020-CRAFT-S |
| PSM 0 | REV 01 | 740-050037 | IPUPAKRKAA | MX2000-PSM-DC-S |
| PSM 1 | REV 01 | 740-050037 | IPUPAKRKAA | MX2000-PSM-DC-S |
| PSM 2 | REV 01 | 740-050037 | IPUPAKRKAA | MX2000-PSM-DC-S |
| PSM 3 | REV 01 | 740-050037 | IPUPAKRKAA | MX2000-PSM-DC-S |
| PSM 4 | REV 01 | 740-050037 | IPUPAKRKAA | MX2000-PSM-DC-S |
| PSM 5 | REV 01 | 740-050037 | IPUPAKRKAA | MX2000-PSM-DC-S |
| PSM 6 | REV 01 | 740-050037 | IPUPAKRKAA | MX2000-PSM-DC-S |
| PSM 7 | REV 01 | 740-050037 | IPUPAKRKAA | MX2000-PSM-DC-S |
| PSM 8 | REV 01 | 740-050037 | IPUPAKRKAA | MX2000-PSM-DC-S |
| PSM 12 | REV 01 | 740-050037 | IPUPAKRKAA | MX2000-PSM-DC-S |
| PSM 13 | REV 01 | 740-050037 | IPUPAKRKAA | MX2000-PSM-DC-S |
| PSM 14 | REV 01 | 740-050037 | IPUPAKRKAA | MX2000-PSM-DC-S |
| PSM 15 | REV 01 | 740-050037 | IPUPAKRKAA | MX2000-PSM-DC-S |
| PSM 16 | REV 01 | 740-050037 | IPUPAKRKAA | MX2000-PSM-DC-S |
| PSM 17 | REV 01 | 740-050037 | IPUPAKRKAA | MX2000-PSM-DC-S |
| PDM 0 | REV 03 | 740-045234 | IPUPAJSKAA | MX2000-PDM-DC-S |
| PDM 1 | REV 03 | 740-045234 | IPUPAJSKAA | MX2000-PDM-DC-S |
| PDM 2 | REV 03 | 740-045234 | IPUPAJSKAA | MX2000-PDM-DC-S |
| PDM 3 | REV 03 | 740-045234 | IPUPAJSKAA | MX2000-PDM-DC-S |
| CB 0 | REV 23 | 750-040257 | IPUCBA7CTA | RE-MX2000-1800X4-S |
| CB 1 | REV 23 | 750-040257 | IPUCBA7CTA | RE-MX2000-1800X4-S |
| SFB 0 | REV 06 | 711-044466 | IPUCBA6CAA | MX2000-SFB-S |
| SFB 1 | REV 06 | 711-044466 | IPUCBA6CAA | MX2000-SFB-S |
| SFB 2 | REV 06 | 711-044466 | IPUCBA6CAA | MX2000-SFB-S |
| SFB 3 | REV 06 | 711-044466 | IPUCBA6CAA | MX2000-SFB-S |
| SFB 4 | REV 06 | 711-044466 | IPUCBA6CAA | MX2000-SFB-S |
| SFB 5 | REV 06 | 711-044466 | IPUCBA6CAA | MX2000-SFB-S |
| SFB 6 | REV 06 | 711-044466 | IPUCBA6CAA | MX2000-SFB-S |
| SFB 7 | REV 06 | 711-044466 | IPUCBA6CAA | MX2000-SFB-S |
| FPC 0 | REV 39 | 750-045715 | PROTOXCLEI | PROTO-ASSEMBLY |
| FPC 1 | REV 11 | 750-045372 | COUIBBNBAA | MX-MPC3E-3D |
| FPC 2 | REV 17 | 750-037355 | IPU3A4DHAA | MPC4E-3D-2CGE-8XGE |
| FPC 3 | REV 05 | 750-044444 | COUIBBGBAA | MX-MPC2E-3D-P |
| MIC 0 | REV 28 | 750-028387 | COUIA16BAA | MIC-3D-4XGE-XFP |
| FPC 4 | REV 18 | 750-046005 | PROTOXCLEI | PROTO-ASSEMBLY |

| | | | | |
|------------|--------|------------|------------|-------------------|
| FPC 5 | REV 35 | 750-028467 | | MPC-3D-16XGE-SFPP |
| FPC 9 | REV 30 | 750-044130 | PROTOXCLEI | PROTO-ASSEMBLY |
| MIC 0 | REV 05 | 750-049457 | PROTOXCLEI | PROTO-ASSEMBLY |
| FPC 10 | REV 36 | 750-044130 | PROTOXCLEI | PROTO-ASSEMBLY |
| MIC 0 | REV 06 | 750-049979 | PROTOXCLEI | PROTO-ASSEMBLY |
| MIC 1 | REV 12 | 750-050008 | PROTOXCLEI | PROTO-ASSEMBLY |
| FPC 17 | REV 28 | 750-044130 | PROTOXCLEI | PROTO-ASSEMBLY |
| MIC 1 | REV 03 | 750-050008 | PROTOXCLEI | PROTO-ASSEMBLY |
| FPC 18 | REV 39 | 750-045715 | PROTOXCLEI | PROTO-ASSEMBLY |
| FPC 19 | REV 39 | 750-045715 | PROTOXCLEI | PROTO-ASSEMBLY |
| ADC 0 | REV 17 | 750-043596 | IPUCBA8CAA | MX2000-LC-ADAPTER |
| ADC 1 | REV 17 | 750-043596 | IPUCBA8CAA | MX2000-LC-ADAPTER |
| ADC 2 | REV 17 | 750-043596 | IPUCBA8CAA | MX2000-LC-ADAPTER |
| ADC 3 | REV 17 | 750-043596 | IPUCBA8CAA | MX2000-LC-ADAPTER |
| ADC 4 | REV 02 | 750-043596 | PROTOXCLEI | 750-043596 |
| ADC 5 | REV 17 | 750-043596 | IPUCBA8CAA | MX2000-LC-ADAPTER |
| ADC 18 | REV 17 | 750-043596 | IPUCBA8CAA | MX2000-LC-ADAPTER |
| ADC 19 | REV 01 | 750-043596 | PROTOXCLEI | 750-043596 |
| Fan Tray 0 | REV 06 | 760-046960 | IPUCBA5CAA | MX2000-FANTRAY-S |
| Fan Tray 1 | REV 06 | 760-046960 | IPUCBA5CAA | MX2000-FANTRAY-S |
| Fan Tray 2 | REV 06 | 760-046960 | IPUCBA5CAA | MX2000-FANTRAY-S |
| Fan Tray 3 | REV 06 | 760-046960 | IPUCBA5CAA | MX2000-FANTRAY-S |

show chassis hardware (MX Series routers with ATM MIC)

```
user@host> show chassis hardware
```

```
Hardware inventory:
```

| Item | Version | Part number | Serial number | Description |
|------------------|----------|-------------|---------------|------------------------|
| Chassis | | | JN115736EAF | MX240 |
| Midplane | REV 07 | 760-021404 | ABAA5038 | MX240 Backplane |
| FPM Board | REV 03 | 760-021392 | ABBA2758 | Front Panel Display |
| PEM 0 | Rev 01 | 740-022697 | QCS0937C07K | PS 1.2-1.7kW; 100-240V |
| AC in | | | | |
| PEM 1 | Rev 01 | 740-022697 | QCS0939C04X | PS 1.2-1.7kW; 100-240V |
| AC in | | | | |
| PEM 2 | Rev 01 | 740-022697 | QCS0937C06B | PS 1.2-1.7kW; 100-240V |
| AC in | | | | |
| PEM 3 | Rev 01 | 740-022697 | QCS0937C07U | PS 1.2-1.7kW; 100-240V |
| AC in | | | | |
| Routing Engine 0 | REV 12 | 740-013063 | 9009042291 | RE-S-2000 |
| Routing Engine 1 | REV 12 | 740-013063 | 9009042266 | RE-S-2000 |
| CB 0 | REV 06 | 710-021523 | ABBC1435 | MX SCB |
| CB 1 | REV 06 | 710-021523 | ABBC1497 | MX SCB |
| FPC 2 | REV 14 | 750-031088 | YH8446 | MPC Type 2 3D Q |
| CPU | REV 06 | 711-030884 | YH9612 | MPC PMB 2G |
| MIC 0 | | | | |
| MIC 1 | REV 10 | 750-036132 | ZP7062 | 2x0C12/8x0C3 CC-CE |
| PIC 2 | | BUILTIN | BUILTIN | 2x0C12/8x0C3 CC-CE |
| Xcvr 0 | NON-JNPR | 23393-00492 | | UNKNOWN |
| Xcvr 1 | | NON-JNPR | 23393-00500 | UNKNOWN |
| Xcvr 2 | | NON-JNPR | 23393-00912 | UNKNOWN |
| Xcvr 3 | REV 01 | 740-015638 | 22216-00575 | Load SFP |
| Xcvr 4 | REV 01 | 740-015638 | 24145-00110 | Load SFP |
| Xcvr 5 | REV 01 | 740-015638 | 24145-00016 | Load SFP |
| Xcvr 6 | REV 01 | 740-015638 | 24145-00175 | Load SFP |
| Xcvr 7 | | NON-JNPR | 23393-00627 | UNKNOWN |
| QXM 0 | REV 05 | 711-028408 | YF4681 | MPC QXM |
| QXM 1 | REV 05 | 711-028408 | YF4817 | MPC QXM |
| Fan Tray 0 | REV 01 | 710-021113 | XL3645 | MX240 Fan Tray |

show chassis hardware (MX240, MX480, MX960 routers with Application Services Modular Line Card)

```
user@host>show chassis hardware
```

```
Hardware inventory:
```

| Item | Version | Part number | Serial number | Description |
|------------------|---------|-------------|---------------|---------------------------|
| Chassis | | | JN1D969BAFA | MX960 |
| Midplane | REV 03 | 710-013698 | ACAA2362 | MX960 Backplane |
| FPM Board | REV 03 | 710-014974 | ZR0639 | Front Panel Display |
| PDM | Rev 03 | 740-013110 | QCS152250SX | Power Distribution Module |
| PEM 0 | Rev 10 | 740-013683 | QCS1512718W | DC Power Entry Module |
| PEM 1 | Rev 10 | 740-013683 | QCS1512702Y | DC Power Entry Module |
| Routing Engine 0 | REV 15 | 740-013063 | 9012024667 | RE-S-2000 |
| Routing Engine 1 | REV 15 | 740-013063 | 9012024649 | RE-S-2000 |
| CB 0 | REV 14 | 750-031391 | ZJ7749 | Enhanced MX SCB |
| CB 1 | REV 14 | 750-031391 | ZJ7750 | Enhanced MX SCB |
| CB 2 | REV 14 | 750-031391 | ZY9233 | Enhanced MX SCB |
| FPC 0 | REV 17 | 750-031089 | YR7434 | MPC Type 2 3D |
| CPU | | | | |
| FPC 1 | REV 11 | 750-037207 | ZW9727 | AS-MCC |
| CPU | REV 04 | 711-038173 | ZW4817 | AS-MCC-PMB |
| MIC 0 | REV 01 | 750-037214 | ZH3764 | AS-MSC |
| PIC 0 | | BUILTIN | BUILTIN | AS-MSC |
| MIC 1 | REV 01 | 711-028408 | JZ9200 | AS-MXC |
| PIC 2 | | BUILTIN | BUILTIN | AS-MXC |
| FPC 4 | REV 30 | 750-028467 | ABBN0232 | MPC 3D 16x 10GE |
| CPU | | | | |
| FPC 5 | REV 04 | 750-037207 | ZK9074 | AS-MCC |
| CPU | | | | |
| Fan Tray 0 | REV 05 | 740-014971 | VT5683 | Fan Tray |
| Fan Tray 1 | REV 05 | 740-014971 | VT5684 | Fan Tray |

show chassis hardware extensive (MX240, MX480, MX960 Routers with Application Services Modular Line Card)

```
user@host> show chassis hardware extensive
```

```
ID: AS-MCC                                FRU Model Number: 750-037207
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff I2C Hex Data:
Address 0x00: 7f b0 02 ff 0b 37 01 0b 52 45 56 20 31 31 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 33 37 32 30 37 00 00
Address 0x20: 53 2f 4e 20 5a 57 39 37 32 37 00 00 00 11 02 07
Address 0x30: dc ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 50 52 4f 54 4f 58 43 4c 45 49 37
Address 0x50: 35 30 2d 30 33 37 32 30 37 00 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 31 31 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff 5e ff ff ff ff ff ff ff ff ff ff ff ff
CPU                                REV 04    711-038173    ZW4817    AS-MCC-PMB
Jedec Code: 0x7fb0                EEPROM Version: 0x02
P/N: 711-038173                  S/N: ZW4817
Assembly ID: 0x0b38              Assembly Version: 01.04
Date: 12-30-2011                 Assembly Flags: 0x00
Version: REV 04
ID: AS-MCC-PMB
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff I2C Hex Data:
Address 0x00: 7f b0 02 ff 0b 38 01 04 52 45 56 20 30 34 00 00
Address 0x10: 00 00 00 00 37 31 31 2d 30 33 38 31 37 33 00 00
```

```

Address 0x20: 53 2f 4e 20 5a 57 34 38 31 37 00 00 00 1e 0c 07
Address 0x30: db ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 00 50 52 4f 54 4f 58 43 4c 45 49 37
Address 0x50: 31 31 2d 30 33 38 31 37 33 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 30 34 00 ff ff ff ff ff ff
Address 0x70: ff ff ff 60 00 00 00 00 00 00 00 00 00 00 00
MIC 0          REV 01    750-037214    ZH3764          AS-MS
Jedec Code:    0x7fb0          EEPROM Version:    0x02
P/N:          750-037214      S/N:             ZH3764
Assembly ID:   0x0a44          Assembly Version: 01.01
Date:          07-04-2011      Assembly Flags:   0x00
Version:       REV 01
ID: AS-MS
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff I2C Hex Data:
Address 0x00: 7f b0 02 ff 0a 44 01 01 52 45 56 20 30 31 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 33 37 32 31 34 00 00
Address 0x20: 53 2f 4e 20 5a 48 33 37 36 34 00 00 00 04 07 07
Address 0x30: db ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 00 00 00 ff ff ff ff ff ff
Address 0x70: ff ff ff f6 c0 03 e1 bc 00 00 00 00 00 00 00
PIC 0          BUILTIN      BUILTIN          AS-MS
FPC 4          REV 30      750-028467    ABBN0232          MPC 3D 16x 10GE
Jedec Code:    0x7fb0          EEPROM Version:    0x01

```

show chassis hardware (MX480 Router with MPC4E)

```

user@host> show chassis hardware
Hardware inventory:

```

| Item | Version | Part number | Serial number | Description |
|------------------|---------|-------------|---------------|------------------------|
| Chassis | | | JN10FF57BAFB | MX480 |
| Midplane | REV 05 | 750-047849 | Good | MX480 Midplane |
| FPM Board | REV 02 | 710-017254 | KG2066 | Front Panel Display |
| PEM 0 | Rev 03 | 740-017330 | QCS081590BJ | PS 1.2-1.7kW; 100-240V |
| AC in | | | | |
| PEM 1 | Rev 03 | 740-017330 | QCS0815908Z | PS 1.2-1.7kW; 100-240V |
| AC in | | | | |
| PEM 2 | Rev 03 | 740-029970 | QCS1001U001 | PS 1.4-2.52kW; 90-264V |
| AC in | | | | |
| Routing Engine 0 | REV 05 | 740-031116 | 9009089502 | RE-S-1800x4 |
| Routing Engine 1 | REV 05 | 740-031116 | 9009089624 | RE-S-1800x4 |
| CB 0 | REV 02 | 750-031391 | YE8506 | Enhanced MX SCB |
| CB 1 | REV 14 | 750-031391 | ZK8265 | Enhanced MX SCB |
| FPC 2 | REV 05 | 750-037358 | ZT0638 | MPC4E 3D 32XGE |
| CPU | REV 07 | 711-035209 | ZK3187 | HMPC PMB 2G |
| PIC 0 | | BUILTIN | BUILTIN | 8X10GE SFPP |
| PIC 1 | | BUILTIN | BUILTIN | 8X10GE SFPP |
| PIC 2 | | BUILTIN | BUILTIN | 8X10GE SFPP |
| PIC 3 | | BUILTIN | BUILTIN | 8X10GE SFPP |
| FPC 3 | REV 06 | 750-037355 | CAAB1144 | MPC4E 3D 2CGE+8XGE |
| CPU | REV 08 | 711-035209 | CAAB1278 | HMPC PMB 2G |
| PIC 0 | | BUILTIN | BUILTIN | 4x10GE SFPP |
| Xcvr 0 | REV 01 | 740-031980 | B11E01439 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | B11D05809 | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 1X100GE CFP |
| Xcvr 0 | | NON-JNPR | D5418 | UNKNOWN |
| PIC 2 | | BUILTIN | BUILTIN | 4x10GE SFPP |
| PIC 3 | | BUILTIN | BUILTIN | 1X100GE CFP |
| Xcvr 0 | | NON-JNPR | X12J00362 | CFP-100G-SR10 |

| | | |
|----------|-------------------------------|------------------------|
| FPC 4 | REV 12.3.10 750-033205 YR9445 | MPCE Type 3 3D |
| CPU | | |
| Fan Tray | | Enhanced Left Fan Tray |

show chassis hardware (MX2020 Router with MPC4E)

```
user@host> show chassis hardware
```

```
Hardware inventory:
```

| Item | Version | Part number | Serial number | Description |
|------------------|---------|-------------|---------------|-----------------------|
| Chassis | | | JN11E188CAFJ | MX2020 |
| Midplane | REV 04 | 711-032387 | ABAC7474 | Lower Backplane |
| Midplane 1 | REV 04 | 711-032386 | ABAC7408 | Upper Backplane |
| PMP 1 | REV 03 | 711-032428 | ACAJ1137 | Upper Power Midplane |
| PMP 0 | REV 03 | 711-032426 | ACAJ1016 | Lower Power Midplane |
| FPM Board | REV 06 | 760-040242 | ABBT8832 | Front Panel Display |
| PSM 3 | REV 0C | 740-033727 | VK00255 | DC 52V Power Supply |
| Module | | | | |
| PSM 4 | REV 0C | 740-033727 | VJ00148 | DC 52V Power Supply |
| Module | | | | |
| PSM 5 | REV 0C | 740-033727 | VK00207 | DC 52V Power Supply |
| Module | | | | |
| PSM 6 | REV 0C | 740-033727 | VK00319 | DC 52V Power Supply |
| Module | | | | |
| PSM 7 | REV 0C | 740-033727 | VK00264 | DC 52V Power Supply |
| Module | | | | |
| PSM 8 | REV 0B | 740-033727 | VG00025 | DC 52V Power Supply |
| Module | | | | |
| PSM 13 | REV 0C | 740-033727 | VK00274 | DC 52V Power Supply |
| Module | | | | |
| PSM 14 | REV 0C | 740-033727 | VJ00167 | DC 52V Power Supply |
| Module | | | | |
| PSM 15 | REV 0C | 740-033727 | VK00299 | DC 52V Power Supply |
| Module | | | | |
| PSM 16 | REV 0C | 740-033727 | VK00213 | DC 52V Power Supply |
| Module | | | | |
| PSM 17 | REV 0C | 740-033727 | VK00253 | DC 52V Power Supply |
| Module | | | | |
| PDM 0 | REV 0B | 740-038109 | VJ00040 | DC Power Dist Module |
| PDM 2 | REV 0B | 740-038109 | VJ00025 | DC Power Dist Module |
| Routing Engine 0 | REV 02 | 740-041821 | 9009089735 | RE-S-1800x4 |
| Routing Engine 1 | REV 02 | 740-041821 | 9009089731 | RE-S-1800x4 |
| CB 0 | REV 04 | 750-040257 | ZT2846 | Control Board |
| CB 1 | REV 04 | 750-040257 | ZT2877 | Control Board |
| SPMB 0 | REV 01 | 711-041855 | ZS2282 | PMB Board |
| SPMB 1 | REV 01 | 711-041855 | ZS2261 | PMB Board |
| SFB 0 | REV 07 | 711-032385 | ZZ2582 | Switch Fabric Board |
| SFB 1 | REV 04 | 711-032385 | ZV4229 | Switch Fabric Board |
| SFB 2 | REV 07 | 711-032385 | CAAB4902 | Switch Fabric Board |
| SFB 3 | REV 07 | 711-032385 | CAAB4891 | Switch Fabric Board |
| SFB 4 | REV 07 | 711-032385 | CAAB4883 | Switch Fabric Board |
| SFB 5 | REV 07 | 711-032385 | CAAB4889 | Switch Fabric Board |
| SFB 6 | REV 06 | 711-032385 | ZV1818 | Switch Fabric Board |
| SFB 7 | REV 07 | 711-032385 | CAAB4897 | Switch Fabric Board |
| FPC 0 | REV 34 | 750-031090 | ZT9799 | MPC Type 2 3D EQ |
| CPU | REV 06 | 711-030884 | ZS1122 | MPC PMB 2G |
| MIC 0 | REV 11 | 750-033535 | CAAD7674 | MIC-3D-10C192-XFP |
| PIC 0 | | BUILTIN | BUILTIN | MIC-3D-10C192-XFP |
| Xcvr 0 | REV 01 | 740-014279 | 753019A00404 | XFP-0C192-SR |
| MIC 1 | REV 14 | 750-031967 | ZM6103 | MIC-3D-80C30C12-40C48 |
| PIC 2 | | BUILTIN | BUILTIN | MIC-3D-80C30C12-40C48 |
| Xcvr 0 | REV 01 | 740-011615 | PEF1AZP | SFP-IR |

| | | | | |
|------------|--------|------------|--------------|------------------------|
| Xcvr 1 | REV 01 | 740-011615 | PEF1AZN | SFP-IR |
| Xcvr 2 | REV 01 | 740-021308 | ANA0N8S | SFP+-10G-SR |
| QXM 0 | REV 06 | 711-028408 | ZT9339 | MPC QXM |
| QXM 1 | REV 06 | 711-028408 | ZT9237 | MPC QXM |
| FPC 9 | REV 34 | 750-031090 | ZT9770 | MPC Type 2 3D EQ |
| CPU | REV 06 | 711-030884 | ZS1302 | MPC PMB 2G |
| MIC 0 | REV 24 | 750-028387 | YJ3950 | 3D 4x 10GE XFP |
| PIC 0 | | BUILTIN | BUILTIN | 2x 10GE XFP |
| Xcvr 0 | | NON-JNPR | T09M52516 | XFP-10G-SR |
| Xcvr 1 | | NON-JNPR | CA49BK095 | XFP-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 2x 10GE XFP |
| Xcvr 0 | REV 02 | 740-014289 | C834XU01T | XFP-10G-SR |
| Xcvr 1 | | NON-JNPR | T09M52515 | XFP-10G-SR |
| MIC 1 | REV 11 | 750-033535 | CAAD7681 | MIC-3D-10C192-XFP |
| PIC 2 | | BUILTIN | BUILTIN | MIC-3D-10C192-XFP |
| Xcvr 0 | REV 01 | 740-014279 | KBQ02BE | XFP-OC192-SR |
| QXM 0 | REV 06 | 711-028408 | ZT9151 | MPC QXM |
| QXM 1 | REV 06 | 711-028408 | ZT9116 | MPC QXM |
| FPC 10 | REV 27 | 750-033205 | ZL6215 | MPCE Type 3 3D |
| CPU | REV 07 | 711-035209 | ZK9038 | HMPC PMB 2G |
| MIC 0 | REV 18 | 750-028380 | YG6885 | 3D 2x 10GE XFP |
| PIC 0 | | BUILTIN | BUILTIN | 1x 10GE XFP |
| Xcvr 0 | REV 01 | 740-014289 | C706XU0AG | XFP-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 1x 10GE XFP |
| Xcvr 0 | REV 02 | 740-014289 | T08L84366 | XFP-10G-SR |
| FPC 14 | REV 09 | 750-037355 | CAAF1534 | MPC4E 3D 2CGE+8XGE |
| CPU | REV 08 | 711-035209 | CAAB9879 | HMPC PMB 2G |
| PIC 0 | | BUILTIN | BUILTIN | 4x10GE SFPP |
| Xcvr 0 | REV 01 | 740-021308 | 21T511100436 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AHPOGPM | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | 123363A00032 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021308 | 19T511100477 | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 1X100GE CFP |
| Xcvr 0 | | NON-JNPR | X12J00260 | CFP-100G-SR10 |
| PIC 2 | | BUILTIN | BUILTIN | 4x10GE SFPP |
| Xcvr 0 | REV 01 | 740-021308 | 21T511104086 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | 21T511104627 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-021308 | 21T511104644 | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 1X100GE CFP |
| FPC 19 | REV 32 | 750-028467 | ZR2008 | MPC 3D 16x 10GE |
| CPU | REV 10 | 711-029089 | ZT6933 | AMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-021308 | 19T511100291 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-021308 | AMH02VE | SFP+-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-021308 | 23T511102128 | SFP+-10G-SR |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-021308 | AMS15PP | SFP+-10G-SR |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | 123363A00716 | SFP+-10G-SR |
| ADC 0 | REV 05 | 750-043596 | CAAC2072 | Adapter Card |
| ADC 9 | REV 01 | 750-043596 | ZV4111 | Adapter Card |
| ADC 10 | REV 05 | 750-043596 | CAAC2058 | Adapter Card |
| ADC 14 | REV 02 | 750-043596 | ZW1561 | Adapter Card |
| ADC 19 | REV 01 | 750-043596 | ZV4127 | Adapter Card |
| Fan Tray 0 | REV 03 | 760-046960 | ACAY0124 | 172mm FanTray - 6 Fans |
| Fan Tray 1 | REV 2A | 760-046960 | ACAY0022 | 172mm FanTray - 6 Fans |
| Fan Tray 2 | REV 2A | 760-046960 | ACAY0023 | 172mm FanTray - 6 Fans |
| Fan Tray 3 | REV 2A | 760-046960 | ACAY0025 | 172mm FanTray - 6 Fans |

show chassis hardware (MX5, MX10, MX40, MX80, MX240, MX480, and MX960 Routers with Enhanced 20-Port Gigabit Ethernet MIC)

```

user@host> show chassis hardware
Hardware inventory:
Item          Version  Part number  Serial number  Description
Chassis                               F3434         MX80-P
Midplane                               ZK2681        MX80-P
PEM 0         Rev 04    740-028288   VE05267        AC Power Entry Module
PEM 1         Rev 04    740-028288   VE05270        AC Power Entry Module
Routing Engine                               BUILTIN       Routing Engine
TFEB 0                               BUILTIN       Forwarding Engine
Processor
  QXM 0         REV 05    711-028408   ZK0952         MPC QXM
  FPC 0                               BUILTIN       MPC BUILTIN
  MIC 0                               BUILTIN       4x 10GE XFP
  PIC 0                               BUILTIN       4x 10GE XFP
  FPC 1                               BUILTIN       MPC BUILTIN
  MIC 0         REV 02    750-049846   CAAV2153       3D 20x 1GE(LAN)-E,SFP
  PIC 0                               BUILTIN       10x 1GE(LAN) -E SFP
    Xcvr 0       REV 01    740-011613   AM0816S9B81    SFP-SX
    Xcvr 1       REV 02    740-011613   AM0925SBLK7    SFP-SX
    Xcvr 2       REV 01    740-011613   UAQ0005        SFP-SX
    Xcvr 3       REV 01    740-011613   UAQ000C        SFP-SX
    Xcvr 4       REV 01    740-011613   P9F195E        SFP-SX
    Xcvr 5       REV 01    740-011613   UAQ0003        SFP-SX
    Xcvr 6       REV 01    740-031851   AM1041SU1LD    SFP-SX
    Xcvr 8       REV 02    740-013111   B101501        SFP-T
  PIC 1                               BUILTIN       10x 1GE(LAN) -E SFP
    Xcvr 0       REV 01    740-011613   PFM1ML7        SFP-SX
    Xcvr 4       REV 01    740-011613   PE729P6        SFP-SX
    Xcvr 6       REV 02    740-011613   AM1014SGC84    SFP-SX
    Xcvr 9       REV 01    740-011613   AM0812S8UK3    SFP-SX
  MIC 1         REV 26    750-028392   ZY0187         3D 20x 1GE(LAN) SFP
  PIC 2                               BUILTIN       10x 1GE(LAN) SFP
    Xcvr 0       REV 01    740-011613   P9F1AN9        SFP-SX
    Xcvr 5       REV 02    740-011613   AM1003SFUF4    SFP-SX
    Xcvr 9       REV 01    740-031851   AM1041SU1LM    SFP-SX
  PIC 3                               BUILTIN       10x 1GE(LAN) SFP
    Xcvr 4       REV 01    740-011613   PAJ4MYT        SFP-SX
    Xcvr 7       +         NON-JNPR      XG32A024       SFP-SX
    Xcvr 8                               NON-JNPR      PFROV6J        SFP-SX
    Xcvr 9       REV 01    740-031851   AM1041SU02U    SFP-SX
Fan Tray

```

show chassis hardware models (MX5, MX10, MX40, MX80, MX240, MX480, and MX960 Routers with Enhanced 20-Port Gigabit Ethernet MIC)

```

user@host> show chassis hardware models
Hardware inventory:
Item          Version  Part number  Serial number  FRU model number
PEM 0         Rev 04    740-028288   VE05267        PWR-MX80-AC-S
PEM 1         Rev 04    740-028288   VE05270        PWR-MX80-AC-S
Routing Engine                               BUILTIN
TFEB 0                               BUILTIN
FPC 0                               BUILTIN
FPC 1                               BUILTIN
  MIC 0         REV 02    750-049846   CAAV2153       MIC-3D-20GE-SFP-E
  MIC 1         REV 26    750-028392   ZY0187         MIC-3D-20GE-SFP
Fan Tray                               FANTRAY-MX80-S

```

show chassis hardware (MX2008 Router)

```
user@host>show chassis hardware
```

```
Hardware inventory:
```

| Item | Version | Part number | Serial number | Description |
|------------------|-------------|-------------|---------------|------------------------|
| Chassis | | | JN1259E1CAFL | MX2008 |
| Midplane | REV 47 | 750-044636 | ABAD1739 | Lower Backplane |
| PMP | REV 01 | 711-051406 | ACVD0738 | Power Midplane |
| FPM Board | REV 02 | 760-068193 | ABDG7408 | Front Panel Display |
| PSM 1 | REV 06 | 740-050037 | 1EDB61200R8 | DC 52V Power Supply |
| Module | | | | |
| PSM 2 | REV 06 | 740-050037 | 1EDB61200WA | DC 52V Power Supply |
| Module | | | | |
| PSM 3 | REV 06 | 740-050037 | 1EDB61200NY | DC 52V Power Supply |
| Module | | | | |
| PSM 4 | REV 06 | 740-050037 | 1EDB61200N2 | DC 52V Power Supply |
| Module | | | | |
| PSM 5 | REV 06 | 740-050037 | 1EDB61200RN | DC 52V Power Supply |
| Module | | | | |
| PSM 6 | REV 06 | 740-050037 | 1EDB61200RF | DC 52V Power Supply |
| Module | | | | |
| PSM 7 | REV 06 | 740-050037 | 1EDB61200R7 | DC 52V Power Supply |
| Module | | | | |
| PDM 0 | REV 01 | 740-060189 | 1EFF5250143 | DC PDM Optimized |
| PDM 1 | REV 01 | 740-060189 | 1EFF5250074 | DC PDM Optimized |
| Routing Engine 0 | | BUILTIN | BUILTIN | RE-S-2X00x8 |
| Routing Engine 1 | | BUILTIN | BUILTIN | RE-S-2X00x8 |
| CB 0 | REV 01 | 750-067373 | ABDJ0047 | Control Board |
| CB 1 | REV 03 | 750-067373 | ABDH3016 | Control Board |
| SFB 0 | REV 08 | 750-067371 | ABDK7180 | Switch Fabric Board |
| SFB 1 | REV 08 | 750-067371 | ABDK7024 | Switch Fabric Board |
| SFB 2 | REV 08 | 750-067371 | ABDK7188 | Switch Fabric Board |
| SFB 3 | REV 08 | 750-067371 | ABDK7143 | Switch Fabric Board |
| SFB 4 | REV 08 | 750-067371 | ABDK7030 | Switch Fabric Board |
| SFB 5 | REV 08 | 750-067371 | ABDK7146 | Switch Fabric Board |
| SFB 6 | REV 08 | 750-067371 | ABDK7203 | Switch Fabric Board |
| SFB 7 | REV 08 | 750-067371 | ABDK7238 | Switch Fabric Board |
| FPC 0 | REV 36 | 750-044130 | ABCS8607 | MPC6E 3D |
| CPU | REV 09 | 711-045719 | ABCS8776 | RMPC PMB |
| MIC 0 | REV 21 | 750-050008 | ABCT5920 | 4X100GE CXP |
| PIC 0 | | BUILTIN | BUILTIN | 4X100GE CXP |
| XLM 0 | REV 07.2.00 | 711-046638 | ABCK3488 | MPC6E XL |
| XLM 1 | REV 07.2.00 | 711-046638 | ABCK5482 | MPC6E XL |
| FPC 1 | REV 22 | 750-063414 | CAFJ3026 | MPC9E 3D |
| CPU | REV 16 | 750-057177 | CAFF9332 | SMPC PMB |
| FPC 7 | REV 08 | 750-038492 | ZX4080 | MPCE Type 2 3D EQ |
| CPU | REV 03 | 711-038484 | ZX3665 | MPCE PMB 2G |
| MIC 0 | REV 05 | 750-037128 | ZR4031 | 1xCOC12/4xCOC3 CH-CE |
| PIC 0 | | BUILTIN | BUILTIN | 1xCOC12/4xCOC3 CH-CE |
| MIC 1 | REV 23 | 750-032479 | CADE8614 | MIC-3D-8DS3-E3 |
| PIC 2 | | BUILTIN | BUILTIN | MIC-3D-8DS3-E3 |
| QXM 0 | REV 06 | 711-028408 | ZW8299 | MPC QXM |
| QXM 1 | REV 06 | 711-028408 | ZY0609 | MPC QXM |
| ADC 7 | REV 17 | 750-043596 | ABCA0990 | Adapter Card |
| Fan Tray 0 | REV 01 | 760-052467 | ACAY6190 | 172mm FanTray - 6 Fans |
| Fan Tray 1 | REV 01 | 760-052467 | ACAY6414 | 172mm FanTray - 6 Fans |

show chassis hardware detail (MX2008 Router)

```
user@host>show chassis hardware detail
```

Hardware inventory:

| Item | Version | Part number | Serial number | Description |
|------------------|-----------------|-------------|---------------|------------------------|
| Chassis | | | JN1259E1CAFL | MX2008 |
| Midplane | REV 47 | 750-044636 | ABAD1739 | Lower Backplane |
| PMP | REV 01 | 711-051406 | ACVD0738 | Power Midplane |
| FPM Board | REV 02 | 760-068193 | ABDG7408 | Front Panel Display |
| PSM 1 | REV 06 | 740-050037 | 1EDB61200R8 | DC 52V Power Supply |
| Module | | | | |
| PSM 2 | REV 06 | 740-050037 | 1EDB61200WA | DC 52V Power Supply |
| Module | | | | |
| PSM 3 | REV 06 | 740-050037 | 1EDB61200NY | DC 52V Power Supply |
| Module | | | | |
| PSM 4 | REV 06 | 740-050037 | 1EDB61200N2 | DC 52V Power Supply |
| Module | | | | |
| PSM 5 | REV 06 | 740-050037 | 1EDB61200RN | DC 52V Power Supply |
| Module | | | | |
| PSM 6 | REV 06 | 740-050037 | 1EDB61200RF | DC 52V Power Supply |
| Module | | | | |
| PSM 7 | REV 06 | 740-050037 | 1EDB61200R7 | DC 52V Power Supply |
| Module | | | | |
| PDM 0 | REV 01 | 740-060189 | 1EFF5250143 | DC PDM Optimized |
| PDM 1 | REV 01 | 740-060189 | 1EFF5250074 | DC PDM Optimized |
| Routing Engine 0 | | BUILTIN | BUILTIN | RE-S-2X00x8 |
| vtbd0 15361 MB | | | | Virtio Block Disk |
| vtbd1 15360 MB | | | | Virtio Block Disk |
| ada0 511 MB | QEMU HARDDISK | | QM00002 | Emulated IDE Disk |
| usb0 (addr 1) | XHCI root HUB 0 | | 0x8086 | uhub0 |
| Routing Engine 1 | | BUILTIN | BUILTIN | RE-S-2X00x8 |
| vtbd0 15361 MB | | | | Virtio Block Disk |
| vtbd1 15360 MB | | | | Virtio Block Disk |
| ada0 511 MB | QEMU HARDDISK | | QM00002 | Emulated IDE Disk |
| usb0 (addr 1) | XHCI root HUB 0 | | 0x8086 | uhub0 |
| CB 0 | REV 01 | 750-067373 | ABDJ0047 | Control Board |
| CB 1 | REV 03 | 750-067373 | ABDH3016 | Control Board |
| SFB 0 | REV 08 | 750-067371 | ABDK7180 | Switch Fabric Board |
| SFB 1 | REV 08 | 750-067371 | ABDK7024 | Switch Fabric Board |
| SFB 2 | REV 08 | 750-067371 | ABDK7188 | Switch Fabric Board |
| SFB 3 | REV 08 | 750-067371 | ABDK7143 | Switch Fabric Board |
| SFB 4 | REV 08 | 750-067371 | ABDK7030 | Switch Fabric Board |
| SFB 5 | REV 08 | 750-067371 | ABDK7146 | Switch Fabric Board |
| SFB 6 | REV 08 | 750-067371 | ABDK7203 | Switch Fabric Board |
| SFB 7 | REV 08 | 750-067371 | ABDK7238 | Switch Fabric Board |
| FPC 0 | REV 36 | 750-044130 | ABCS8607 | MPC6E 3D |
| CPU | REV 09 | 711-045719 | ABCS8776 | RMPC PMB |
| MIC 0 | REV 21 | 750-050008 | ABCT5920 | 4X100GE CXP |
| PIC 0 | | BUILTIN | BUILTIN | 4X100GE CXP |
| XLM 0 | REV 07.2.00 | 711-046638 | ABCK3488 | MPC6E XL |
| XLM 1 | REV 07.2.00 | 711-046638 | ABCK5482 | MPC6E XL |
| FPC 1 | REV 22 | 750-063414 | CAFJ3026 | MPC9E 3D |
| CPU | REV 16 | 750-057177 | CAFF9332 | SMPC PMB |
| FPC 7 | REV 08 | 750-038492 | ZX4080 | MPCE Type 2 3D EQ |
| CPU | REV 03 | 711-038484 | ZX3665 | MPCE PMB 2G |
| MIC 0 | REV 05 | 750-037128 | ZR4031 | 1xCOC12/4xCOC3 CH-CE |
| PIC 0 | | BUILTIN | BUILTIN | 1xCOC12/4xCOC3 CH-CE |
| MIC 1 | REV 23 | 750-032479 | CADE8614 | MIC-3D-8DS3-E3 |
| PIC 2 | | BUILTIN | BUILTIN | MIC-3D-8DS3-E3 |
| QXM 0 | REV 06 | 711-028408 | ZW8299 | MPC QXM |
| QXM 1 | REV 06 | 711-028408 | ZY0609 | MPC QXM |
| ADC 7 | REV 17 | 750-043596 | ABCA0990 | Adapter Card |
| Fan Tray 0 | REV 01 | 760-052467 | ACAY6190 | 172mm FanTray - 6 Fans |
| Fan Tray 1 | REV 01 | 760-052467 | ACAY6414 | 172mm FanTray - 6 Fans |

show chassis hardware extensive (MX2008 Router)

```

user@host>show chassis hardware extensive
Hardware inventory:
Item          Version  Part number  Serial number  Description
Chassis                               JN1259E1CAFL  MX2008
  Jedec Code:  0x7fb0                EEPROM Version: 0x02
                                     S/N:           JN1259E1CAFL
  Assembly ID: 0x0557                Assembly Version: 00.00
  Date:         00-00-0000           Assembly Flags:  0x00
  ID: MX2008
Board Information Record:
  Address 0x00: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
I2C Hex Data:
  Address 0x00: 7f b0 02 ff 05 57 00 00 00 00 00 00 00 00 00 00
  Address 0x10: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
  Address 0x20: 4a 4e 31 32 35 39 45 31 43 41 46 4c 00 00 00 00
  Address 0x30: 00 00 00 ff 00 00 00 00 00 00 00 00 00 00 00 00
  Address 0x40: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
  Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
  Address 0x60: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
  Address 0x70: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Midplane      REV 47   750-044636  ABAD1739      Lower Backplane
  Jedec Code:  0x7fb0                EEPROM Version: 0x02
  P/N:         750-044636            S/N:           ABAD1739
  Assembly ID: 0x0b66                Assembly Version: 01.47
  Date:        06-08-2016            Assembly Flags: 0x00
  Version:     REV 47                CLEI Code:     IPMU810ARB
  ID: Lower Backplane                FRU Model Number: CHAS-BP-MX2010-S
Board Information Record:
  Address 0x00: ad 01 08 00 f4 cc 55 3e 35 00 ff ff ff ff ff ff
I2C Hex Data:
  Address 0x00: 7f b0 02 ff 0b 66 01 2f 52 45 56 20 34 37 00 00
  Address 0x10: 00 00 00 00 37 35 30 2d 30 34 34 36 33 36 00 00
  Address 0x20: 53 2f 4e 20 41 42 41 44 31 37 33 39 00 08 06 07
  Address 0x30: e0 ff ff ff ad 01 08 00 f4 cc 55 3e 35 00 ff ff
  Address 0x40: ff ff ff ff 01 49 50 4d 55 38 31 30 41 52 42 43
  Address 0x50: 48 41 53 2d 42 50 2d 4d 58 32 30 31 30 2d 53 00
  Address 0x60: 00 00 00 00 00 00 42 43 00 ff ff ff ff ff ff ff
  Address 0x70: ff ff ff 18 ff ff ff ff ff ff ff ff ff ff ff ff
PMP           REV 01   711-051406  ACVD0738      Power Midplane
  Jedec Code:  0x7fb0                EEPROM Version: 0x01
  P/N:         711-051406            S/N:           ACVD0738
  Assembly ID: 0x045d                Assembly Version: 01.01
  Date:        06-06-2016            Assembly Flags: 0x00
  Version:     REV 01
  ID: Power Midplane
Board Information Record:
  Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
  Address 0x00: 7f b0 01 ff 04 5d 01 01 52 45 56 20 30 31 00 00
  Address 0x10: 00 00 00 00 37 31 31 2d 30 35 31 34 30 36 00 00
  Address 0x20: 53 2f 4e 20 41 43 56 44 30 37 33 38 00 06 06 07
  Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
  Address 0x40: ff ff ff ff 01 00 00 00 00 00 00 00 00 00 00 00
  Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
  Address 0x60: 00 00 00 00 00 00 ff ff ff ff ff ff ff ff ff ff
  Address 0x70: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
FPM Board     REV 02   760-068193  ABDG7408      Front Panel Display
  Jedec Code:  0x7fb0                EEPROM Version: 0x02

```

```

P/N:          760-068193      S/N:          ABDG7408
Assembly ID:  0x0cac          Assembly Version: 01.02
Date:         06-06-2016      Assembly Flags:  0x00
Version:      REV 02          CLEI Code:       PROTOXCLEI
ID: Front Panel Display      FRU Model Number:  PROTO-ASSEMBLY

Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 fe 0c ac 01 02 52 45 56 20 30 32 00 00
Address 0x10: 00 00 00 00 37 36 30 2d 30 36 38 31 39 33 00 00
Address 0x20: 53 2f 4e 20 41 42 44 47 37 34 30 38 00 06 06 07
Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 50 52 4f 54 4f 58 43 4c 45 49 50
Address 0x50: 52 4f 54 4f 2d 41 53 53 45 4d 42 4c 59 00 00 00
Address 0x60: 00 00 00 00 00 00 41 30 30 ff ff ff ff ff ff ff
Address 0x70: ff ff ff c2 ff ff ff ff ff ff ff ff ff ff ff ff

PSM 1          REV 06      740-050037      1EDB61200R8      DC 52V Power Supply
Module
Jedec Code:    0x7fb0          EEPROM Version:  0x02
P/N:           740-050037      S/N:             1EDB61200R8
Assembly ID:   0x0478          Assembly Version: 01.06
Date:          03-16-2016      Assembly Flags:   0x00
Version:       REV 06          CLEI Code:       IPUPAPDKAA
ID: DC 52V Power Supply Module FRU Model Number:  MX2000-PSM-DC-S

Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 04 78 01 06 52 45 56 20 30 36 00 00
Address 0x10: 00 00 00 00 37 34 30 2d 30 35 30 30 33 37 00 00
Address 0x20: 31 45 44 42 36 31 32 30 30 52 38 00 00 10 03 07
Address 0x30: e0 72 75 ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 49 50 55 50 41 50 44 4b 41 41 4d
Address 0x50: 58 32 30 30 30 2d 50 53 4d 2d 44 43 2d 53 00 00
Address 0x60: 00 00 00 00 00 00 31 30 36 ff ff ff ff ff ff ff
Address 0x70: ff ff ff 26 00 00 00 00 00 00 00 00 00 00 00 00

PSM 2          REV 06      740-050037      1EDB61200WA      DC 52V Power Supply
Module
Jedec Code:    0x7fb0          EEPROM Version:  0x02
P/N:           740-050037      S/N:             1EDB61200WA
Assembly ID:   0x0478          Assembly Version: 01.06
Date:          03-16-2016      Assembly Flags:   0x00
Version:       REV 06          CLEI Code:       IPUPAPDKAA
ID: DC 52V Power Supply Module FRU Model Number:  MX2000-PSM-DC-S

Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 04 78 01 06 52 45 56 20 30 36 00 00
Address 0x10: 00 00 00 00 37 34 30 2d 30 35 30 30 33 37 00 00
Address 0x20: 31 45 44 42 36 31 32 30 30 57 41 00 00 10 03 07
Address 0x30: e0 72 75 ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 49 50 55 50 41 50 44 4b 41 41 4d
Address 0x50: 58 32 30 30 30 2d 50 53 4d 2d 44 43 2d 53 00 00
Address 0x60: 00 00 00 00 00 00 31 30 36 ff ff ff ff ff ff ff
Address 0x70: ff ff ff 26 00 00 00 00 00 00 00 00 00 00 00 00

PSM 3          REV 06      740-050037      1EDB61200NY      DC 52V Power Supply
Module
Jedec Code:    0x7fb0          EEPROM Version:  0x02
P/N:           740-050037      S/N:             1EDB61200NY
Assembly ID:   0x0478          Assembly Version: 01.06
Date:          03-16-2016      Assembly Flags:   0x00
Version:       REV 06          CLEI Code:       IPUPAPDKAA

```

ID: DC 52V Power Supply Module FRU Model Number: MX2000-PSM-DC-S

Board Information Record:

Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff

I2C Hex Data:

Address 0x00: 7f b0 02 ff 04 78 01 06 52 45 56 20 30 36 00 00

Address 0x10: 00 00 00 00 37 34 30 2d 30 35 30 30 33 37 00 00

Address 0x20: 31 45 44 42 36 31 32 30 30 4e 59 00 00 10 03 07

Address 0x30: e0 72 75 ff ff ff ff ff ff ff ff ff ff ff ff ff

Address 0x40: ff ff ff ff 01 49 50 55 50 41 50 44 4b 41 41 4d

Address 0x50: 58 32 30 30 30 2d 50 53 4d 2d 44 43 2d 53 00 00

Address 0x60: 00 00 00 00 00 00 31 30 36 ff ff ff ff ff ff ff

Address 0x70: ff ff ff 26 00 00 00 00 00 00 00 00 00 00 00 00

PSM 4 REV 06 740-050037 1EDB61200N2 DC 52V Power Supply
Module

Jedec Code: 0x7fb0 EEPROM Version: 0x02

P/N: 740-050037 S/N: 1EDB61200N2

Assembly ID: 0x0478 Assembly Version: 01.06

Date: 03-16-2016 Assembly Flags: 0x00

Version: REV 06 CLEI Code: IPUPAPDKAA

ID: DC 52V Power Supply Module FRU Model Number: MX2000-PSM-DC-S

Board Information Record:

Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff

I2C Hex Data:

Address 0x00: 7f b0 02 ff 04 78 01 06 52 45 56 20 30 36 00 00

Address 0x10: 00 00 00 00 37 34 30 2d 30 35 30 30 33 37 00 00

Address 0x20: 31 45 44 42 36 31 32 30 30 4e 32 00 00 10 03 07

Address 0x30: e0 72 75 ff ff ff ff ff ff ff ff ff ff ff ff ff

Address 0x40: ff ff ff ff 01 49 50 55 50 41 50 44 4b 41 41 4d

Address 0x50: 58 32 30 30 30 2d 50 53 4d 2d 44 43 2d 53 00 00

Address 0x60: 00 00 00 00 00 00 31 30 36 ff ff ff ff ff ff ff

Address 0x70: ff ff ff 26 00 00 00 00 00 00 00 00 00 00 00 00

PSM 5 REV 06 740-050037 1EDB61200RN DC 52V Power Supply
Module

Jedec Code: 0x7fb0 EEPROM Version: 0x02

P/N: 740-050037 S/N: 1EDB61200RN

Assembly ID: 0x0478 Assembly Version: 01.06

Date: 03-16-2016 Assembly Flags: 0x00

Version: REV 06 CLEI Code: IPUPAPDKAA

ID: DC 52V Power Supply Module FRU Model Number: MX2000-PSM-DC-S

Board Information Record:

Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff

I2C Hex Data:

Address 0x00: 7f b0 02 ff 04 78 01 06 52 45 56 20 30 36 00 00

Address 0x10: 00 00 00 00 37 34 30 2d 30 35 30 30 33 37 00 00

Address 0x20: 31 45 44 42 36 31 32 30 30 52 4e 00 00 10 03 07

Address 0x30: e0 72 75 ff ff ff ff ff ff ff ff ff ff ff ff ff

Address 0x40: ff ff ff ff 01 49 50 55 50 41 50 44 4b 41 41 4d

Address 0x50: 58 32 30 30 30 2d 50 53 4d 2d 44 43 2d 53 00 00

Address 0x60: 00 00 00 00 00 00 31 30 36 ff ff ff ff ff ff ff

Address 0x70: ff ff ff 26 00 00 00 00 00 00 00 00 00 00 00 00

PSM 6 REV 06 740-050037 1EDB61200RF DC 52V Power Supply
Module

Jedec Code: 0x7fb0 EEPROM Version: 0x02

P/N: 740-050037 S/N: 1EDB61200RF

Assembly ID: 0x0478 Assembly Version: 01.06

Date: 03-16-2016 Assembly Flags: 0x00

Version: REV 06 CLEI Code: IPUPAPDKAA

ID: DC 52V Power Supply Module FRU Model Number: MX2000-PSM-DC-S

Board Information Record:

Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff

I2C Hex Data:

```

Address 0x00: 7f b0 02 ff 04 78 01 06 52 45 56 20 30 36 00 00
Address 0x10: 00 00 00 00 37 34 30 2d 30 35 30 30 33 37 00 00
Address 0x20: 31 45 44 42 36 31 32 30 30 52 46 00 00 10 03 07
Address 0x30: e0 72 75 ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 49 50 55 50 41 50 44 4b 41 41 4d
Address 0x50: 58 32 30 30 30 2d 50 53 4d 2d 44 43 2d 53 00 00
Address 0x60: 00 00 00 00 00 00 00 31 30 36 ff ff ff ff ff ff
Address 0x70: ff ff ff 26 00 00 00 00 00 00 00 00 00 00 00 00
PSM 7          REV 06    740-050037    1EDB61200R7          DC 52V Power Supply
Module
Jedec Code:    0x7fb0          EEPROM Version:    0x02
P/N:           740-050037      S/N:              1EDB61200R7
Assembly ID:   0x0478          Assembly Version:  01.06
Date:          03-16-2016      Assembly Flags:    0x00
Version:       REV 06          CLEI Code:         IPUPAPDKAA
ID: DC 52V Power Supply Module FRU Model Number: MX2000-PSM-DC-S
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 04 78 01 06 52 45 56 20 30 36 00 00
Address 0x10: 00 00 00 00 37 34 30 2d 30 35 30 30 33 37 00 00
Address 0x20: 31 45 44 42 36 31 32 30 30 52 37 00 00 10 03 07
Address 0x30: e0 72 75 ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 49 50 55 50 41 50 44 4b 41 41 4d
Address 0x50: 58 32 30 30 30 2d 50 53 4d 2d 44 43 2d 53 00 00
Address 0x60: 00 00 00 00 00 00 00 31 30 36 ff ff ff ff ff ff
Address 0x70: ff ff ff 26 00 00 00 00 00 00 00 00 00 00 00 00
PDM 0          REV 01    740-060189    1EFF5250143          DC PDM Optimized
Jedec Code:    0x7fb0          EEPROM Version:    0x02
P/N:           740-060189      S/N:              1EFF5250143
Assembly ID:   0x0495          Assembly Version:  01.01
Date:          07-21-2015      Assembly Flags:    0x00
Version:       REV 01          CLEI Code:         IPUPAN1KAA
ID: DC PDM Optimized          FRU Model Number:  MX2K-PDM-OP-DC-S
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 04 95 01 01 52 45 56 20 30 31 00 00
Address 0x10: 00 00 00 00 37 34 30 2d 30 36 30 31 38 39 00 00
Address 0x20: 31 45 46 46 35 32 35 30 31 34 33 00 00 15 07 07
Address 0x30: df ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 49 50 55 50 41 4e 31 4b 41 41 4d
Address 0x50: 58 32 4b 2d 50 44 4d 2d 4f 50 2d 44 43 2d 53 00
Address 0x60: 00 00 00 00 00 00 00 31 30 31 ff ff ff ff ff ff
Address 0x70: ff ff ff 84 00 00 00 00 00 00 00 00 00 00 00 00
PDM 1          REV 01    740-060189    1EFF5250074          DC PDM Optimized
Jedec Code:    0x7fb0          EEPROM Version:    0x02
P/N:           740-060189      S/N:              1EFF5250074
Assembly ID:   0x0495          Assembly Version:  01.01
Date:          07-21-2015      Assembly Flags:    0x00
Version:       REV 01          CLEI Code:         IPUPAN1KAA
ID: DC PDM Optimized          FRU Model Number:  MX2K-PDM-OP-DC-S
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 04 95 01 01 52 45 56 20 30 31 00 00
Address 0x10: 00 00 00 00 37 34 30 2d 30 36 30 31 38 39 00 00
Address 0x20: 31 45 46 46 35 32 35 30 30 37 34 00 00 15 07 07
Address 0x30: df ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 49 50 55 50 41 4e 31 4b 41 41 4d
Address 0x50: 58 32 4b 2d 50 44 4d 2d 4f 50 2d 44 43 2d 53 00

```



```

Address 0x60: 00 00 00 00 00 00 31 30 31 ff ff ff ff ff ff ff
Address 0x70: ff ff ff 84 00 00 00 00 00 00 00 00 00 00 00 00
Routing Engine 0          BUILTIN          BUILTIN          RE-S-2X00x8
Jedec Code: 0x0000          EEPROM Version: 0x00
P/N:          BUILTIN          S/N:          BUILTIN
Assembly ID: 0x0c10          Assembly Version: 00.00
Date:          00-00-0000          Assembly Flags: 0x00
ID: RE-S-2X00x8
Board Information Record:
Address 0x00: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
I2C Hex Data:
Address 0x00: 00 00 00 00 0c 10 00 00 00 00 00 00 00 00 00 00
Address 0x10: 00 00 00 00 42 55 49 4c 54 49 4e 00 00 00 00 00
Address 0x20: 42 55 49 4c 54 49 4e 00 00 00 00 00 00 00 00 00
Address 0x30: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x40: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x70: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
vtbd0 15361 MB          Virtio Block Disk
vtbd1 15360 MB          Virtio Block Disk
ada0 511 MB QEMU HARDDISK          QM00002          Emulated IDE Disk
usb0 (addr 1) XHCI root HUB 0          0x8086          uhub0
Routing Engine 1          BUILTIN          BUILTIN          RE-S-2X00x8
Jedec Code: 0x0000          EEPROM Version: 0x00
P/N:          BUILTIN          S/N:          BUILTIN
Assembly ID: 0x0c10          Assembly Version: 00.00
Date:          00-00-0000          Assembly Flags: 0x00
ID: RE-S-2X00x8
Board Information Record:
Address 0x00: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
I2C Hex Data:
Address 0x00: 00 00 00 00 0c 10 00 00 00 00 00 00 00 00 00 00
Address 0x10: 00 00 00 00 42 55 49 4c 54 49 4e 00 00 00 00 00
Address 0x20: 42 55 49 4c 54 49 4e 00 00 00 00 00 00 00 00 00
Address 0x30: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x40: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x70: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
vtbd0 15361 MB          Virtio Block Disk
vtbd1 15360 MB          Virtio Block Disk
ada0 511 MB QEMU HARDDISK          QM00002          Emulated IDE Disk
usb0 (addr 1) XHCI root HUB 0          0x8086          uhub0
CB 0          REV 01 750-067373 ABDJ0047          Control Board
Jedec Code: 0x7fb0          EEPROM Version: 0x02
P/N:          750-067373          S/N:          ABDJ0047
Assembly ID: 0x0c96          Assembly Version: 01.01
Date:          06-21-2016          Assembly Flags: 0x00
Version:          REV 01          CLEI Code:          PROTOXCLEI
ID: Control Board          FRU Model Number:          PROTO-ASSEMBLY
Board Information Record:
Address 0x00: ad 01 00 20 28 8a 1c 6d c4 7e ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 fe 0c 96 01 01 52 45 56 20 30 31 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 36 37 33 37 33 00 00
Address 0x20: 53 2f 4e 20 41 42 44 4a 30 30 34 37 00 15 06 07
Address 0x30: e0 ff ff ff ad 01 00 20 28 8a 1c 6d c4 7e ff ff
Address 0x40: ff ff ff ff 01 50 52 4f 54 4f 58 43 4c 45 49 50
Address 0x50: 52 4f 54 4f 2d 41 53 53 45 4d 42 4c 59 00 00 00
Address 0x60: 00 00 00 00 00 00 41 30 30 ff ff ff ff ff ff ff

```

```

Address 0x70: ff ff ff c2 ff ff ff ff ff ff ff ff ff ff ff
CB 1          REV 03 750-067373 ABDH3016          Control Board
Jedec Code:   0x7fb0          EEPROM Version: 0x02
P/N:          750-067373      S/N:          ABDH3016
Assembly ID:  0x0c96          Assembly Version: 01.03
Date:         05-07-2016      Assembly Flags: 0x00
Version:      REV 03          CLEI Code:   PROTOXCLEI
ID: Control Board          FRU Model Number: PROTO-ASSEMBLY
Board Information Record:
Address 0x00: ad 01 00 20 f4 cc 55 35 71 a0 ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 fe 0c 96 01 03 52 45 56 20 30 33 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 36 37 33 37 33 00 00
Address 0x20: 53 2f 4e 20 41 42 44 48 33 30 31 36 00 07 05 07
Address 0x30: e0 ff ff ff ad 01 00 20 f4 cc 55 35 71 a0 ff ff
Address 0x40: ff ff ff ff 01 50 52 4f 54 4f 58 43 4c 45 49 50
Address 0x50: 52 4f 54 4f 2d 41 53 53 45 4d 42 4c 59 00 00 00
Address 0x60: 00 00 00 00 00 00 41 30 30 ff ff ff ff ff ff ff
Address 0x70: ff ff ff c2 ff ff ff ff ff ff ff ff ff ff ff ff

SFB 0          REV 08 750-067371 ABDK7180          Switch Fabric Board
Jedec Code:   0x7fb0          EEPROM Version: 0x02
P/N:          750-067371      S/N:          ABDK7180
Assembly ID:  0x0c97          Assembly Version: 01.08
Date:         09-27-2016      Assembly Flags: 0x00
Version:      REV 08          CLEI Code:   PROTOXCLEI
ID: Switch Fabric Board      FRU Model Number: PROTO-ASSEMBLY
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 fe 0c 97 01 08 52 45 56 20 30 38 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 36 37 33 37 31 00 00
Address 0x20: 53 2f 4e 20 41 42 44 4b 37 31 38 30 00 1b 09 07
Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 50 52 4f 54 4f 58 43 4c 45 49 50
Address 0x50: 52 4f 54 4f 2d 41 53 53 45 4d 42 4c 59 00 00 00
Address 0x60: 00 00 00 00 00 00 41 30 30 ff ff ff ff ff ff ff
Address 0x70: ff ff ff c2 07 00 00 00 00 00 00 00 00 00 00 48 00

SFB 1          REV 08 750-067371 ABDK7024          Switch Fabric Board
Jedec Code:   0x7fb0          EEPROM Version: 0x02
P/N:          750-067371      S/N:          ABDK7024
Assembly ID:  0x0c97          Assembly Version: 01.08
Date:         09-27-2016      Assembly Flags: 0x00
Version:      REV 08          CLEI Code:   PROTOXCLEI
ID: Switch Fabric Board      FRU Model Number: PROTO-ASSEMBLY
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 fe 0c 97 01 08 52 45 56 20 30 38 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 36 37 33 37 31 00 00
Address 0x20: 53 2f 4e 20 41 42 44 4b 37 30 32 34 00 1b 09 07
Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 50 52 4f 54 4f 58 43 4c 45 49 50
Address 0x50: 52 4f 54 4f 2d 41 53 53 45 4d 42 4c 59 00 00 00
Address 0x60: 00 00 00 00 00 00 41 30 30 ff ff ff ff ff ff ff
Address 0x70: ff ff ff c2 07 00 00 00 00 00 00 00 00 01 00 48 00

SFB 2          REV 08 750-067371 ABDK7188          Switch Fabric Board
Jedec Code:   0x7fb0          EEPROM Version: 0x02
P/N:          750-067371      S/N:          ABDK7188
Assembly ID:  0x0c97          Assembly Version: 01.08
Date:         09-28-2016      Assembly Flags: 0x00
Version:      REV 08          CLEI Code:   PROTOXCLEI

```

```

ID: Switch Fabric Board          FRU Model Number:  PROTO-ASSEMBLY
Board Information Record:
  Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
  Address 0x00: 7f b0 02 fe 0c 97 01 08 52 45 56 20 30 38 00 00
  Address 0x10: 00 00 00 00 37 35 30 2d 30 36 37 33 37 31 00 00
  Address 0x20: 53 2f 4e 20 41 42 44 4b 37 31 38 38 00 1c 09 07
  Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff
  Address 0x40: ff ff ff ff 01 50 52 4f 54 4f 58 43 4c 45 49 50
  Address 0x50: 52 4f 54 4f 2d 41 53 53 45 4d 42 4c 59 00 00 00
  Address 0x60: 00 00 00 00 00 00 41 30 30 ff ff ff ff ff ff
  Address 0x70: ff ff ff c2 07 00 00 00 00 00 00 00 02 00 48 00
SFB 3          REV 08    750-067371  ABDK7143          Switch Fabric Board
Jedec Code:    0x7fb0          EEPROM Version:    0x02
P/N:          750-067371      S/N:          ABDK7143
Assembly ID:   0x0c97          Assembly Version: 01.08
Date:         09-27-2016      Assembly Flags: 0x00
Version:      REV 08          CLEI Code:    PROTOXCLEI
ID: Switch Fabric Board      FRU Model Number:  PROTO-ASSEMBLY
Board Information Record:
  Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
  Address 0x00: 7f b0 02 fe 0c 97 01 08 52 45 56 20 30 38 00 00
  Address 0x10: 00 00 00 00 37 35 30 2d 30 36 37 33 37 31 00 00
  Address 0x20: 53 2f 4e 20 41 42 44 4b 37 31 34 33 00 1b 09 07
  Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff
  Address 0x40: ff ff ff ff 01 50 52 4f 54 4f 58 43 4c 45 49 50
  Address 0x50: 52 4f 54 4f 2d 41 53 53 45 4d 42 4c 59 00 00 00
  Address 0x60: 00 00 00 00 00 00 41 30 30 ff ff ff ff ff ff
  Address 0x70: ff ff ff c2 07 00 00 00 00 00 00 00 03 00 48 00
SFB 4          REV 08    750-067371  ABDK7030          Switch Fabric Board
Jedec Code:    0x7fb0          EEPROM Version:    0x02
P/N:          750-067371      S/N:          ABDK7030
Assembly ID:   0x0c97          Assembly Version: 01.08
Date:         09-24-2016      Assembly Flags: 0x00
Version:      REV 08          CLEI Code:    PROTOXCLEI
ID: Switch Fabric Board      FRU Model Number:  PROTO-ASSEMBLY
Board Information Record:
  Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
  Address 0x00: 7f b0 02 fe 0c 97 01 08 52 45 56 20 30 38 00 00
  Address 0x10: 00 00 00 00 37 35 30 2d 30 36 37 33 37 31 00 00
  Address 0x20: 53 2f 4e 20 41 42 44 4b 37 30 33 30 00 18 09 07
  Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff
  Address 0x40: ff ff ff ff 01 50 52 4f 54 4f 58 43 4c 45 49 50
  Address 0x50: 52 4f 54 4f 2d 41 53 53 45 4d 42 4c 59 00 00 00
  Address 0x60: 00 00 00 00 00 00 41 30 30 ff ff ff ff ff ff
  Address 0x70: ff ff ff c2 07 00 00 00 00 00 00 00 04 00 48 00
SFB 5          REV 08    750-067371  ABDK7146          Switch Fabric Board
Jedec Code:    0x7fb0          EEPROM Version:    0x02
P/N:          750-067371      S/N:          ABDK7146
Assembly ID:   0x0c97          Assembly Version: 01.08
Date:         09-27-2016      Assembly Flags: 0x00
Version:      REV 08          CLEI Code:    PROTOXCLEI
ID: Switch Fabric Board      FRU Model Number:  PROTO-ASSEMBLY
Board Information Record:
  Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
  Address 0x00: 7f b0 02 fe 0c 97 01 08 52 45 56 20 30 38 00 00
  Address 0x10: 00 00 00 00 37 35 30 2d 30 36 37 33 37 31 00 00
  Address 0x20: 53 2f 4e 20 41 42 44 4b 37 31 34 36 00 1b 09 07

```

```

Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 50 52 4f 54 4f 58 43 4c 45 49 50
Address 0x50: 52 4f 54 4f 2d 41 53 53 45 4d 42 4c 59 00 00 00
Address 0x60: 00 00 00 00 00 00 41 30 30 ff ff ff ff ff ff
Address 0x70: ff ff ff c2 07 00 00 00 00 00 00 00 05 00 48 00
SFB 6          REV 08    750-067371    ABDK7203          Switch Fabric Board
Jedec Code:    0x7fb0          EEPROM Version:    0x02
P/N:           750-067371      S/N:             ABDK7203
Assembly ID:   0x0c97          Assembly Version: 01.08
Date:          09-28-2016      Assembly Flags:   0x00
Version:       REV 08          CLEI Code:        PROTOXCLEI
ID: Switch Fabric Board      FRU Model Number: PROTO-ASSEMBLY
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 fe 0c 97 01 08 52 45 56 20 30 38 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 36 37 33 37 31 00 00
Address 0x20: 53 2f 4e 20 41 42 44 4b 37 32 30 33 00 1c 09 07
Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 50 52 4f 54 4f 58 43 4c 45 49 50
Address 0x50: 52 4f 54 4f 2d 41 53 53 45 4d 42 4c 59 00 00 00
Address 0x60: 00 00 00 00 00 00 41 30 30 ff ff ff ff ff ff
Address 0x70: ff ff ff c2 07 00 00 00 00 00 00 00 06 00 48 00
SFB 7          REV 08    750-067371    ABDK7238          Switch Fabric Board
Jedec Code:    0x7fb0          EEPROM Version:    0x02
P/N:           750-067371      S/N:             ABDK7238
Assembly ID:   0x0c97          Assembly Version: 01.08
Date:          09-27-2016      Assembly Flags:   0x00
Version:       REV 08          CLEI Code:        PROTOXCLEI
ID: Switch Fabric Board      FRU Model Number: PROTO-ASSEMBLY
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 fe 0c 97 01 08 52 45 56 20 30 38 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 36 37 33 37 31 00 00
Address 0x20: 53 2f 4e 20 41 42 44 4b 37 32 33 38 00 1b 09 07
Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 50 52 4f 54 4f 58 43 4c 45 49 50
Address 0x50: 52 4f 54 4f 2d 41 53 53 45 4d 42 4c 59 00 00 00
Address 0x60: 00 00 00 00 00 00 41 30 30 ff ff ff ff ff ff
Address 0x70: ff ff ff c2 07 00 00 00 00 00 00 00 07 00 48 00
FPC 0          REV 36    750-044130    ABCS8607          MPC6E 3D
Jedec Code:    0x7fb0          EEPROM Version:    0x02
P/N:           750-044130      S/N:             ABCS8607
Assembly ID:   0x0b86          Assembly Version: 01.36
Date:          10-29-2013      Assembly Flags:   0x00
Version:       REV 36          CLEI Code:        PROTOXCLEI
ID: MPC6E 3D      FRU Model Number: PROTO-ASSEMBLY
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 fe 0b 86 01 24 52 45 56 20 33 36 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 34 34 31 33 30 00 00
Address 0x20: 53 2f 4e 20 41 42 43 53 38 36 30 37 00 1d 0a 07
Address 0x30: dd ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 50 52 4f 54 4f 58 43 4c 45 49 50
Address 0x50: 52 4f 54 4f 2d 41 53 53 45 4d 42 4c 59 00 00 00
Address 0x60: 00 00 00 00 00 00 41 30 30 ff ff ff ff ff ff
Address 0x70: ff ff ff c2 ff ff ff ff ff ff ff ff ff ff ff
CPU          REV 09    711-045719    ABCS8776          RMPC PMB
Jedec Code:    0x7fb0          EEPROM Version:    0x02

```

```

P/N:          711-045719      S/N:          ABCS8776
Assembly ID:  0x0b85         Assembly Version: 01.09
Date:         10-24-2013     Assembly Flags:  0x00
Version:      REV 09
ID: RMPC PMB
Board Information Record:
  Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
  Address 0x00: 7f b0 02 ff 0b 85 01 09 52 45 56 20 30 39 00 00
  Address 0x10: 00 00 00 00 37 31 31 2d 30 34 35 37 31 39 00 00
  Address 0x20: 53 2f 4e 20 41 42 43 53 38 37 37 36 00 18 0a 07
  Address 0x30: dd ff ff ff ff ff ff ff ff ff ff ff ff ff ff
  Address 0x40: ff ff ff ff 00 50 52 4f 54 4f 58 43 4c 45 49 50
  Address 0x50: 52 4f 54 4f 2d 41 53 53 45 4d 42 4c 59 00 00 00
  Address 0x60: 00 00 00 00 00 00 41 30 30 ff ff ff ff ff ff ff
  Address 0x70: ff ff ff c2 00 00 00 00 16 47 1f b0 00 00 00 00
MIC 0          REV 21    750-050008    ABCT5920          4X100GE CXP
Jedec Code:    0x7fb0          EEPROM Version:    0x02
P/N:          750-050008      S/N:          ABCT5920
Assembly ID:   0x0a83         Assembly Version: 01.21
Date:         09-29-2014     Assembly Flags:  0x00
Version:      REV 21          CLEI Code:      IP9IATYDAA
ID: 4X100GE CXP              FRU Model Number: MIC6-100G-CXP
Board Information Record:
  Address 0x00: 12 01 07 02 03 ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
  Address 0x00: 7f b0 02 ff 0a 83 01 15 52 45 56 20 32 31 00 00
  Address 0x10: 00 00 00 00 37 35 30 2d 30 35 30 30 30 38 00 00
  Address 0x20: 53 2f 4e 20 41 42 43 54 35 39 32 30 00 1d 09 07
  Address 0x30: de ff ff ff 12 01 07 02 03 ff ff ff ff ff ff ff
  Address 0x40: ff ff ff ff 01 49 50 39 49 41 54 59 44 41 41 4d
  Address 0x50: 49 43 36 2d 31 30 30 47 2d 43 58 50 00 00 00 00
  Address 0x60: 00 00 00 00 00 00 41 41 00 ff ff ff ff ff ff ff
  Address 0x70: ff ff ff 74 00 00 00 00 10 09 73 3c c0 02 70 3c
PIC 0          BUILTIN      BUILTIN      4X100GE CXP
XLM 0          REV 07.2.00  711-046638  ABCK3488      MPC6E XL
Jedec Code:    0x7fb0          EEPROM Version:    0x02
P/N:          711-046638      S/N:          ABCK3488
Assembly ID:   0x0b88         Assembly Version: 01.07
Date:         11-11-2013     Assembly Flags:  0x00
Version:      REV 07.2.00
ID: MPC6E XL
Board Information Record:
  Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
  Address 0x00: 7f b0 02 ff 0b 88 01 07 52 45 56 20 30 37 2e 32
  Address 0x10: 2e 30 30 00 37 31 31 2d 30 34 36 36 33 38 00 00
  Address 0x20: 53 2f 4e 20 41 42 43 4b 33 34 38 38 00 0b 0b 07
  Address 0x30: dd ff ff ff ff ff ff ff ff ff ff ff ff ff ff
  Address 0x40: ff ff ff ff 00 50 52 4f 54 4f 58 43 4c 45 49 50
  Address 0x50: 52 4f 54 4f 2d 41 53 53 45 4d 42 4c 59 00 00 00
  Address 0x60: 00 00 00 00 00 00 41 30 30 ff ff ff ff ff ff ff
  Address 0x70: ff ff ff c2 00 00 00 00 00 00 00 00 00 00 00 00
XLM 1          REV 07.2.00  711-046638  ABCK5482      MPC6E XL
Jedec Code:    0x7fb0          EEPROM Version:    0x02
P/N:          711-046638      S/N:          ABCK5482
Assembly ID:   0x0b88         Assembly Version: 01.07
Date:         10-21-2013     Assembly Flags:  0x00
Version:      REV 07.2.00
ID: MPC6E XL
Board Information Record:

```

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Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 0b 88 01 07 52 45 56 20 30 37 2e 32
Address 0x10: 2e 30 30 00 37 31 31 2d 30 34 36 36 33 38 00 00
Address 0x20: 53 2f 4e 20 41 42 43 4b 35 34 38 32 00 15 0a 07
Address 0x30: dd ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 00 50 52 4f 54 4f 58 43 4c 45 49 50
Address 0x50: 52 4f 54 4f 2d 41 53 53 45 4d 42 4c 59 00 00 00
Address 0x60: 00 00 00 00 00 00 41 30 30 ff ff ff ff ff ff ff
Address 0x70: ff ff ff c2 00 00 00 00 00 00 00 00 00 00 00 00
FPC 1          REV 22    750-063414    CAFJ3026          MPC9E 3D
Jedec Code:    0x7fb0          EEPROM Version:    0x02
P/N:           750-063414      S/N:             CAFJ3026
Assembly ID:   0x0c43          Assembly Version: 01.22
Date:          03-28-2016      Assembly Flags:   0x00
Version:       REV 22          CLEI Code:        IPUCBMUCAA
ID: MPC9E 3D          FRU Model Number: MX2K-MPC9E
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 0c 43 01 16 52 45 56 20 32 32 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 36 33 34 31 34 00 00
Address 0x20: 53 2f 4e 20 43 41 46 4a 33 30 32 36 00 1c 03 07
Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 49 50 55 43 42 4d 55 43 41 41 4d
Address 0x50: 58 32 4b 2d 4d 50 43 39 45 00 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 41 41 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff 00 ff ff ff ff ff ff ff ff ff ff ff ff
CPU          REV 16    750-057177    CAFF9332          SMPC PMB
Jedec Code:    0x7fb0          EEPROM Version:    0x01
P/N:           750-057177      S/N:             CAFF9332
Assembly ID:   0x0c22          Assembly Version: 01.16
Date:          03-20-2016      Assembly Flags:   0x00
Version:       REV 16
ID: SMPC PMB
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 01 ff 0c 22 01 10 52 45 56 20 31 36 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 35 37 31 37 37 00 00
Address 0x20: 53 2f 4e 20 43 41 46 46 39 33 33 32 00 14 03 07
Address 0x30: e0 ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 00 ff ff ff ff ff ff ff ff ff ff ff
Address 0x50: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x60: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x70: ff ff ff ff 00 00 00 00 38 f9 0d e0 4f d1 4b 08
FPC 7          REV 08    750-038492    ZX4080          MPCE Type 2 3D EQ
Jedec Code:    0x7fb0          EEPROM Version:    0x02
P/N:           750-038492      S/N:             ZX4080
Assembly ID:   0x0b35          Assembly Version: 01.08
Date:          02-03-2012      Assembly Flags:   0x00
Version:       REV 08          CLEI Code:        COUIBA5BAA
ID: MPCE Type 2 3D EQ          FRU Model Number: MX-MPC2E-3D-EQ
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 0b 35 01 08 52 45 56 20 30 38 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 33 38 34 39 32 00 00
Address 0x20: 53 2f 4e 20 5a 58 34 30 38 30 00 00 00 03 02 07
Address 0x30: dc ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 43 4f 55 49 42 41 35 42 41 41 4d

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Address 0x50: 58 2d 4d 50 43 32 45 2d 33 44 2d 45 51 00 00 00
Address 0x60: 00 00 00 00 00 00 41 00 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff 74 ff ff ff ff ff ff ff ff ff ff ff ff
CPU          REV 03    711-038484    ZX3665    MPCE PMB 2G
Jedec Code:  0x7fb0    EEPROM Version: 0x01
P/N:         711-038484 S/N:         ZX3665
Assembly ID: 0x0b36    Assembly Version: 01.03
Date:        02-01-2012 Assembly Flags: 0x00
Version:     REV 03
ID: MPCE PMB 2G
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 01 ff 0b 36 01 03 52 45 56 20 30 33 00 00
Address 0x10: 00 00 00 00 37 31 31 2d 30 33 38 34 38 34 00 00
Address 0x20: 53 2f 4e 20 5a 58 33 36 36 35 00 00 00 01 02 07
Address 0x30: dc ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x50: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x60: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x70: ff ff ff ff 00 00 00 02 00 00 0c 00 42 5f c0 a4
MIC 0          REV 05    750-037128    ZR4031    1xCOC12/4xCOC3 CH-CE
Jedec Code:  0x7fb0    EEPROM Version: 0x02
P/N:         750-037128 S/N:         ZR4031
Assembly ID: 0x0a1b    Assembly Version: 01.05
Date:        12-04-2011 Assembly Flags: 0x00
Version:     REV 05    CLEI Code:    PROTOXCLEI
ID: 1xCOC12/4xCOC3 CH-CE FRU Model Number: MIC-3D-4CHOC3-10C12-CE
Board Information Record:
Address 0x00: 12 01 05 03 05 ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 0a 1b 01 05 52 45 56 20 30 35 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 33 37 31 32 38 00 00
Address 0x20: 53 2f 4e 20 5a 52 34 30 33 31 00 00 00 04 0c 07
Address 0x30: db ff ff ff 12 01 05 03 05 ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 50 52 4f 54 4f 58 43 4c 45 49 4d
Address 0x50: 49 43 2d 33 44 2d 34 43 48 4f 43 33 2d 31 4f 43
Address 0x60: 31 32 2d 43 45 00 30 32 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff 98 c0 02 61 bc 7f b0 02 ff 0a 11 01 17
PIC 0          BUILTIN    BUILTIN    1xCOC12/4xCOC3 CH-CE
MIC 1          REV 23    750-032479    CADE8614    MIC-3D-8DS3-E3
Jedec Code:  0x7fb0    EEPROM Version: 0x02
P/N:         750-032479 S/N:         CADE8614
Assembly ID: 0x0a11    Assembly Version: 01.23
Date:        07-24-2014 Assembly Flags: 0x00
Version:     REV 23    CLEI Code:    COUIA8DBAA
ID: MIC-3D-8DS3-E3    FRU Model Number: MIC-3D-8DS3-E3
Board Information Record:
Address 0x00: 56 01 ff ff 03 ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 0a 11 01 17 52 45 56 20 32 33 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 33 32 34 37 39 00 00
Address 0x20: 53 2f 4e 20 43 41 44 45 38 36 31 34 00 18 07 07
Address 0x30: de ff ff ff 56 01 ff ff 03 ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 43 4f 55 49 41 38 44 42 41 41 4d
Address 0x50: 49 43 2d 33 44 2d 38 44 53 33 2d 45 33 00 00 00
Address 0x60: 00 00 00 00 00 00 41 41 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff 7b c0 03 e5 7c 4f 8a 9e 10 00 00 00 02
PIC 2          BUILTIN    BUILTIN    MIC-3D-8DS3-E3
QXM 0          REV 06    711-028408    ZW8299    MPC QXM
Jedec Code:  0x7fb0    EEPROM Version: 0x01

```

P/N: 711-028408 S/N: ZW8299
 Assembly ID: 0x097a Assembly Version: 02.06
 Date: 01-19-2012 Assembly Flags: 0x00
 Version: REV 06
 ID: MPC QXM

Board Information Record:

Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff

I2C Hex Data:

Address 0x00: 7f b0 01 ff 09 7a 02 06 52 45 56 20 30 36 00 00
 Address 0x10: 00 00 00 00 37 31 31 2d 30 32 38 34 30 38 00 00
 Address 0x20: 53 2f 4e 20 5a 57 38 32 39 39 00 00 00 13 01 07
 Address 0x30: dc ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
 Address 0x40: ff ff ff ff 00 ff ff ff ff ff ff ff ff ff ff ff
 Address 0x50: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
 Address 0x60: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
 Address 0x70: ff ff ff ff 00 00 00 00 00 00 00 00 00 00 00 00

QXM 1 REV 06 711-028408 ZY0609 MPC QXM

Jedec Code: 0x7fb0 EEPROM Version: 0x01
 P/N: 711-028408 S/N: ZY0609
 Assembly ID: 0x097a Assembly Version: 02.06
 Date: 01-19-2012 Assembly Flags: 0x00
 Version: REV 06
 ID: MPC QXM

Board Information Record:

Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff

I2C Hex Data:

Address 0x00: 7f b0 01 ff 09 7a 02 06 52 45 56 20 30 36 00 00
 Address 0x10: 00 00 00 00 37 31 31 2d 30 32 38 34 30 38 00 00
 Address 0x20: 53 2f 4e 20 5a 59 30 36 30 39 00 00 00 13 01 07
 Address 0x30: dc ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
 Address 0x40: ff ff ff ff 00 ff ff ff ff ff ff ff ff ff ff ff
 Address 0x50: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
 Address 0x60: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
 Address 0x70: ff ff ff ff 00 00 00 00 00 00 00 00 00 00 00 00

ADC 7 REV 17 750-043596 ABCA0990 Adapter Card

Jedec Code: 0x7fb0 EEPROM Version: 0x02
 P/N: 750-043596 S/N: ABCA0990
 Assembly ID: 0x0b3d Assembly Version: 01.17
 Date: 03-07-2013 Assembly Flags: 0x00
 Version: REV 17 CLEI Code: IPUCBA8CAA
 ID: Adapter Card FRU Model Number: MX2000-LC-ADAPTER

Board Information Record:

Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff

I2C Hex Data:

Address 0x00: 7f b0 02 ff 0b 3d 01 11 52 45 56 20 31 37 00 00
 Address 0x10: 00 00 00 00 37 35 30 2d 30 34 33 35 39 36 00 00
 Address 0x20: 53 2f 4e 20 41 42 43 41 30 39 39 30 00 07 03 07
 Address 0x30: dd ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
 Address 0x40: ff ff ff ff 01 49 50 55 43 42 41 38 43 41 41 4d
 Address 0x50: 58 32 30 30 30 2d 4c 43 2d 41 44 41 50 54 45 52
 Address 0x60: 00 00 00 00 00 00 41 00 00 ff ff ff ff ff ff ff
 Address 0x70: ff ff ff 3a 00 00 00 00 00 00 00 00 00 00 00 00

Fan Tray 0 REV 01 760-052467 ACAY6190 172mm FanTray - 6 Fans

Jedec Code: 0x7fb0 EEPROM Version: 0x02
 P/N: 760-052467 S/N: ACAY6190
 Assembly ID: 0x0b96 Assembly Version: 02.10
 Date: 09-18-2015 Assembly Flags: 0x00
 Version: REV 01 CLEI Code: IPUCBENCAA
 ID: 172mm FanTray - 6 Fans FRU Model Number: MX2000-FANTRAY-S

Board Information Record:

Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff


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I2C Hex Data:
Address 0x00: 7f b0 02 ff 0b 96 02 0a 52 45 56 20 30 31 00 00
Address 0x10: 00 00 00 00 37 36 30 2d 30 35 32 34 36 37 00 00
Address 0x20: 53 2f 4e 20 41 43 41 59 36 31 39 30 00 12 09 07
Address 0x30: df ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 49 50 55 43 42 45 4e 43 41 41 4d
Address 0x50: 58 32 30 30 30 2d 46 41 4e 54 52 41 59 2d 53 00
Address 0x60: 00 00 00 00 00 00 31 ff ff ff ff ff ff ff ff
Address 0x70: ff ff ff 1a ff ff ff ff ff ff ff ff ff ff ff
Fan Tray 1      REV 01    760-052467    ACAY6414      172mm FanTray - 6 Fans
Jedec Code:    0x7fb0      EEPROM Version: 0x02
P/N:           760-052467    S/N:          ACAY6414
Assembly ID:   0x0b96      Assembly Version: 02.10
Date:          10-28-2015    Assembly Flags: 0x00
Version:       REV 01      CLEI Code:     IPUCBENCAA
ID: 172mm FanTray - 6 Fans    FRU Model Number: MX2000-FANTRAY-S
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 0b 96 02 0a 52 45 56 20 30 31 00 00
Address 0x10: 00 00 00 00 37 36 30 2d 30 35 32 34 36 37 00 00
Address 0x20: 53 2f 4e 20 41 43 41 59 36 34 31 34 00 1c 0a 07
Address 0x30: df ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 49 50 55 43 42 45 4e 43 41 41 4d
Address 0x50: 58 32 30 30 30 2d 46 41 4e 54 52 41 59 2d 53 00
Address 0x60: 00 00 00 00 00 00 31 ff ff ff ff ff ff ff ff
Address 0x70: ff ff ff 1a ff ff ff ff ff ff ff ff ff ff ff

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show chassis hardware models (MX2008 Router)

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user@host>show chassis hardware models
Hardware inventory:

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| Item | Version | Part number | Serial number | FRU model number |
|-----------|---------|-------------|---------------|------------------------|
| Midplane | REV 47 | 750-044636 | ABAD1739 | CHAS-BP-MX2010-S |
| PMP | REV 01 | 711-051406 | ACVD0738 | |
| FPM Board | REV 02 | 760-068193 | ABDG7408 | PROTO-ASSEMBLY |
| PSM 1 | REV 06 | 740-050037 | 1EDB61200R8 | MX2000-PSM-DC-S |
| PSM 2 | REV 06 | 740-050037 | 1EDB61200WA | MX2000-PSM-DC-S |
| PSM 3 | REV 06 | 740-050037 | 1EDB61200NY | MX2000-PSM-DC-S |
| PSM 4 | REV 06 | 740-050037 | 1EDB61200N2 | MX2000-PSM-DC-S |
| PSM 5 | REV 06 | 740-050037 | 1EDB61200RN | MX2000-PSM-DC-S |
| PSM 6 | REV 06 | 740-050037 | 1EDB61200RF | MX2000-PSM-DC-S |
| PSM 7 | REV 06 | 740-050037 | 1EDB61200R7 | MX2000-PSM-DC-S |
| PDM 0 | REV 01 | 740-060189 | 1EFF5250143 | MX2K-PDM-OP-DC-S |
| PDM 1 | REV 01 | 740-060189 | 1EFF5250074 | MX2K-PDM-OP-DC-S |
| CB 0 | REV 01 | 750-067373 | ABDJ0047 | PROTO-ASSEMBLY |
| CB 1 | REV 03 | 750-067373 | ABDH3016 | PROTO-ASSEMBLY |
| SFB 0 | REV 08 | 750-067371 | ABDK7180 | PROTO-ASSEMBLY |
| SFB 1 | REV 08 | 750-067371 | ABDK7024 | PROTO-ASSEMBLY |
| SFB 2 | REV 08 | 750-067371 | ABDK7188 | PROTO-ASSEMBLY |
| SFB 3 | REV 08 | 750-067371 | ABDK7143 | PROTO-ASSEMBLY |
| SFB 4 | REV 08 | 750-067371 | ABDK7030 | PROTO-ASSEMBLY |
| SFB 5 | REV 08 | 750-067371 | ABDK7146 | PROTO-ASSEMBLY |
| SFB 6 | REV 08 | 750-067371 | ABDK7203 | PROTO-ASSEMBLY |
| SFB 7 | REV 08 | 750-067371 | ABDK7238 | PROTO-ASSEMBLY |
| FPC 0 | REV 36 | 750-044130 | ABCS8607 | PROTO-ASSEMBLY |
| MIC 0 | REV 21 | 750-050008 | ABCT5920 | MIC6-100G-CXP |
| FPC 1 | REV 22 | 750-063414 | CAFJ3026 | MX2K-MPC9E |
| FPC 7 | REV 08 | 750-038492 | ZX4080 | MX-MPC2E-3D-EQ |
| MIC 0 | REV 05 | 750-037128 | ZR4031 | MIC-3D-4CHOC3-10C12-CE |
| MIC 1 | REV 23 | 750-032479 | CADE8614 | MIC-3D-8DS3-E3 |

| | | | | |
|------------|--------|------------|----------|-------------------|
| ADC 7 | REV 17 | 750-043596 | ABCA0990 | MX2000-LC-ADAPTER |
| Fan Tray 0 | REV 01 | 760-052467 | ACAY6190 | MX2000-FANTRAY-S |
| Fan Tray 1 | REV 01 | 760-052467 | ACAY6414 | MX2000-FANTRAY-S |

show chassis hardware clei-models (MX2008 Router)

user@host>show chassis hardware clei-models

Hardware inventory:

| Item | Version | Part number | CLEI code | FRU model number |
|------------|---------|-------------|------------|------------------------|
| Midplane | REV 47 | 750-044636 | IPMU810ARB | CHAS-BP-MX2010-S |
| PMP | REV 01 | 711-051406 | | |
| FPM Board | REV 02 | 760-068193 | PROTOXCLEI | PROTO-ASSEMBLY |
| PSM 1 | REV 06 | 740-050037 | IPUPAPDKAA | MX2000-PSM-DC-S |
| PSM 2 | REV 06 | 740-050037 | IPUPAPDKAA | MX2000-PSM-DC-S |
| PSM 3 | REV 06 | 740-050037 | IPUPAPDKAA | MX2000-PSM-DC-S |
| PSM 4 | REV 06 | 740-050037 | IPUPAPDKAA | MX2000-PSM-DC-S |
| PSM 5 | REV 06 | 740-050037 | IPUPAPDKAA | MX2000-PSM-DC-S |
| PSM 6 | REV 06 | 740-050037 | IPUPAPDKAA | MX2000-PSM-DC-S |
| PSM 7 | REV 06 | 740-050037 | IPUPAPDKAA | MX2000-PSM-DC-S |
| PDM 0 | REV 01 | 740-060189 | IPUPAN1KAA | MX2K-PDM-OP-DC-S |
| PDM 1 | REV 01 | 740-060189 | IPUPAN1KAA | MX2K-PDM-OP-DC-S |
| CB 0 | REV 01 | 750-067373 | PROTOXCLEI | PROTO-ASSEMBLY |
| CB 1 | REV 03 | 750-067373 | PROTOXCLEI | PROTO-ASSEMBLY |
| SFB 0 | REV 08 | 750-067371 | PROTOXCLEI | PROTO-ASSEMBLY |
| SFB 1 | REV 08 | 750-067371 | PROTOXCLEI | PROTO-ASSEMBLY |
| SFB 2 | REV 08 | 750-067371 | PROTOXCLEI | PROTO-ASSEMBLY |
| SFB 3 | REV 08 | 750-067371 | PROTOXCLEI | PROTO-ASSEMBLY |
| SFB 4 | REV 08 | 750-067371 | PROTOXCLEI | PROTO-ASSEMBLY |
| SFB 5 | REV 08 | 750-067371 | PROTOXCLEI | PROTO-ASSEMBLY |
| SFB 6 | REV 08 | 750-067371 | PROTOXCLEI | PROTO-ASSEMBLY |
| SFB 7 | REV 08 | 750-067371 | PROTOXCLEI | PROTO-ASSEMBLY |
| FPC 0 | REV 36 | 750-044130 | PROTOXCLEI | PROTO-ASSEMBLY |
| MIC 0 | REV 21 | 750-050008 | IP9IATYDAA | MIC6-100G-CXP |
| FPC 1 | REV 22 | 750-063414 | IPUCBMUCAA | MX2K-MPC9E |
| FPC 7 | REV 08 | 750-038492 | COUIBA5BAA | MX-MPC2E-3D-EQ |
| MIC 0 | REV 05 | 750-037128 | PROTOXCLEI | MIC-3D-4CHOC3-10C12-CE |
| MIC 1 | REV 23 | 750-032479 | COUIA8DBAA | MIC-3D-8DS3-E3 |
| ADC 7 | REV 17 | 750-043596 | IPUCBA8CAA | MX2000-LC-ADAPTER |
| Fan Tray 0 | REV 01 | 760-052467 | IPUCBENCAA | MX2000-FANTRAY-S |
| Fan Tray 1 | REV 01 | 760-052467 | IPUCBENCAA | MX2000-FANTRAY-S |

show chassis hardware (MX10003 Router)

user@host> show chassis hardware

Hardware inventory:

| Item | Version | Part number | Serial number | Description |
|------------------|---------|-------------|---------------|--------------------|
| Chassis | | | BLANK | JNP10003 [MX10003] |
| Midplane | REV 01 | 750-066883 | CAGM0759 | Midplane 2 |
| Routing Engine 0 | | BUILTIN | BUILTIN | Routing Engine |
| Routing Engine 1 | | BUILTIN | BUILTIN | Routing Engine |
| CB 0 | REV 07 | 750-067071 | CAGX4354 | SPM |
| Mezz | REV 10 | 711-066896 | CAHS7200 | SPM Mezz Board |
| CB 1 | REV 07 | 750-067071 | CAGX4363 | SPM |
| Mezz | REV 10 | 711-066896 | CAHS7193 | SPM Mezz Board |
| FPC 0 | REV 05 | 750-066879 | CAGV0273 | LC2103 |
| CPU | | BUILTIN | BUILTIN | SMPC PMB |
| PIC 0 | | | | |
| PIC 1 | | | | |
| FPC 1 | REV 05 | 750-066879 | CAGV0278 | LC2103 |

| | | | | |
|------------|--------|------------|-------------|----------------|
| CPU | | BUILTIN | BUILTIN | SMPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 6xQSFP |
| PIC 1 | | | | |
| PEM 0 | REV 01 | 740-066937 | 1HS16320003 | JNP-PWR1600-AC |
| PEM 1 | REV 01 | 740-066937 | 1HS16320002 | JNP-PWR1600-AC |
| Fan Tray 0 | REV 02 | 760-069329 | CAGS7731 | JNP FAN 3RU |
| Fan Tray 1 | REV 02 | 760-069329 | CAGS7776 | JNP FAN 3RU |
| Fan Tray 2 | REV 02 | 760-069329 | CAGS7659 | JNP FAN 3RU |
| Fan Tray 3 | REV 02 | 760-069329 | CAGS7669 | JNP FAN 3RU |

show chassis hardware (MX204 Router)

```
user@host> show chassis hardware
```

Hardware inventory:

| Item | Version | Part number | Serial number | Description |
|------------------|---------|-------------|---------------|-------------------------|
| Chassis | | | BB768 | JNP204 [MX204] |
| Routing Engine 0 | | BUILTIN | BUILTIN | RE-S-2X00x6 |
| CB 0 | REV 11 | 750-069579 | CAJD3113 | JNP204 [MX204] |
| FPC 0 | | BUILTIN | BUILTIN | MPC |
| PIC 0 | | BUILTIN | BUILTIN | 4XQSFP28 PIC |
| Xcvr 0 | REV 01 | 740-061405 | 1ACQ110409R | QSFP-100GBASE-SR4 |
| Xcvr 1 | REV 01 | 740-054053 | QF027546 | QSFP+-4X10G-SR |
| Xcvr 2 | REV 01 | 740-058732 | 1AMQA142092 | QSFP-100GBASE-LR4 |
| Xcvr 3 | REV 01 | 740-058732 | 1AMQA14203J | QSFP-100GBASE-LR4 |
| PIC 1 | | BUILTIN | BUILTIN | 8XSFP PIC |
| PEM 1 | REV 04 | 740-043886 | 1GA46361256 | JPSU-650W-DC-AFO |
| Fan Tray 0 | | | | Fan Tray, Front to Back |
| Airflow - AFO | | | | |
| Fan Tray 1 | | | | Fan Tray, Front to Back |
| Airflow - AFO | | | | |
| Fan Tray 2 | | | | Fan Tray, Front to Back |
| Airflow - AFO | | | | |

show chassis hardware (vMX running in lite mode)

```
user@host> show chassis hardware
```

Hardware inventory:

| Item | Version | Part number | Serial number | Description |
|------------------|----------|-------------|---------------|-------------|
| Chassis | | | VM54599D128A | VMX |
| Midplane | | | | |
| Routing Engine 0 | | | | RE-VMX |
| CB 0 | | | | VMX SCB |
| CB 1 | | | | VMX SCB |
| FPC 0 | | | | Virtual FPC |
| CPU | Rev. 1.0 | RIOT-LITE | BUILTIN | |
| MIC 0 | | | | Virtual |
| PIC 0 | | BUILTIN | BUILTIN | Virtual |

show chassis hardware (vMX running in performance mode)

```
user@host> show chassis hardware
```

Hardware inventory:

| Item | Version | Part number | Serial number | Description |
|------------------|---------|-------------|---------------|-------------|
| Chassis | | | VM54599D128A | VMX |
| Midplane | | | | |
| Routing Engine 0 | | | | RE-VMX |
| CB 0 | | | | VMX SCB |
| CB 1 | | | | VMX SCB |
| FPC 0 | | | | Virtual FPC |

| | | | | |
|-------|----------|-----------|---------|---------|
| CPU | Rev. 1.0 | RIOT-PERF | BUILTIN | |
| MIC 0 | | | | Virtual |
| PIC 0 | | BUILTIN | BUILTIN | Virtual |

show chassis hardware (T320 Router)

user@host> show chassis hardware

Hardware inventory:

| Item | Version | Part number | Serial number | Description |
|------------------|---------|-------------|---------------|--------------------|
| Chassis | | | 19093 | T320 |
| Midplane | REV 04 | 710-004339 | BC1436 | T320 Backplane |
| FPM GBUS | REV 03 | 710-004461 | BC1407 | T320 FPM Board |
| FPM Display | REV 04 | 710-002897 | BE0763 | FPM Display |
| CIP | REV 05 | 710-002895 | BB2311 | T Series CIP |
| PEM 0 | Rev 01 | 740-004359 | NB12546 | Power Entry Module |
| SCG 0 | REV 06 | 710-004455 | AY4522 | T320 Sonet |
| Clock Gen. | | | | |
| Routing Engine 0 | | | | unknown |
| CB 0 | REV 13 | 710-002728 | BC1577 | T Series |
| Control Board | | | | |
| CB 1 | REV 13 | 710-002728 | BC1595 | T Series |
| Control Board | | | | |
| FPC 1 | REV 09 | 710-007531 | HS1572 | FPC Type 2 |
| CPU | REV 15 | 710-001726 | HR8763 | FPC CPU |
| PIC 0 | REV 01 | 750-010618 | CB5579 | 4x G/E SFP, |
| 1000 BASE | | | | |
| SFP 0 | REV 01 | 740-007326 | P5809Z1 | SFP-SX |
| SFP 1 | REV 01 | 740-007326 | P4Q10XU | SFP-SX |
| SFP 2 | | NON-JNPR | RA45020031 | SFP-SX |
| SFP 3 | | NON-JNPR | RA45020032 | SFP-SX |
| PIC 1 | REV 01 | 750-010618 | CD9587 | 4x G/E SFP, |
| 1000 BASE | | | | |
| SFP 0 | | NON-JNPR | P5A08QZ | SFP-T |
| SFP 1 | REV 01 | 740-007326 | P4Q133K | SFP-SX |
| SFP 2 | REV 01 | 740-007326 | P5809YY | SFP-SX |
| SFP 3 | REV 01 | 740-007327 | 4C81704 | SFP-LX |
| MMB 1 | REV 03 | 710-005555 | HR9401 | MMB-288mbit |
| PPB 0 | REV 04 | 710-003758 | HR2886 | PPB Type 2 |
| FPC 2 | REV 07 | 710-005860 | HP2392 | FPC Type 1 |
| CPU | REV 14 | 710-001726 | HP7797 | FPC CPU |
| PIC 0 | REV 02 | 750-007643 | HM0853 | 1x G/E QPP, |
| 1000 BASE | | | | |
| SFP 0 | REV 01 | 740-007326 | P11E9JJ | SFP-SX |
| MMB 1 | REV 02 | 710-005555 | HN2379 | MMB-288mbit |
| PPB 0 | REV 04 | 710-003758 | HP8092 | PPB Type 2 |
| FPC 3 | REV 07 | 710-005860 | HP2393 | FPC Type 1 |
| CPU | REV 14 | 710-001726 | HP0968 | FPC CPU |
| PIC 0 | REV 01 | 750-010240 | CB5363 | 1x G/E SFP, |
| 1000 BASE | | | | |
| SFP 0 | REV 01 | 740-007326 | P4R0PNH | SFP-SX |
| PIC 1 | REV 03 | 750-003034 | HD2832 | 4x OC-3 SONET, |
| SMIR | | | | |
| MMB 1 | REV 02 | 710-005555 | HN6307 | MMB-288mbit |
| PPB 0 | REV 04 | 710-003758 | HP5051 | PPB Type 2 |
| FPC 4 | REV 01 | 710-010845 | JD3872 | FPC Type 4 |
| CPU | REV 02 | 710-011481 | JB6042 | FPC CPU |
| 5 | REV 01 | 710-005802 | BC1566 | FPC Type 2 |
| CPU | REV 09 | 710-001726 | AY4922 | FPC CPU |
| PIC 0 | REV 02 | 750-008155 | BE2114 | 2x G/E QPP, |
| 1000 BASE | | | | |
| SFP 0 | REV 01 | 740-007326 | P4R0PMQ | SFP-SX |

| | | | | |
|-----------|--------|------------|---------|-------------|
| SFP 1 | REV 01 | 740-007326 | P4R0PN9 | SFP-SX |
| PIC 1 | REV 01 | 750-008155 | BE2116 | 2x G/E QPP, |
| 1000 BASE | | | | |
| SFP 0 | REV 01 | 740-007326 | P4R0PNZ | SFP-SX |
| SFP 1 | | NON-JNPR | 2908 | SFP-T |
| MMB 1 | REV 01 | 710-005555 | AZ2246 | MMB-288mbit |
| PPB 0 | REV 03 | 710-003758 | AY4839 | PPB Type 2 |
| FPC 7 | REV 01 | 710-005803 | AZ2123 | FPC Type 3 |
| ... | | | | |

show chassis hardware (T640 Router)

```
user@host> show chassis hardware
Hardware inventory:
```

| Item | Version | Part number | Serial number | Description |
|------------------|---------|-------------|---------------|------------------------|
| Chassis | | | 19182 | T640 |
| Midplane | REV 04 | 710-002726 | AX5608 | T640 Backplane |
| FPM GBUS | REV 02 | 710-002901 | HE3064 | T640 FPM Board |
| FPM Display | REV 02 | 710-002897 | HE7864 | FPM Display |
| CIP | REV 05 | 710-002895 | HA5024 | T Series CIP |
| PEM 0 | Rev 02 | 740-029522 | VH26235 | AC PEM 10kW US |
| PEM 1 | Rev 02 | 740-029522 | VH26230 | AC PEM 10kW US |
| SCG 0 | REV 03 | 710-003423 | HA4508 | T640 Sonet Clock Gen. |
| Routing Engine 0 | REV 02 | 740-005022 | 210865700483 | RE-3.0 (RE-600) |
| CB 0 | REV 01 | 710-002728 | HD3044 | T Series Control Board |
| FPC 2 | REV 04 | 710-001721 | HD5572 | FPC Type 3 |
| CPU | REV 06 | 710-001726 | HA4712 | FPC CPU |
| PIC 1 | REV 03 | 750-009567 | HV2331 | 1x 10GE(LAN),XENPAK |
| SFP 0 | REV 01 | 740-009898 | USC202R103 | XENPAK-SR |
| PIC 2 | REV 03 | 750-009567 | HV2332 | 1x 10GE(LAN),XENPAK |
| SFP 0 | REV 01 | 740-011268 | USC202R112 | XENPAK-ZR |
| PIC 3 | REV 03 | 750-009567 | HX4416 | 1x 10GE(LAN),XENPAK |
| SFP 0 | REV 01 | 740-012056 | 434TC004 | XENPAK-CX4 |
| PIC 4 | REV 03 | 750-009567 | HX4420 | 1x 10GE(LAN),XENPAK |
| SFP 0 | REV 01 | 740-012058 | 434TC124 | XENPAK-LX4 |
| FPC 5 | REV 01 | 710-013553 | JE4839 | E2-FPC Type 1 |
| CPU | REV 01 | 710-013569 | JW9163 | FPC CPU |
| PIC 0 | REV 01 | 750-009567 | HX4419 | 1x 10GE(LAN),XENPAK |
| SFP 0 | REV 01 | 740-009898 | USC202RT05 | XENPAK-LR |
| PIC 1 | REV 03 | 750-009567 | HN7426 | 1x 10GE(LAN),XENPAK |
| SFP 0 | REV 01 | 740-009550 | 03L90051 | XENPAK-ER |
| PIC 2 | REV 03 | 750-009467 | HT7423 | 1x 10GE(LAN),XENPAK |
| SFP 0 | | NON-JNPR | | UNKNOWN |
| PIC 3 | REV 04 | 750-005100 | AY4850 | 1x 10GE(LAN),DWDM |
| FPC 4 | REV 01 | 710-010845 | JD3872 | FPC Type 4 |
| CPU | REV 02 | 710-011481 | JB6042 | FPC CPU |
| Fan Tray 0 | | | | Front Top Fan Tray |
| Fan Tray 1 | | | | Front Bottom Fan Tray |
| Fan Tray 2 | | | | Rear Fan Tray |

show chassis hardware models (T640 Router)

```
user@host> show chassis hardware models
Hardware inventory:
```

| Item | Version | Part number | CLEI code | FRU model number |
|-------------|---------|-------------|-----------|------------------|
| Midplane | REV 04 | 710-002726 | | CHAS-BP-T640-S |
| FPM Display | REV 02 | 710-002897 | | CRAFT-T640-S |
| CIP | REV 05 | 710-002895 | | CIP-L-T640-S |
| PEM 0 | Rev 01 | 740-002595 | | PWR-T-DC-S |
| SCG 0 | REV 04 | 710-003423 | | SCG-T-S |

| | | | |
|------------------|--------|------------|--------------------|
| SCG 1 | REV 04 | 710-003423 | SCG-T-S |
| Routing Engine 0 | REV 01 | 740-005022 | RE-600-2048-S |
| Routing Engine 1 | REV 07 | 740-005022 | RE-600-2048-S |
| CB 0 | REV 06 | 710-002726 | CHAS-BP-T640-S |
| CB 1 | REV 06 | 710-002728 | CB-L-T-S |
| FPC 5 | REV 05 | 710-007527 | T640-FPC2 |
| PIC 0 | REV 05 | 750-002510 | PB-2GE-SX |
| PIC 1 | REV 05 | 750-001901 | PB-40C12-SON-SMIR |
| FPC 6 | REV 03 | 710-001721 | T640-FPC3 |
| PIC 1 | REV 01 | 750-009553 | PC-40C48-SON-SFP |
| SIB 4 | REV 02 | 750-005486 | SIB-I-T640-S |
| Fan Tray 0 | | | FANTRAY-T-S |
| Fan Tray 1 | | | FANTRAY-T-S |
| Fan Tray 2 | | | FAN-REAR-TX-T640-S |

show chassis hardware extensive (T640 Router)

```

user@host> show chassis hardware extensive
Hardware inventory:
Item                Version  Part number  Serial number  Description
Chassis
Jedec Code: 0x7fb0      EEPROM Version: 0x01
P/N: ..... S/N: .....
Assembly ID: 0x0507      Assembly Version: 00.00
Date: 00-00-0000      Assembly Flags: 0x00
Version: .....
ID: Gibson LCC Chassis
Board Information Record:
Address 0x00: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
I2C Hex Data:
Address 0x00: 7f b0 01 ff 05 07 00 00 00 00 00 00 00 00 00 00
Address 0x10: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x20: ff ff ff ff ff ff ff ff ff ff ff ff ff 00 00 00 00
Address 0x30: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x40: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Midplane
REV 04 710-002726 AX5633
Jedec Code: 0x7fb0      EEPROM Version: 0x01
P/N: 710-002726. S/N: AX5633.
Assembly ID: 0x0127      Assembly Version: 01.04
Date: 06-27-2001      Assembly Flags: 0x00
Version: REV 04.....
ID: Gibson Backplane
Board Information Record:
Address 0x00: ad 01 08 00 00 90 69 0e f8 00 ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 01 ff 01 27 01 04 52 45 56 20 30 34 00 00
Address 0x10: 00 00 00 00 37 31 30 2d 30 30 32 37 32 36 00 00
Address 0x20: 53 2f 4e 20 41 58 35 36 33 33 00 00 00 1b 06 07
Address 0x30: d1 ff ff ff ad 01 08 00 00 90 69 0e f8 00 ff ff
Address 0x40: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
FPM GBUS
REV 02 710-002901 HE3245
...
FPM Display
REV 02 710-002897 HA4873
...
CIP
REV 05 710-002895 HA4729
...
PEM 1
RevX02 740-002595 MD21815 Power Entry Module
...
SCG 0
REV 04 710-003423 HF6023
...
SCG 1
REV 04 710-003423 HF6061

```

```

...
Routing Engine 0 REV 01 740-005022 210865700292 RE-3.0
...
CB 0 REV 06 710-002728 HE3614
...
FPC 1 REV 01 710-002385 HE3009 FPC Type 1
...
REV 06 710-001726 HC0010

```

show chassis hardware (T4000 Router)

```

user@host> show chassis hardware
Hardware inventory:
Item          Version  Part number  Serial number  Description
Chassis                               JN1172F25AHA   T4000
Midplane      REV 01   710-027486   RC8355         T-series Backplane
FPM GBUS      REV 13   710-002901   BBAE0927       T640 FPM Board
FPM Display   REV 01   710-021387   EF6764         T1600 FPM Display
CIP           REV 06   710-002895   BBAD9210       T-series CIP
PEM 0         REV 01   740-036442   VA00016        Power Entry Module 6x60
SCG 0         REV 18   710-003423   BBAD7248       T640 Sonet Clock Gen.
SCG 1         REV 18   710-003423   BBAE3874       T640 Sonet Clock Gen.
Routing Engine 0 REV 05   740-026941   P737F-002248   RE-DUO-1800
Routing Engine 1 REV 06   740-026941   P737F-002653   RE-DUO-1800
CB 0          REV 09   710-022597   ED0295         LCC Control Board
CB 1          REV 09   710-022597   EA6050         LCC Control Board
FPC 0         REV 26   750-032819   EK1173         FPC Type 5-3D
CPU           REV 12   711-030686   EJ8584         SNG PMB
PIC 0         REV 07   750-034624   EF6837         12x10GE (LAN/WAN) SFPP
  Xcvr 0      REV 01   740-031980   123363A01145   SFP+-10G-SR
  Xcvr 1      REV 01   740-031980   123363A01147   SFP+-10G-SR
  Xcvr 2      REV 01   740-031980   AJJ01P3        SFP+-10G-SR
  Xcvr 3      REV 01   740-031980   B10M03256      SFP+-10G-SR
  Xcvr 4      REV 01   740-031980   AJJ01M2        SFP+-10G-SR
  Xcvr 5      REV 01   740-031980   123363A01137   SFP+-10G-SR
  Xcvr 6      REV 01   740-031980   AJJ01PN        SFP+-10G-SR
  Xcvr 7      REV 01   740-031980   AJJ01NW        SFP+-10G-SR
  Xcvr 8      REV 01   740-031980   123363A01139   SFP+-10G-SR
  Xcvr 9      REV 01   740-031980   AJJ01KE        SFP+-10G-SR
  Xcvr 10     REV 01   740-031980   123363A01336   SFP+-10G-SR
  Xcvr 11     REV 01   740-031980   B10M01325      SFP+-10G-SR
PIC 1         REV 07   750-034624   EF6800         12x10GE (LAN/WAN) SFPP
  Xcvr 0      REV 01   740-031980   AJJ01SA        SFP+-10G-SR
  Xcvr 1      REV 01   740-031980   AJJ01QZ        SFP+-10G-SR
  Xcvr 2      REV 01   740-031980   AJH0217        SFP+-10G-SR
  Xcvr 3      REV 01   740-031980   AJJ01TE        SFP+-10G-SR
  Xcvr 4      REV 01   740-031980   AJJ01KV        SFP+-10G-SR
  Xcvr 5      REV 01   740-031980   AJJ01MU        SFP+-10G-SR
  Xcvr 6      REV 01   740-031980   AJJ01R0        SFP+-10G-SR
  Xcvr 7      REV 01   740-031980   AJJ01TC        SFP+-10G-SR
  Xcvr 8      REV 01   740-031980   AJJ0364        SFP+-10G-SR
  Xcvr 9      REV 01   740-031980   AJD0GV3        SFP+-10G-SR
  Xcvr 10     REV 01   740-031980   B10M03343      SFP+-10G-SR
  Xcvr 11     REV 01   740-031980   AJJ01QJ        SFP+-10G-SR
LMB 0         REV 05   711-034381   EJ8490         Type-0 LMB
LMB 1         REV 04   711-035774   EJ8517         Type-1 LMB
LMB 2         REV 05   711-034381   EJ8489         Type-0 LMB
FPC 3         REV 07   750-032819   EG3637        FPC Type 5-3D
CPU           REV 09   711-030686   EG0150         SNG PMB
PIC 0         REV 08   750-035293   EF3657         1x100GE
  Xcvr 0      REV 01   740-032210   C22CQNJ        CFP-100G-LR4
PIC 1         REV 10   750-034624   BBAN4098       12x10GE (LAN/WAN) SFPP

```

| | | | | |
|----------|--------|------------|--------------|------------------------|
| Xcvr 0 | REV 01 | 740-031980 | B11J04902 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | B11J04891 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AJJ01MX | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | B11J04183 | SFP+-10G-SR |
| Xcvr 4 | REV 01 | 740-031980 | B11J04894 | SFP+-10G-SR |
| Xcvr 5 | REV 01 | 740-031980 | B11J04184 | SFP+-10G-SR |
| Xcvr 6 | REV 01 | 740-031980 | B11J04897 | SFP+-10G-SR |
| Xcvr 7 | REV 01 | 740-031980 | B11J04899 | SFP+-10G-SR |
| Xcvr 8 | REV 01 | 740-031980 | AJJ01TV | SFP+-10G-SR |
| Xcvr 9 | REV 01 | 740-031980 | B11J04057 | SFP+-10G-SR |
| Xcvr 10 | REV 01 | 740-031980 | AJJ01M4 | SFP+-10G-SR |
| Xcvr 11 | REV 01 | 740-031980 | B11J04905 | SFP+-10G-SR |
| LMB 0 | REV 04 | 711-034381 | EG1524 | Type-0 LMB |
| LMB 1 | REV 03 | 711-035774 | EG0345 | Type-1 LMB |
| LMB 2 | REV 04 | 711-034381 | EG1522 | Type-0 LMB |
| FPC 5 | REV 03 | 710-033871 | BBAJ0768 | FPC Type 4-ES |
| CPU | REV 11 | 710-016744 | BBAH9342 | ST-PMB2 |
| PIC 0 | REV 09 | 750-029262 | EE6789 | 100GE |
| PIC 1 | REV 03 | 750-034781 | EE6655 | 100GE CFP |
| Xcvr 0 | REV 01 | 740-032210 | J11A22334 | CFP-100G-LR4 |
| BRIDGE 0 | REV 03 | 711-029995 | EE6572 | 100GE Bridge Board |
| MMB 0 | REV 07 | 710-025563 | BBAJ4657 | ST-MMB2 |
| MMB 1 | REV 07 | 710-025563 | BBAJ3073 | ST-MMB2 |
| FPC 6 | REV 05 | 750-010153 | EF4936 | FPC Type 5-3D |
| CPU | REV 06 | 711-030686 | EF4189 | SNG PMB |
| PIC 0 | REV 10 | 750-034624 | BBAN4109 | 12x10GE (LAN/WAN) SFPP |
| Xcvr 0 | REV 01 | 740-031980 | B11J04895 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | B11J04898 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | B11J04021 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | B11J04903 | SFP+-10G-SR |
| Xcvr 4 | REV 01 | 740-031980 | B11J04311 | SFP+-10G-SR |
| Xcvr 5 | REV 01 | 740-031980 | B11J04059 | SFP+-10G-SR |
| Xcvr 6 | REV 01 | 740-031980 | B11J04016 | SFP+-10G-SR |
| Xcvr 7 | REV 01 | 740-031980 | B11J04017 | SFP+-10G-SR |
| Xcvr 8 | REV 01 | 740-031980 | B11J04887 | SFP+-10G-SR |
| Xcvr 9 | REV 01 | 740-031980 | B11J04297 | SFP+-10G-SR |
| Xcvr 10 | REV 01 | 740-031980 | B11J04893 | SFP+-10G-SR |
| Xcvr 11 | REV 01 | 740-031980 | B11J04022 | SFP+-10G-SR |
| PIC 1 | REV 02 | 750-034624 | EE3711 | 12x10GE (LAN/WAN) SFPP |
| Xcvr 0 | REV 01 | 740-031980 | AJH033X | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AJJ01N0 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AJJ01SV | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AJJ032L | SFP+-10G-SR |
| Xcvr 4 | REV 01 | 740-031980 | B10M01593 | SFP+-10G-SR |
| Xcvr 5 | REV 01 | 740-031980 | AJD0FF1 | SFP+-10G-SR |
| Xcvr 6 | REV 01 | 740-031980 | AJJ01NU | SFP+-10G-SR |
| Xcvr 7 | REV 01 | 740-031980 | 123363A01305 | SFP+-10G-SR |
| Xcvr 8 | REV 01 | 740-031980 | B10M00361 | SFP+-10G-SR |
| Xcvr 9 | REV 01 | 740-031980 | AJJ01M7 | SFP+-10G-SR |
| Xcvr 10 | REV 01 | 740-031980 | AJJ032X | SFP+-10G-SR |
| Xcvr 11 | REV 01 | 740-031980 | AJJ01PG | SFP+-10G-SR |
| LMB 0 | REV 04 | 711-034381 | EF3838 | Type-0 LMB |
| LMB 1 | REV 03 | 711-035774 | EF3821 | Type-1 LMB |
| LMB 2 | REV 04 | 711-034381 | EF3834 | Type-0 LMB |
| SPMB 0 | REV 05 | 710-023321 | ED1990 | LCC Switch CPU |
| SPMB 1 | REV 05 | 710-023321 | EA2768 | LCC Switch CPU |
| SIB 0 | REV 02 | 711-036340 | EF8802 | SIB-HC-3D |
| SIB 1 | REV 07 | 711-036340 | EG2286 | SIB-HC-3D |
| SIB 2 | REV 07 | 711-036340 | EG2252 | SIB-HC-3D |
| SIB 3 | REV 02 | 711-036340 | EF1358 | SIB-HC-3D |
| SIB 4 | REV 02 | 711-036340 | EF8806 | SIB-HC-3D |

| | |
|------------|------------------------|
| Fan Tray 0 | Front Top Fan Tray |
| Fan Tray 1 | Front Bottom Fan Tray |
| -- Rev 2 | |
| Fan Tray 2 | Rear Fan Tray -- Rev 3 |

show chassis hardware (T4000 Router with 16-GB Line Card Chassis (LCC) Routing Engine)

```
user@host> show chassis hardware
Hardware inventory:
```

| Item | Version | Part number | Serial number | Description |
|------------------|---------|-------------|---------------|-------------------------|
| Chassis | | | JN11BDF2CAHA | T1600 |
| Midplane | REV 01 | 710-027486 | ACAJ0774 | T640 Backplane |
| FPM GBUS | REV 13 | 710-002901 | BBAL6812 | T640 FPM Board |
| FPM Display | REV 04 | 710-021387 | BBAP2679 | T1600 FPM Display |
| CIP | REV 06 | 710-002895 | BBAP4758 | T-series CIP |
| PEM 0 | Rev 03 | 740-026384 | XF86421 | Power Entry Module 3x80 |
| PEM 1 | Rev 03 | 740-026384 | XF86429 | Power Entry Module 3x80 |
| SCG 0 | REV 18 | 710-003423 | BBAP1896 | T640 Sonet Clock Gen. |
| SCG 1 | REV 18 | 710-003423 | BBAN8659 | T640 Sonet Clock Gen. |
| Routing Engine 0 | REV 01 | 740-042243 | 737F-002238 | RE-DUO-1800-16G |
| Routing Engine 1 | REV 01 | 740-042243 | 737F-002403 | RE-DUO-1800-16G |
| CB 1 | REV 11 | 710-022597 | EK4526 | LCC Control Board |
| CB 1 | REV 11 | 710-022597 | EK4527 | LCC Control Board |
| FPC 0 | REV 05 | 710-033871 | EK5644 | FPC Type 4-ES |
| CPU | REV 11 | 710-016744 | EK3428 | ST-PMB2 |
| PIC 0 | REV 20 | 750-017405 | EJ3041 | 4x 10GE (LAN/WAN) XFP |
| PIC 1 | REV 17 | 750-026962 | EH7536 | 10x10GE (LAN/WAN) SFPP |
| MMB 0 | REV 07 | 710-025563 | EK6039 | ST-MMB2 |
| MMB 1 | REV 07 | 710-025563 | EK6086 | ST-MMB2 |
| FPC 1 | REV 05 | 710-033871 | EK6583 | FPC Type 4-ES |
| CPU | REV 11 | 710-016744 | EK3401 | ST-PMB2 |
| PIC 0 | REV 17 | 750-026962 | EJ8948 | 10x10GE (LAN/WAN) SFPP |
| MMB 0 | REV 07 | 710-025563 | EK6202 | ST-MMB2 |
| MMB 1 | REV 07 | 710-025563 | EK6112 | ST-MMB2 |
| SPMB 1 | REV 05 | 710-023321 | EK4900 | LCC Switch CPU |
| SIB 0 | REV 11 | 710-013074 | EK5958 | SIB-I8-SF |
| SIB 1 | REV 11 | 710-013074 | EK4606 | SIB-I8-SF |
| SIB 2 | REV 11 | 710-013074 | EK5971 | SIB-I8-SF |
| SIB 3 | REV 11 | 710-013074 | EK4609 | SIB-I8-SF |
| SIB 4 | REV 11 | 710-013074 | EK4602 | SIB-I8-SF |
| Fan Tray 0 | | | | Front Top Fan Tray |
| Fan Tray 1 | | | | Front Bottom Fan Tray |
| Fan Tray 2 | | | | Rear Fan Tray -- Rev 2 |

show chassis hardware (T4000 Router with LSR FPC)

```
user@host> show chassis hardware
Hardware inventory:
```

| Item | Version | Part number | Serial number | Description |
|---------|---------|-------------|---------------|------------------------|
| Chassis | | | JN1173A24AHA | T4000 |
| FPC 3 | REV | 750-048373 | AN7797 | FPC Type 5-LSR |
| CPU | REV 10 | 711-030686 | AN6649 | SNG PMB |
| PIC 0 | REV 07 | 750-034624 | EF6830 | 12x10GE (LAN/WAN) SFPP |

show chassis hardware clei-models (T4000 Router)

```
user@host> show chassis hardware clei-models
Hardware inventory:
```

| Item | Version | Part number | CLEI code | FRU model number |
|----------|---------|-------------|------------|------------------|
| Midplane | REV 01 | 710-027486 | IPMJ700DRD | CHAS-BP-T1600-S |

| | | | | |
|------------------|--------|------------|------------|-------------------|
| FPM Display | REV 01 | 710-021387 | | CRAFT-T1600-S |
| CIP | REV 06 | 710-002895 | | CIP-L-T640-S |
| PEM 0 | REV 01 | 740-036442 | IPUPAG6KAA | PWR-T-6-60-DC |
| SCG 0 | REV 18 | 710-003423 | | SCG-T-S |
| SCG 1 | REV 18 | 710-003423 | | SCG-T-S |
| Routing Engine 0 | REV 05 | 740-026941 | | RE-DUO-C1800-8G-S |
| Routing Engine 1 | REV 06 | 740-026941 | | RE-DUO-C1800-8G-S |
| CB 0 | REV 09 | 710-022597 | | CB-LCC-S |
| CB 1 | REV 09 | 710-022597 | | CB-LCC-S |
| FPC 3 | | | | |
| PIC 0 | REV 08 | 750-035293 | XXXXXXXXBB | PF-1CGE-CFP |
| PIC 1 | REV 10 | 750-034624 | XXXXXXXXCC | PF-12XGE-SFPP |
| FPC 5 | REV 03 | 710-033871 | IPUCAMBCTD | T1600-FPC4-ES |
| PIC 1 | REV 03 | 750-034781 | IPUIBKLMMA | PD-1CE-CFP-FPC4 |
| FPC 6 | | | | |
| PIC 0 | REV 10 | 750-034624 | XXXXXXXXCC | PF-12XGE-SFPP |
| Fan Tray 0 | | | | FANTRAY-T-S |
| Fan Tray 1 | | | | FANTRAY-T4000-S |
| Fan Tray 2 | | | | FANTRAY-TXP-R-S |

show chassis hardware detail (T4000 Router)

```
user@host> show chassis hardware detail
```

```
Hardware inventory:
```

| Item | Version | Part number | Serial number | Description |
|------------------|----------|-----------------------|----------------------|-------------------------|
| Chassis | | | JN1172F25AHA | T4000 |
| Midplane | REV 01 | 710-027486 | RC8355 | T-series Backplane |
| FPM GBUS | REV 13 | 710-002901 | BBAE0927 | T640 FPM Board |
| FPM Display | REV 01 | 710-021387 | EF6764 | T1600 FPM Display |
| CIP | REV 06 | 710-002895 | BBAD9210 | T-series CIP |
| PEM 0 | REV 01 | 740-036442 | VA00016 | Power Entry Module 6x60 |
| SCG 0 | REV 18 | 710-003423 | BBAD7248 | T640 Sonet Clock Gen. |
| SCG 1 | REV 18 | 710-003423 | BBAE3874 | T640 Sonet Clock Gen. |
| Routing Engine 0 | REV 05 | 740-026941 | P737F-002248 | RE-DUO-1800 |
| ad0 | 3823 MB | SMART CF | 2009121602A661576157 | Compact Flash |
| ad1 | 59690 MB | STEC MACH-8 SSD | STM000103FDB | Disk 1 |
| Routing Engine 1 | REV 06 | 740-026941 | P737F-002653 | RE-DUO-1800 |
| ad0 | 3823 MB | SMART CF | 201011150153F52CF52C | Compact Flash |
| ad1 | 62720 MB | SMART Lite SATA Drive | 2010110900150A880A88 | Disk 1 |
| CB 0 | REV 09 | 710-022597 | ED0295 | LCC Control Board |
| CB 1 | REV 09 | 710-022597 | EA6050 | LCC Control Board |
| FPC 0 | REV 26 | 750-032819 | EK1173 | FPC Type 5-3D |
| CPU | REV 12 | 711-030686 | EJ8584 | SNG PMB |
| PIC 0 | REV 07 | 750-034624 | EF6837 | 12x10GE (LAN/WAN) SFPP |
| Xcvr 0 | REV 01 | 740-031980 | 123363A01145 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | 123363A01147 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AJJ01P3 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | B10M03256 | SFP+-10G-SR |
| Xcvr 4 | REV 01 | 740-031980 | AJJ01M2 | SFP+-10G-SR |
| Xcvr 5 | REV 01 | 740-031980 | 123363A01137 | SFP+-10G-SR |
| Xcvr 6 | REV 01 | 740-031980 | AJJ01PN | SFP+-10G-SR |
| Xcvr 7 | REV 01 | 740-031980 | AJJ01NW | SFP+-10G-SR |
| Xcvr 8 | REV 01 | 740-031980 | 123363A01139 | SFP+-10G-SR |
| Xcvr 9 | REV 01 | 740-031980 | AJJ01KE | SFP+-10G-SR |
| Xcvr 10 | REV 01 | 740-031980 | 123363A01336 | SFP+-10G-SR |
| Xcvr 11 | REV 01 | 740-031980 | B10M01325 | SFP+-10G-SR |
| PIC 1 | REV 07 | 750-034624 | EF6800 | 12x10GE (LAN/WAN) SFPP |
| Xcvr 0 | REV 01 | 740-031980 | AJJ01SA | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AJJ01QZ | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AJH0217 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AJJ01TE | SFP+-10G-SR |

| | | | | |
|----------|--------|------------|-----------|------------------------|
| Xcvr 4 | REV 01 | 740-031980 | AJJ01KV | SFP+-10G-SR |
| Xcvr 5 | REV 01 | 740-031980 | AJJ01MU | SFP+-10G-SR |
| Xcvr 6 | REV 01 | 740-031980 | AJJ01R0 | SFP+-10G-SR |
| Xcvr 7 | REV 01 | 740-031980 | AJJ01TC | SFP+-10G-SR |
| Xcvr 8 | REV 01 | 740-031980 | AJJ0364 | SFP+-10G-SR |
| Xcvr 9 | REV 01 | 740-031980 | AJD0GV3 | SFP+-10G-SR |
| Xcvr 10 | REV 01 | 740-031980 | B10M03343 | SFP+-10G-SR |
| Xcvr 11 | REV 01 | 740-031980 | AJJ01QJ | SFP+-10G-SR |
| LMB 0 | REV 05 | 711-034381 | EJ8490 | Type-0 LMB |
| LMB 1 | REV 04 | 711-035774 | EJ8517 | Type-1 LMB |
| LMB 2 | REV 05 | 711-034381 | EJ8489 | Type-0 LMB |
| FPC 3 | REV 07 | 750-032819 | EG3637 | FPC Type 5-3D |
| CPU | REV 09 | 711-030686 | EG0150 | SNG PMB |
| PIC 0 | REV 08 | 750-035293 | EF3657 | 1x100GE |
| Xcvr 0 | REV 01 | 740-032210 | C22CQNJ | CFP-100G-LR4 |
| PIC 1 | REV 10 | 750-034624 | BBAN4098 | 12x10GE (LAN/WAN) SFPP |
| Xcvr 0 | REV 01 | 740-031980 | B11J04902 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | B11J04891 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AJJ01MX | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | B11J04183 | SFP+-10G-SR |
| Xcvr 4 | REV 01 | 740-031980 | B11J04894 | SFP+-10G-SR |
| Xcvr 5 | REV 01 | 740-031980 | B11J04184 | SFP+-10G-SR |
| Xcvr 6 | REV 01 | 740-031980 | B11J04897 | SFP+-10G-SR |
| Xcvr 7 | REV 01 | 740-031980 | B11J04899 | SFP+-10G-SR |
| Xcvr 8 | REV 01 | 740-031980 | AJJ01TV | SFP+-10G-SR |
| Xcvr 9 | REV 01 | 740-031980 | B11J04057 | SFP+-10G-SR |
| Xcvr 10 | REV 01 | 740-031980 | AJJ01M4 | SFP+-10G-SR |
| Xcvr 11 | REV 01 | 740-031980 | B11J04905 | SFP+-10G-SR |
| LMB 0 | REV 04 | 711-034381 | EG1524 | Type-0 LMB |
| LMB 1 | REV 03 | 711-035774 | EG0345 | Type-1 LMB |
| LMB 2 | REV 04 | 711-034381 | EG1522 | Type-0 LMB |
| FPC 5 | REV 03 | 710-033871 | BBAJ0768 | FPC Type 4-ES |
| CPU | REV 11 | 710-016744 | BBAH9342 | ST-PMB2 |
| PIC 0 | REV 09 | 750-029262 | EE6789 | 100GE |
| PIC 1 | REV 03 | 750-034781 | EE6655 | 100GE CFP |
| Xcvr 0 | REV 01 | 740-032210 | J11A22334 | CFP-100G-LR4 |
| BRIDGE 0 | REV 03 | 711-029995 | EE6572 | 100GE Bridge Board |
| MMB 0 | REV 07 | 710-025563 | BBAJ4657 | ST-MMB2 |
| MMB 1 | REV 07 | 710-025563 | BBAJ3073 | ST-MMB2 |
| FPC 6 | REV 05 | 750-010153 | EF4936 | FPC Type 5-3D |
| CPU | REV 06 | 711-030686 | EF4189 | SNG PMB |
| PIC 0 | REV 10 | 750-034624 | BBAN4109 | 12x10GE (LAN/WAN) SFPP |
| Xcvr 0 | REV 01 | 740-031980 | B11J04895 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | B11J04898 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | B11J04021 | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | B11J04903 | SFP+-10G-SR |
| Xcvr 4 | REV 01 | 740-031980 | B11J04311 | SFP+-10G-SR |
| Xcvr 5 | REV 01 | 740-031980 | B11J04059 | SFP+-10G-SR |
| Xcvr 6 | REV 01 | 740-031980 | B11J04016 | SFP+-10G-SR |
| Xcvr 7 | REV 01 | 740-031980 | B11J04017 | SFP+-10G-SR |
| Xcvr 8 | REV 01 | 740-031980 | B11J04887 | SFP+-10G-SR |
| Xcvr 9 | REV 01 | 740-031980 | B11J04297 | SFP+-10G-SR |
| Xcvr 10 | REV 01 | 740-031980 | B11J04893 | SFP+-10G-SR |
| Xcvr 11 | REV 01 | 740-031980 | B11J04022 | SFP+-10G-SR |
| PIC 1 | REV 02 | 750-034624 | EE3711 | 12x10GE (LAN/WAN) SFPP |
| Xcvr 0 | REV 01 | 740-031980 | AJH033X | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | AJJ01N0 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AJJ01SV | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031980 | AJJ032L | SFP+-10G-SR |
| Xcvr 4 | REV 01 | 740-031980 | B10M01593 | SFP+-10G-SR |
| Xcvr 5 | REV 01 | 740-031980 | AJD0FF1 | SFP+-10G-SR |

| | | | | |
|------------|--------|------------|--------------|------------------------|
| Xcvr 6 | REV 01 | 740-031980 | AJJ01NU | SFP+-10G-SR |
| Xcvr 7 | REV 01 | 740-031980 | 123363A01305 | SFP+-10G-SR |
| Xcvr 8 | REV 01 | 740-031980 | B10M00361 | SFP+-10G-SR |
| Xcvr 9 | REV 01 | 740-031980 | AJJ01M7 | SFP+-10G-SR |
| Xcvr 10 | REV 01 | 740-031980 | AJJ032X | SFP+-10G-SR |
| Xcvr 11 | REV 01 | 740-031980 | AJJ01PG | SFP+-10G-SR |
| LMB 0 | REV 04 | 711-034381 | EF3838 | Type-0 LMB |
| LMB 1 | REV 03 | 711-035774 | EF3821 | Type-1 LMB |
| LMB 2 | REV 04 | 711-034381 | EF3834 | Type-0 LMB |
| SPMB 0 | REV 05 | 710-023321 | ED1990 | LCC Switch CPU |
| SPMB 1 | REV 05 | 710-023321 | EA2768 | LCC Switch CPU |
| SIB 0 | REV 02 | 711-036340 | EF8802 | SIB-HC-3D |
| SIB 1 | REV 07 | 711-036340 | EG2286 | SIB-HC-3D |
| SIB 2 | REV 07 | 711-036340 | EG2252 | SIB-HC-3D |
| SIB 3 | REV 02 | 711-036340 | EF1358 | SIB-HC-3D |
| SIB 4 | REV 02 | 711-036340 | EF8806 | SIB-HC-3D |
| Fan Tray 0 | | | | Front Top Fan Tray |
| Fan Tray 1 | | | | Front Bottom Fan Tray |
| -- Rev 2 | | | | |
| Fan Tray 2 | | | | Rear Fan Tray -- Rev 3 |

show chassis hardware models (T4000 Router)

```
user@host> show chassis hardware models
```

| Hardware inventory: | | | | |
|---------------------|---------|-------------|---------------|-------------------|
| Item | Version | Part number | Serial number | FRU model number |
| Midplane | REV 01 | 710-027486 | RC8355 | CHAS-BP-T1600-S |
| FPM Display | REV 01 | 710-021387 | EF6764 | CRAFT-T1600-S |
| CIP | REV 06 | 710-002895 | BBAD9210 | CIP-L-T640-S |
| PEM 0 | REV 01 | 740-036442 | VA00016 | PWR-T-6-60-DC |
| SCG 0 | REV 18 | 710-003423 | BBAD7248 | SCG-T-S |
| SCG 1 | REV 18 | 710-003423 | BBAE3874 | SCG-T-S |
| Routing Engine 0 | REV 05 | 740-026941 | P737F-002248 | RE-DUO-C1800-8G-S |
| Routing Engine 1 | REV 06 | 740-026941 | P737F-002653 | RE-DUO-C1800-8G-S |
| CB 0 | REV 09 | 710-022597 | ED0295 | CB-LCC-S |
| CB 1 | REV 09 | 710-022597 | EA6050 | CB-LCC-S |
| FPC 3 | | | | |
| PIC 0 | REV 08 | 750-035293 | EF3657 | PF-1CGE-CFP |
| PIC 1 | REV 10 | 750-034624 | BBAN4098 | PF-12XGE-SFPP |
| FPC 5 | REV 03 | 710-033871 | BBAJ0768 | T1600-FPC4-ES |
| PIC 1 | REV 03 | 750-034781 | EE6655 | PD-1CE-CFP-FPC4 |
| FPC 6 | | | | |
| PIC 0 | REV 10 | 750-034624 | BBAN4109 | PF-12XGE-SFPP |
| Fan Tray 0 | | | | FANTRAY-T-S |
| Fan Tray 1 | | | | FANTRAY-T4000-S |
| Fan Tray 2 | | | | FAN-REAR-TXP-LCC |

show chassis hardware lcc (TX Matrix Router)

```
user@host> show chassis hardware lcc 0
lcc0-re0:
```

| Hardware inventory: | | | | |
|---------------------|---------|-------------|---------------|----------------|
| Item | Version | Part number | Serial number | Description |
| Chassis | | | 65751 | T640 |
| Midplane | REV 03 | 710-005608 | RA1408 | T640 Backplane |
| FPM GBUS | REV 09 | 710-002901 | RA2784 | T640 FPM Board |
| FPM Display | REV 05 | 710-002897 | RA2825 | FPM Display |
| CIP | REV 06 | 710-002895 | HT0684 | T Series CIP |

| | | | | |
|------------------|--------|------------|--------------|-------------------------|
| PEM 0 | Rev 11 | 740-002595 | PM18483 | Power Entry Module |
| PEM 1 | Rev 11 | 740-002595 | qb13984 | Power Entry Module |
| SCG 0 | REV 11 | 710-003423 | HT0022 | T640 Sonet Clock Gen. |
| Routing Engine 0 | REV 13 | 740-005022 | 210865700363 | RE-3.0 (RE-600) |
| CB 0 | REV 03 | 710-007655 | HW1195 | Control Board (CB-T) |
| FPC 1 | REV 05 | 710-007527 | HM3245 | FPC Type 2 |
| CPU | REV 14 | 710-001726 | HM1084 | FPC CPU |
| PIC 0 | REV 02 | 750-007218 | AZ1112 | 2x OC-12 ATM2 IQ, SMIR |
| PIC 1 | REV 02 | 750-007745 | HG3462 | 4x OC-3 SONET, SMIR |
| PIC 2 | REV 14 | 750-001901 | BA5390 | 4x OC-12 SONET, SMIR |
| PIC 3 | REV 09 | 750-008155 | HS3012 | 2x G/E IQ, 1000 BASE |
| SFP 0 | | NON-JNPR | P1186TY | SFP-S |
| SFP 1 | REV 01 | 740-007326 | P11WLTF | SFP-SX |
| MMB 1 | REV 02 | 710-005555 | HL7514 | MMB-288mbit |
| PPB 0 | REV 04 | 710-003758 | HM4405 | PPB Type 2 |
| PPB 1 | REV 04 | 710-003758 | AV1960 | PPB Type 2 |
| FPC 2 | REV 08 | 710-010154 | HZ3578 | E-FPC Type 3 |
| CPU | REV 05 | 710-010169 | HZ3219 | FPC CPU-Enhanced |
| PIC 0 | REV 02 | 750-009567 | HX2882 | 1x 10GE(LAN), XENPAK |
| SFP 0 | REV 01 | 740-009898 | USC202U709 | XENPAK-LR |
| PIC 1 | REV 03 | 750-003336 | HJ9954 | 4x OC-48 SONET, SMSR |
| PIC 2 | REV 01 | 750-004535 | HC0235 | 1x OC-192 SM SR1 |
| PIC 3 | REV 07 | 750-007141 | HX1699 | 10x 1GE(LAN), 1000 BASE |
| SFP 0 | REV 01 | 740-007326 | 2441042 | SFP-SX |
| SFP 1 | REV 01 | 740-007326 | 2441027 | SFP-SX |
| MMB 0 | REV 03 | 710-010171 | HV2365 | MMB-5M3-288mbit |
| MMB 1 | REV 03 | 710-010171 | HZ3888 | MMB-5M3-288mbit |
| SPMB 0 | REV 09 | 710-003229 | HW5245 | T Series Switch CPU |
| SIB 3 | REV 07 | 710-005781 | HR5927 | SIB-L8-F16 |
| B Board | REV 06 | 710-005782 | HR5971 | SIB-L8-F16 (B) |
| SIB 4 | REV 07 | 710-005781 | HR5903 | SIB-L8-F16 |
| B Board | REV 06 | 710-005782 | HZ5275 | SIB-L8-F16 (B) |

show chassis hardware scc (TX Matrix Router)

```

user@host> show chassis hardware scc
scc-re0:
-----
Hardware inventory:
Item          Version  Part number  Serial number  Description
Chassis                               TX Matrix
Midplane      REV 04   710-004396   RB0014         SCC Midplane
FPM GBUS      REV 04   710-004617   HW9141         SCC FPM Board
FPM Display   REV 04   710-004619   HS5950         SCC FPM
CIP 0         REV 01   710-010218   HV9151         SCC CIP
CIP 1         REV 01   710-010218   HV9152         SCC CIP
PEM 1         Rev 11   740-002595   QB13977        Power Entry Module
Routing Engine 0 REV 05   740-008883   P11123900153  RE-4.0 (RE-1600)
CB 0          REV 01   710-011709   HR5964         Control Board (CB-TX)
SPMB 0        REV 09   710-003229   HW5293         T Series Switch CPU
SIB 3
SIB 4         REV 01   710-005839   HW1177         SIB-S8-F16
B Board       REV 01   710-005840   HW1202         SIB-S8-F16 (B)

```

show chassis hardware (TI600 Router)

```

user@host> show chassis hardware
Hardware inventory:
Item          Version  Part number  Serial number  Description

```

| | | | | |
|------------------|--------|------------|-------------|--------------------------|
| Chassis | | | B2703 | T1600 |
| Midplane | REV 03 | 710-005608 | RC4137 | T640 Backplane |
| FPM GBUS | REV 10 | 710-002901 | DT7062 | T640 FPM Board |
| FPM Display | REV 05 | 710-002897 | DS3067 | FPM Display |
| CIP | REV 06 | 710-002895 | DT3386 | T-series CIP |
| PEM 0 | Rev 07 | 740-017906 | UA26344 | Power Entry Module 3x80 |
| PEM 1 | Rev 18 | 740-002595 | UF38441 | Power Entry Module |
| SCG 0 | REV 15 | 710-003423 | DV0941 | T640 Sonet Clock Gen. |
| Routing Engine 0 | REV 08 | 740-014082 | 9009014502 | RE-A-2000 |
| Routing Engine 1 | REV 07 | 740-014082 | 9009009591 | RE-A-2000 |
| CB 0 | REV 05 | 710-007655 | JA9360 | Control Board (CB-T) |
| CB 1 | REV 03 | 710-017707 | DT3251 | Control Board (CB-T) |
| FPC 0 | REV 07 | 710-013558 | DR4253 | E2-FPC Type 2 |
| CPU | REV 05 | 710-013563 | DS3902 | FPC CPU-Enhanced |
| PIC 0 | REV 01 | 750-010618 | CB5446 | 4x G/E SFP, 1000 BASE |
| Xcvr 0 | REV 01 | 740-011613 | P9F11CW | SFP-SX |
| Xcvr 1 | REV 01 | 740-011613 | P9F15C2 | SFP-SX |
| Xcvr 2 | REV 01 | 740-011782 | PB94K0L | SFP-SX |
| PIC 1 | REV 06 | 750-001900 | HB6399 | 1x OC-48 SONET, SMSR |
| PIC 2 | REV 14 | 750-001901 | AP1092 | 4x OC-12 SONET, SMIR |
| PIC 3 | REV 07 | 750-001900 | AR8275 | 1x OC-48 SONET, SMSR |
| MMB 1 | REV 07 | 710-010171 | DS1524 | MMB-5M3-288mbit |
| FPC 1 | REV 06 | 710-013553 | DL9067 | E2-FPC Type 1 |
| CPU | REV 04 | 710-013563 | DM1685 | FPC CPU-Enhanced |
| PIC 0 | REV 08 | 750-001072 | AB1688 | 1x G/E, 1000 BASE-SX |
| PIC 1 | REV 10 | 750-012266 | JX5519 | 4x 1GE(LAN), IQ2 |
| Xcvr 0 | REV 01 | 740-011613 | AM0812S8UK6 | SFP-SX |
| Xcvr 2 | REV 01 | 740-011613 | AM0812S8UK1 | SFP-SX |
| Xcvr 3 | REV 01 | 740-011782 | P8N1YHG | SFP-SX |
| PIC 2 | REV 22 | 750-005634 | DP0083 | 1x CHOC12 IQ SONET, SMIR |
| MMB 1 | REV 07 | 710-008923 | DN1862 | MMB 3M 288-bit |
| FPC 2 | REV 01 | 710-005548 | HJ9899 | FPC Type 3 |
| CPU | REV 06 | 710-001726 | HC0586 | FPC CPU |
| PIC 0 | REV 16 | 750-007141 | NC9660 | 10x 1GE(LAN), 1000 BASE |
| Xcvr 0 | REV 01 | 740-011613 | AM0812S8XAR | SFP-SX |
| Xcvr 1 | REV 01 | 740-011782 | P920E7B | SFP-SX |
| Xcvr 2 | REV 01 | 740-011613 | AM0812S8XAU | SFP-SX |
| Xcvr 4 | REV 01 | 740-011613 | AM0812S8XAK | SFP-SX |
| Xcvr 5 | REV 01 | 740-011613 | AM0812S8XAA | SFP-SX |
| Xcvr 6 | REV 01 | 740-011613 | PAJ4NKY | SFP-SX |
| Xcvr 7 | REV 01 | 740-011613 | AM0812S8UJW | SFP-SX |
| Xcvr 8 | REV 01 | 740-011782 | PB81X89 | SFP-SX |
| Xcvr 9 | REV 01 | 740-011613 | AM0812S8UJX | SFP-SX |
| PIC 1 | REV 06 | 750-015217 | DK3280 | 8x 1GE(TYPE3), IQ2 |
| Xcvr 0 | REV 01 | 740-011782 | P8P0A3T | SFP-SX |
| Xcvr 1 | REV 01 | 740-013111 | 5090002 | SFP-T |
| Xcvr 2 | REV 01 | 740-011613 | AM0814S93BQ | SFP-SX |
| Xcvr 4 | | NON-JNPR | PDE0FAN | SFP-SX |
| Xcvr 5 | REV 01 | 740-011782 | P8Q20XY | SFP-SX |
| Xcvr 6 | REV 01 | 740-011613 | AM0812S8UJV | SFP-SX |
| Xcvr 7 | REV 01 | 740-011613 | AM0812S8UP7 | SFP-SX |
| PIC 2 | REV 05 | 750-004695 | HT4383 | 1x Tunnel |
| PIC 3 | REV 17 | 750-009553 | RL0204 | 4x OC-48 SONET |
| Xcvr 0 | REV 01 | 740-011785 | PDS3T23 | SFP-SR |
| Xcvr 1 | REV 01 | 740-011785 | P6Q0F3E | SFP-SR |
| MMB 0 | REV 03 | 710-004047 | HD5843 | MMB-288mbit |
| MMB 1 | REV 03 | 710-004047 | HE3208 | MMB-288mbit |
| PPB 0 | REV 02 | 710-002845 | HA4524 | PPB Type 3 |
| PPB 1 | REV 02 | 710-002845 | HA4766 | PPB Type 3 |

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|----------|--------|------------|-------------|-------------------------|
| FPC 3 | REV 01 | 710-010154 | HR0863 | E-FPC Type 3 |
| CPU | REV 01 | 710-010169 | HN3422 | FPC CPU-Enhanced |
| PIC 0 | REV 07 | 750-012793 | WF5096 | 1x 10GE(LAN/WAN) IQ2 |
| Xcvr 0 | | NON-JNPR | M64294TP | XFP-10G-LR |
| PIC 1 | REV 25 | 750-007141 | DV2127 | 10x 1GE(LAN), 1000 BASE |
| Xcvr 0 | REV 01 | 740-011613 | PFA6LTJ | SFP-SX |
| Xcvr 1 | REV 01 | 740-011782 | P9POXV4 | SFP-SX |
| Xcvr 2 | REV 01 | 740-011782 | P9M0TNX | SFP-SX |
| Xcvr 4 | REV 01 | 740-011782 | P9B0TTP | SFP-SX |
| Xcvr 5 | | NON-JNPR | PBS4LED | SFP-SX |
| PIC 2 | REV 17 | 750-009553 | RL0212 | 4x OC-48 SONET |
| Xcvr 0 | REV 01 | 740-011785 | PDS3T8G | SFP-SR |
| PIC 3 | REV 32 | 750-003700 | DL1279 | 1x OC-192 12xMM VSR |
| MMB 0 | REV 01 | 710-010171 | HR0821 | MMB-288mbit |
| MMB 1 | REV 01 | 710-010171 | HR0818 | MMB-288mbit |
| FPC 4 | REV 16 | 710-013037 | EB4919 | FPC Type 4-ES |
| CPU | REV 09 | 710-016744 | BBAA4382 | ST-PMB2 |
| PIC 0 | REV 03 | 711-029996 | EB1569 | 100GE |
| PIC 1 | REV 05 | 711-029999 | EB9983 | 100GE CFP |
| Xcvr 0 | REV 0 | 740-032210 | J10G80746 | CFP-100G-LR4 |
| BRIDGE 0 | REV 02 | 711-029995 | EB2235 | 100GE Bridge Board |
| MMB 0 | REV 04 | 710-025563 | BBAA7112 | ST-MMB2 |
| MMB 1 | REV 04 | 710-025563 | BBAA7149 | ST-MMB2 |
| FPC 5 | REV 02 | 710-013037 | DE3407 | FPC Type 4-ES |
| CPU | REV 04 | 710-016744 | DA2124 | ST-PMB2 |
| PIC 0 | REV 16 | 750-012518 | DF2554 | 4x OC-192 SONET XFP |
| Xcvr 0 | REV 01 | 740-014279 | AA0745N1FX8 | XFP-OC192-SR |
| Xcvr 1 | REV 01 | 740-014279 | AA0748N1HN5 | XFP-OC192-SR |
| Xcvr 2 | REV 01 | 740-014279 | AA0748N1HT6 | XFP-OC192-SR |
| Xcvr 3 | REV 01 | 740-014279 | AA0744N1EC9 | XFP-OC192-SR |
| PIC 1 | REV 01 | 750-010850 | JA0329 | 1x OC-768 SONET SR |
| MMB 0 | REV 04 | 710-016036 | DE9577 | ST-MMB2 |
| MMB 1 | REV 04 | 710-016036 | DK4060 | ST-MMB2 |
| FPC 6 | REV 14 | 710-013037 | DV1431 | FPC Type 4-ES |
| CPU | REV 09 | 710-016744 | DT9020 | ST-PMB2 |
| PIC 0 | REV 11 | 750-017405 | DM6261 | 4x 10GE (LAN/WAN) XFP |
| Xcvr 0 | REV 01 | 740-014289 | C701XU05Q | XFP-10G-SR |
| Xcvr 1 | REV 01 | 740-014279 | AA0748N1HPT | XFP-10G-LR |
| Xcvr 2 | REV 01 | 740-014289 | T08E19189 | XFP-10G-SR |
| Xcvr 3 | REV 01 | 740-014289 | C715XU058 | XFP-10G-SR |
| PIC 1 | REV 13 | 750-017405 | DP8772 | 4x 10GE (LAN/WAN) XFP |
| Xcvr 0 | REV 02 | 740-011571 | C850XJ037 | XFP-10G-SR |
| Xcvr 1 | REV 02 | 740-014289 | C839XU0L9 | XFP-10G-SR |
| Xcvr 2 | REV 02 | 740-014289 | C834XU05A | XFP-10G-SR |
| Xcvr 3 | REV 02 | 740-014289 | C810XU0CE | XFP-10G-SR |
| MMB 0 | REV 01 | 710-025563 | DT8454 | ST-MMB2 |
| MMB 1 | REV 01 | 710-025563 | DT8366 | ST-MMB2 |
| FPC 7 | REV 09 | 710-007529 | HZ7624 | FPC Type 3 |
| CPU | REV 15 | 710-001726 | HZ1413 | FPC CPU |
| PIC 0 | REV 10 | 750-012793 | DM5627 | 1x 10GE(LAN/WAN) IQ2 |
| Xcvr 0 | REV 02 | 740-011571 | C831XJ062 | XFP-10G-SR |
| PIC 1 | REV 01 | 750-015217 | JT6762 | 8x 1GE(TYPE3), IQ2 |
| Xcvr 0 | REV 01 | 740-011782 | P8Q25JU | SFP-SX |
| Xcvr 1 | REV 01 | 740-011782 | P9B0U0K | SFP-SX |
| PIC 2 | REV 01 | 750-015217 | JS4268 | 8x 1GE(TYPE3), IQ2 |
| Xcvr 0 | REV 01 | 740-011613 | AM0812S8XBZ | SFP-SX |
| Xcvr 1 | REV 01 | 740-011613 | AM0812S8XAP | SFP-SX |
| Xcvr 2 | REV 01 | 740-011613 | AM0812S8XBY | SFP-SX |
| Xcvr 3 | REV 01 | 740-011613 | AM0812S8XBX | SFP-SX |
| Xcvr 4 | REV 01 | 740-011613 | P9F1652 | SFP-SX |

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|------------|--------|------------|---------|------------------------|
| Xcvr 5 | REV 01 | 740-011782 | P8Q21YC | SFP-SX |
| Xcvr 6 | REV 01 | 740-011782 | P8Q27HQ | SFP-SX |
| Xcvr 7 | REV 01 | 740-011613 | P8E2SSU | SFP-SX |
| PIC 3 | REV 15 | 750-009450 | NB6790 | 1x OC-192 SM SR2 |
| MMB 0 | REV 03 | 710-005555 | HZ3450 | MMB-288mbit |
| MMB 1 | REV 03 | 710-005555 | HZ3415 | MMB-288mbit |
| PPB 0 | REV 04 | 710-002845 | HP0887 | PPB Type 3 |
| PPB 1 | REV 04 | 710-002845 | HW5255 | PPB Type 3 |
| SPMB 0 | REV 10 | 710-003229 | HX3699 | T-series Switch CPU |
| SPMB 1 | REV 12 | 710-003229 | DT3091 | T-series Switch CPU |
| SIB 0 | REV 07 | 710-013074 | DS4747 | SIB-I8-SF |
| SIB 1 | REV 07 | 710-013074 | DS4942 | SIB-I8-SF |
| SIB 2 | REV 07 | 710-013074 | DS4965 | SIB-I8-SF |
| SIB 3 | REV 07 | 710-013074 | DS4990 | SIB-I8-SF |
| SIB 4 | REV 07 | 710-013074 | DS4944 | SIB-I8-SF |
| Fan Tray 0 | | | | Front Top Fan Tray |
| Fan Tray 1 | | | | Front Bottom Fan Tray |
| Fan Tray 2 | | | | Rear Fan Tray -- Rev 2 |

show chassis hardware (TX Matrix Plus Router)

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user@host> show chassis hardware
sfc0-re0:
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Hardware inventory:

| Item | Version | Part number | Serial number | Description |
|------------------|---------|-------------|---------------|--------------------|
| Chassis | | | JN113186EAHB | TXP |
| Midplane | REV 05 | 710-022574 | TS3822 | SFC Midplane |
| FPM Display | REV 03 | 710-024027 | DW4701 | TXP FPM Display |
| CIP 0 | REV 05 | 710-023792 | DW7998 | TXP CIP |
| CIP 1 | REV 05 | 710-023792 | DW7999 | TXP CIP |
| PEM 0 | Rev 04 | 740-027463 | UM26367 | Power Entry Module |
| PEM 1 | Rev 04 | 740-027463 | UM26346 | Power Entry Module |
| Routing Engine 0 | REV 06 | 740-026942 | 737A-1081 | RE-DUO-2600 |
| Routing Engine 1 | REV 06 | 740-026942 | 737A-1043 | RE-DUO-2600 |
| CB 0 | REV 05 | 710-022606 | DW4435 | SFC Control Board |
| CB 1 | REV 09 | 710-022606 | DW6100 | SFC Control Board |
| SPMB 0 | | BUILTIN | | SFC Switch CPU |
| SPMB 1 | | BUILTIN | | SFC Switch CPU |
| SIB F13 0 | REV 04 | 750-024564 | DW5764 | F13 SIB |
| B Board | REV 03 | 710-023431 | DW9053 | F13 SIB Mezz |
| SIB F13 3 | REV 04 | 750-024564 | DW5785 | F13 SIB |
| B Board | REV 03 | 710-023431 | DW9030 | F13 SIB Mezz |
| SIB F13 6 | | | | |
| SIB F13 8 | REV 04 | 750-024564 | DW5752 | F13 SIB |
| B Board | REV 03 | 710-023431 | DW9051 | F13 SIB Mezz |
| SIB F13 11 | REV 04 | 750-024564 | DW5782 | F13 SIB |
| B Board | REV 03 | 710-023431 | DW9058 | F13 SIB Mezz |
| SIB F13 12 | REV 03 | 750-024564 | DT9466 | F13 SIB |
| B Board | REV 02 | 710-023431 | DT6556 | F13 SIB Mezz |
| SIB F2S 0/0 | REV 05 | 710-022603 | DW7898 | F2S SIB |
| B Board | REV 05 | 710-023787 | DW7625 | F2S SIB Mezz |
| SIB F2S 0/2 | REV 05 | 710-022603 | DW7811 | F2S SIB |
| B Board | REV 05 | 710-023787 | DW7550 | F2S SIB Mezz |
| SIB F2S 0/4 | REV 04 | 710-022603 | DW4873 | F2S SIB |
| B Board | REV 05 | 710-023787 | DW8509 | F2S SIB Mezz |
| SIB F2S 0/6 | REV 04 | 710-022603 | DW4867 | F2S SIB |
| B Board | REV 05 | 710-023787 | DW8472 | F2S SIB Mezz |
| SIB F2S 1/0 | REV 04 | 710-022603 | DW4871 | F2S SIB |
| B Board | REV 05 | 710-023787 | DW8497 | F2S SIB Mezz |
| SIB F2S 1/2 | REV 05 | 710-022603 | DW7868 | F2S SIB |

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|-------------|--------|------------|--------|----------------|
| B Board | REV 05 | 710-023787 | DW7551 | F2S SIB Mezz |
| SIB F2S 1/4 | REV 04 | 710-022603 | DW4854 | F2S SIB |
| B Board | REV 05 | 710-023787 | DW8496 | F2S SIB Mezz |
| SIB F2S 1/6 | REV 05 | 710-022603 | DW7889 | F2S SIB |
| B Board | REV 05 | 710-023787 | DW7496 | F2S SIB Mezz |
| SIB F2S 2/0 | REV 04 | 710-022603 | DW4852 | F2S SIB |
| B Board | REV 05 | 710-023787 | DW8498 | F2S SIB Mezz |
| SIB F2S 2/2 | REV 04 | 710-022603 | DW4845 | F2S SIB |
| B Board | REV 05 | 710-023787 | DW8457 | F2S SIB Mezz |
| SIB F2S 2/4 | REV 05 | 710-022603 | DW7802 | F2S SIB |
| B Board | REV 05 | 710-023787 | DW7562 | F2S SIB Mezz |
| SIB F2S 2/6 | REV 04 | 710-022603 | DW4822 | F2S SIB |
| B Board | REV 05 | 710-023787 | DW8467 | F2S SIB Mezz |
| SIB F2S 3/0 | REV 05 | 710-022603 | DW7815 | F2S SIB |
| B Board | REV 05 | 710-023787 | DW7518 | F2S SIB Mezz |
| SIB F2S 3/2 | REV 03 | 710-022603 | DV0068 | F2S SIB |
| B Board | REV 03 | 710-023787 | DT9974 | F2S SIB Mezz |
| SIB F2S 3/4 | REV 05 | 710-022603 | DW7874 | F2S SIB |
| B Board | REV 05 | 710-023787 | DW7601 | F2S SIB Mezz |
| SIB F2S 3/6 | REV 03 | 710-022603 | DV0033 | F2S SIB |
| B Board | REV 03 | 710-023787 | DT9969 | F2S SIB Mezz |
| SIB F2S 4/0 | REV 03 | 710-022603 | DV0043 | F2S SIB |
| B Board | REV 03 | 710-023787 | DT9948 | F2S SIB Mezz |
| SIB F2S 4/2 | REV 05 | 710-022603 | DW5446 | F2S SIB |
| B Board | REV 05 | 710-023787 | DW7611 | F2S SIB Mezz |
| SIB F2S 4/4 | REV 04 | 710-022603 | DW4826 | F2S SIB |
| B Board | REV 05 | 710-023787 | DW8458 | F2S SIB Mezz |
| SIB F2S 4/6 | REV 03 | 710-022603 | DV0026 | F2S SIB |
| B Board | REV 03 | 710-023787 | DT9963 | F2S SIB Mezz |
| Fan Tray 0 | REV 02 | 760-024497 | DR8290 | Front Fan Tray |
| Fan Tray 1 | REV 02 | 760-024497 | DR8293 | Front Fan Tray |
| Fan Tray 2 | REV 05 | 760-024502 | DR8280 | Rear Fan Tray |
| Fan Tray 3 | | | | |
| Fan Tray 4 | REV 05 | 760-024502 | DR8276 | Rear Fan Tray |
| Fan Tray 5 | REV 02 | 760-024502 | DP5643 | Rear Fan Tray |

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Hardware inventory:

| Item | Version | Part number | Serial number | Description |
|------------------|---------|-------------|---------------|--------------------------|
| Chassis | | | JN11036F8AHA | T1600 |
| Midplane | REV 03 | 710-017247 | RC3799 | T-series Backplane |
| FPM GBUS | REV 10 | 710-002901 | DP7009 | T640 FPM Board |
| FPM Display | REV 01 | 710-021387 | DN7026 | T1600 FPM Display |
| CIP | REV 06 | 710-002895 | DP6024 | T-series CIP |
| PEM 1 | Rev 02 | 740-023211 | WA50019 | Power Entry Module 4x60A |
| SCG 0 | REV 15 | 710-003423 | DR6757 | T640 Sonet Clock Gen. |
| SCG 1 | REV 15 | 710-003423 | DS2225 | T640 Sonet Clock Gen. |
| Routing Engine 0 | REV 01 | 740-026941 | 737F-1040 | RE-DUO-1800 |
| Routing Engine 1 | REV 01 | 740-026941 | 737F-1016 | RE-DUO-1800 |
| CB 0 | REV 06 | 710-022597 | DX4011 | LCC Control Board |
| CB 1 | REV 06 | 710-022597 | DX4017 | LCC Control Board |
| FPC 1 | REV 07 | 710-013035 | DN5847 | FPC Type 3-ES |
| CPU | REV 08 | 710-016744 | DP2570 | ST-PMB2 |
| PIC 0 | REV 05 | 750-015217 | DB0418 | 8x 1GE(TYPE3), IQ2 |
| Xcvr 0 | REV 01 | 740-011782 | P8Q27ZG | SFP-SX |
| Xcvr 1 | | NON-JNPR | PDA1U0D | SFP-SX |
| Xcvr 2 | REV 01 | 740-011613 | P9F1ALW | SFP-SX |
| Xcvr 3 | REV 01 | 740-011782 | PBA403V | SFP-SX |
| Xcvr 4 | | NON-JNPR | PDE09DP | SFP-SX |
| Xcvr 5 | REV 01 | 740-011782 | PCH2P4K | SFP-SX |

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| Xcvr 6 | REV 01 | 740-011782 | PB94K0F | SFP-SX |
| Xcvr 7 | REV 01 | 740-011782 | PBA2R2A | SFP-SX |
| PIC 1 | REV 03 | 750-004424 | HJ4020 | 1x 10GE(LAN), DWDM |
| PIC 2 | REV 01 | 750-003336 | HG6073 | 4x OC-48 SONET, SMSR |
| MMB 0 | REV 04 | 710-016036 | DP3401 | ST-MMB2 |
| FPC 3 | REV 12 | 710-013037 | DR1169 | FPC Type 4-ES |
| CPU | REV 08 | 710-016744 | DP9429 | ST-PMB2 |
| PIC 0 | REV 02 | 750-010850 | JA0332 | 1x OC-768 SONET SR |
| MMB 0 | REV 04 | 710-016036 | DR0628 | ST-MMB2 |
| MMB 1 | REV 04 | 710-016036 | DR0592 | ST-MMB2 |
| FPC 4 | REV 05 | 710-021534 | DR7350 | FPC Type 1-ES |
| CPU | REV 08 | 710-016744 | DP8096 | ST-PMB2 |
| PIC 0 | REV 04 | 750-014627 | DP9171 | 4x OC-3 1x OC-12 SFP |
| Xcvr 0 | REV 02 | 740-011615 | PDE2RVR | SFP-SR |
| PIC 1 | REV 22 | 750-005634 | DS5815 | 1x CHOC12 IQ SONET, SMIR |
| PIC 2 | REV 09 | 750-002911 | CF4539 | 4x F/E, 100 BASE-TX |
| PIC 3 | REV 08 | 750-021652 | DR2827 | 1x CHOC12 IQE SONET |
| Xcvr 0 | | NON-JNPR | 8 | UNKNOWN |
| MMB 0 | REV 04 | 710-016036 | DR0809 | ST-MMB2 |
| FPC 5 | REV 07 | 710-007529 | HS5608 | FPC Type 3 |
| CPU | REV 15 | 710-001726 | HX4351 | FPC CPU |
| PIC 0 | REV 14 | 750-009567 | WJ8961 | 1x 10GE(LAN), XENPAK |
| Xcvr 0 | REV 01 | 740-013170 | J05K05961 | XENPAK-LR |
| PIC 1 | REV 16 | 750-007141 | JJ8146 | 10x 1GE(LAN), 1000 BASE |
| Xcvr 1 | REV 01 | 740-011613 | P9F117T | SFP-SX |
| Xcvr 2 | REV 01 | 740-011782 | PBA2VCL | SFP-SX |
| Xcvr 3 | REV 01 | 740-011782 | PB83DRB | SFP-SX |
| Xcvr 4 | REV 01 | 740-011613 | AM0812S8UP8 | SFP-SX |
| PIC 2 | REV 12 | 750-009567 | WF3566 | 1x 10GE(LAN), XENPAK |
| Xcvr 0 | REV 02 | 740-013170 | T07C94489 | XENPAK-LR |
| MMB 0 | REV 03 | 710-005555 | HZ1907 | MMB-288mbit |
| MMB 1 | REV 03 | 710-005555 | HW5283 | MMB-288mbit |
| PPB 0 | REV 04 | 710-002845 | HZ7717 | PPB Type 3 |
| PPB 1 | REV 04 | 710-002845 | HS0110 | PPB Type 3 |
| FPC 6 | REV 07 | 710-013035 | DP7486 | FPC Type 3-ES |
| CPU | REV 08 | 710-016744 | DP2545 | ST-PMB2 |
| PIC 0 | REV 09 | 750-009567 | NE6323 | 1x 10GE(LAN), XENPAK |
| Xcvr 0 | REV 02 | 740-013170 | T09C71959 | XENPAK-LR |
| PIC 1 | REV 06 | 750-015217 | DN4775 | 8x 1GE(TYPE3), IQ2 |
| Xcvr 0 | REV 01 | 740-011782 | P7E0T6M | SFP-SX |
| Xcvr 1 | REV 01 | 740-011613 | AM0812S8XAY | SFP-SX |
| Xcvr 2 | REV 01 | 740-011782 | P7E0T6J | SFP-SX |
| Xcvr 3 | REV 01 | 740-011782 | PCH2P7D | SFP-SX |
| Xcvr 4 | REV 01 | 740-011782 | P9B0QYT | SFP-SX |
| Xcvr 5 | REV 01 | 740-011613 | AM0812S8WQJ | SFP-SX |
| Xcvr 6 | REV 02 | 740-013111 | 9301220 | SFP-T |
| Xcvr 7 | REV 01 | 740-011782 | P9B0TZ5 | SFP-SX |
| PIC 2 | REV 06 | 750-015217 | DM6747 | 8x 1GE(TYPE3), IQ2 |
| Xcvr 0 | REV 01 | 740-011613 | PAP0ZB2 | SFP-SX |
| Xcvr 1 | REV 01 | 740-013111 | 70191002 | SFP-T |
| Xcvr 6 | REV 01 | 740-011782 | PBA29H8 | SFP-SX |
| Xcvr 7 | REV 01 | 740-011613 | AM0812S8WQG | SFP-SX |
| MMB 0 | REV 04 | 710-016036 | DP3238 | ST-MMB2 |
| FPC 7 | REV 03 | 710-021540 | DV3154 | FPC Type 2-ES |
| CPU | REV 09 | 710-016744 | DT9053 | ST-PMB2 |
| PIC 0 | REV 13 | 750-001901 | HB4225 | 4x OC-12 SONET, SMIR |
| PIC 1 | REV 05 | 750-001900 | AD3644 | 1x OC-48 SONET, SMSR |
| PIC 2 | REV 10 | 750-008155 | HV0335 | 2x G/E IQ, 1000 BASE |
| Xcvr 0 | REV 01 | 740-011782 | PCH2UKF | SFP-SX |

| | | | | |
|------------|--------|------------|---------|------------------------|
| Xcvr 1 | REV 01 | 740-011782 | PCH2V19 | SFP-SX |
| PIC 3 | REV 03 | 750-014638 | JS9493 | 1x OC-48-12-3 SFP |
| Xcvr 0 | REV 01 | 740-011785 | P6Q0ENK | SFP-SR |
| MMB 0 | REV 05 | 710-016036 | DP3323 | ST-MMB2 |
| SPMB 0 | REV 04 | 710-023321 | DX3004 | LCC Switch CPU |
| SPMB 1 | REV 04 | 710-023321 | DX3009 | LCC Switch CPU |
| SIB 0 | REV 07 | 710-022594 | DW4195 | LCC SIB |
| B Board | REV 07 | 710-023185 | DW3930 | LCC SIB Mezz |
| SIB 1 | REV 07 | 710-022594 | DW4179 | LCC SIB |
| B Board | REV 07 | 710-023185 | DW3919 | LCC SIB Mezz |
| SIB 2 | | | | |
| SIB 3 | REV 06 | 710-022594 | DT8251 | LCC SIB |
| B Board | REV 06 | 710-023185 | DT5792 | LCC SIB Mezz |
| SIB 4 | REV 08 | 710-022594 | DW8014 | LCC SIB |
| B Board | REV 07 | 710-023185 | DW3917 | LCC SIB Mezz |
| Fan Tray 0 | | | | Front Top Fan Tray |
| Fan Tray 1 | | | | Front Bottom Fan Tray |
| Fan Tray 2 | | | | Rear Fan Tray -- Rev 3 |

lcc1-re0:

Hardware inventory:

| Item | Version | Part number | Serial number | Description |
|------------------|---------|-------------|---------------|--------------------------|
| Chassis | | | JN1102270AHA | T1600 |
| Midplane | REV 04 | 710-017247 | RC5358 | T-series Backplane |
| FPM GBUS | REV 10 | 710-002901 | DS3443 | T640 FPM Board |
| FPM Display | REV 01 | 710-021387 | DS6411 | T1600 FPM Display |
| CIP | REV 06 | 710-002895 | DS4235 | T-series CIP |
| PEM 0 | Rev 02 | 740-023211 | VM82438 | Power Entry Module 4x60A |
| SCG 0 | REV 15 | 710-003423 | DS6649 | T640 Sonet Clock Gen. |
| SCG 1 | REV 15 | 710-003423 | DR6775 | T640 Sonet Clock Gen. |
| Routing Engine 0 | REV 01 | 740-026941 | 737F-1083 | RE-DUO-1800 |
| Routing Engine 1 | REV 01 | 740-026941 | 737F-1104 | RE-DUO-1800 |
| CB 0 | REV 06 | 710-022597 | DW8542 | LCC Control Board |
| CB 1 | REV 06 | 710-022597 | DW8530 | LCC Control Board |
| FPC 0 | REV 02 | 710-010845 | JE2392 | FPC Type 4 |
| CPU | REV 02 | 710-011481 | JF6820 | FPC CPU-Enhanced |
| PIC 0 | REV 11 | 750-017405 | DP7259 | 4x 10GE (LAN/WAN) XFP |
| Xcvr 0 | REV 01 | 740-014279 | AA0741N1C8T | XFP-10G-LR |
| Xcvr 1 | REV 01 | 740-014279 | AA0746N1GAM | XFP-10G-LR |
| Xcvr 2 | REV 01 | 740-014279 | AA0747N1H0B | XFP-10G-LR |
| Xcvr 3 | REV 01 | 740-014279 | AA0748N1HZ5 | XFP-10G-LR |
| MMB 0 | REV 03 | 710-010842 | HY7601 | ST-MMB |
| FPC 1 | REV 16 | 710-013037 | BBAA7398 | FPC Type 4-ES |
| CPU | REV 09 | 710-016744 | BBAA2329 | ST-PMB2 |
| PIC 0 | REV 03 | 711-029996 | EB1575 | 100GE |
| PIC 1 | REV 06 | 750-034781 | EB9980 | 100GE CFP |
| MMB 0 | REV 04 | 710-025563 | BBAA5325 | ST-MMB2 |
| MMB 1 | REV 04 | 710-025563 | BBAA5444 | ST-MMB2 |
| FPC 2 | REV 16 | 710-013037 | BBAA7185 | FPC Type 4-ES |
| CPU | REV 09 | 710-016744 | BBAA3522 | ST-PMB2 |
| PIC 0 | REV 03 | 711-029996 | EB1557 | 100GE |
| PIC 1 | REV 05 | 750-034781 | EB4660 | 100GE CFP |
| Xcvr 0 | REV 0 | 740-032210 | J10F73666 | CFP-100G-LR4 |
| BRIDGE 0 | REV 02 | 711-029995 | EB2237 | 100GE Bridge Board |
| MMB 0 | REV 04 | 710-025563 | BBAA5347 | ST-MMB2 |
| MMB 1 | REV 04 | 710-025563 | BBAA5401 | ST-MMB2 |
| FPC 3 | REV 10 | 710-021534 | DZ0941 | FPC Type 1-ES |
| CPU | REV 09 | 710-016744 | DY6364 | ST-PMB2 |
| PIC 0 | REV 13 | 750-012266 | DK9192 | 4x 1GE(LAN), IQ2 |
| Xcvr 0 | REV 01 | 740-011613 | AM0812S8WVD | SFP-SX |

| | | | | |
|---------|--------|------------|--------------|--------------------------|
| Xcvr 1 | | NON-JNPR | PDD63Q4 | SFP-SX |
| Xcvr 2 | | NON-JNPR | PDE4G54 | SFP-SX |
| Xcvr 3 | | NON-JNPR | PD40MAG | SFP-SX |
| PIC 1 | REV 01 | 750-007641 | HJ2003 | 1x G/E IQ, 1000 BASE |
| Xcvr 0 | REV 01 | 740-011613 | AM0812S8WVG | SFP-SX |
| PIC 3 | REV 17 | 750-007444 | JB6873 | 1x CHSTM1 IQ SDH, SMIR |
| MMB 0 | REV 04 | 710-025563 | DZ0281 | ST-MMB2 |
| FPC 4 | REV 06 | 710-013035 | DK0614 | FPC Type 3-ES |
| CPU | REV 07 | 710-016744 | DK1616 | ST-PMB2 |
| PIC 0 | REV 22 | 750-007141 | DM1870 | 10x 1GE(LAN), 1000 BASE |
| Xcvr 0 | REV 01 | 740-011782 | PCL3UKW | SFP-SX |
| Xcvr 1 | REV 01 | 740-011782 | P7E0T73 | SFP-SX |
| Xcvr 2 | REV 01 | 740-007326 | P4TOWLR | SFP-SX |
| Xcvr 3 | REV 01 | 740-011782 | PAR1LRL | SFP-SX |
| Xcvr 4 | REV 01 | 740-011782 | P9MOU3Z | SFP-SX |
| Xcvr 5 | REV 01 | 740-011782 | P9MOU0C | SFP-SX |
| Xcvr 6 | REV 01 | 740-011782 | P9M0TLG | SFP-SX |
| Xcvr 7 | REV 01 | 740-011782 | P9MOU0F | SFP-SX |
| Xcvr 8 | REV 01 | 740-011613 | PFA6LAP | SFP-SX |
| Xcvr 9 | REV 01 | 740-011782 | PCH2POU | SFP-SX |
| PIC 1 | REV 16 | 750-009450 | CV2565 | 1x OC-192 SM SR2 |
| PIC 2 | REV 05 | 750-004424 | HH3057 | 1x 10GE(LAN), 10GBASE-LR |
| PIC 3 | REV 12 | 750-013423 | DP0403 | MultiServices 500 |
| MMB 0 | REV 04 | 710-016036 | DK1988 | ST-MMB2 |
| FPC 5 | REV 07 | 710-013560 | DR0004 | E2-FPC Type 3 |
| CPU | REV 05 | 710-013563 | DR0089 | FPC CPU-Enhanced |
| PIC 0 | REV 11 | 750-012793 | DR6107 | 1x 10GE(LAN/WAN) IQ2 |
| Xcvr 0 | REV 01 | 740-014289 | C743XU074 | XFP-10G-SR |
| PIC 1 | REV 01 | 750-004695 | HD5980 | 1x Tunnel |
| PIC 2 | REV 32 | 750-003700 | DL3770 | 1x OC-192 12xMM VSR |
| PIC 3 | REV 12 | 750-009553 | WB8901 | 4x OC-48 SONET |
| Xcvr 0 | REV 01 | 740-011785 | P9D1GTQ | SFP-SR |
| Xcvr 1 | REV 01 | 740-011785 | PDSOMMB | SFP-SR |
| Xcvr 3 | REV 01 | 740-011785 | PDE1KXP | SFP-SR |
| MMB 0 | REV 07 | 710-010171 | DP7374 | MMB-5M3-288mbit |
| MMB 1 | REV 07 | 710-010171 | DP7404 | MMB-5M3-288mbit |
| FPC 6 | REV 07 | 710-013035 | DM0994 | FPC Type 3-ES |
| CPU | REV 07 | 710-016744 | DM3651 | ST-PMB2 |
| PIC 0 | REV 07 | 750-015217 | DN4743 | 8x 1GE(TYPE3), IQ2 |
| Xcvr 3 | REV 01 | 740-011613 | AM0812S8XB0 | SFP-SX |
| Xcvr 4 | REV 01 | 740-011782 | PB829RB | SFP-SX |
| Xcvr 5 | REV 01 | 740-011782 | P8J1SYX | SFP-SX |
| PIC 1 | REV 03 | 750-003336 | HJ9954 | 4x OC-48 SONET, SMSR |
| PIC 3 | REV 02 | 750-012793 | JM7665 | 1x 10GE(LAN/WAN) IQ2 |
| MMB 0 | REV 04 | 710-016036 | DN6913 | ST-MMB2 |
| FPC 7 | REV 08 | 710-010845 | JM3958 | FPC Type 4 |
| CPU | REV 04 | 710-011481 | JK3669 | FPC CPU-Enhanced |
| PIC 0 | REV 11 | 750-017405 | DP8837 | 4x 10GE (LAN/WAN) XFP |
| Xcvr 1 | REV 01 | 740-014279 | 753019A00277 | XFP-10G-LR |
| Xcvr 2 | REV 02 | 740-011571 | C850XJ00P | XFP-10G-SR |
| Xcvr 3 | REV 01 | 740-014279 | AA0813N1RTG | XFP-10G-LR |
| MMB 0 | REV 04 | 710-010842 | JN1971 | ST-MMB |
| SPMB 0 | REV 04 | 710-023321 | DW3629 | LCC Switch CPU |
| SPMB 1 | REV 04 | 710-023321 | DW3621 | LCC Switch CPU |
| SIB 0 | REV 07 | 710-022594 | DW4200 | LCC SIB |
| B Board | REV 07 | 710-023185 | DW3932 | LCC SIB Mezz |
| SIB 1 | REV 07 | 710-022594 | DW4193 | LCC SIB |
| B Board | REV 07 | 710-023185 | DW3904 | LCC SIB Mezz |
| SIB 2 | | | | |

| | | | | |
|------------|--------|------------|--------|------------------------|
| SIB 3 | REV 07 | 710-022594 | DW4210 | LCC SIB |
| B Board | REV 06 | 710-023185 | DT5780 | LCC SIB Mezz |
| SIB 4 | REV 08 | 710-022594 | DW8019 | LCC SIB |
| B Board | REV 06 | 710-023185 | DT5795 | LCC SIB Mezz |
| Fan Tray 0 | | | | Front Top Fan Tray |
| Fan Tray 1 | | | | Front Bottom Fan Tray |
| Fan Tray 2 | | | | Rear Fan Tray -- Rev 3 |

show chassis hardware sfc (TX Matrix Plus Router)

```
user@host> show chassis hardware sfc 0
sfc0-re0:
```

Hardware inventory:

| Item | Version | Part number | Serial number | Description |
|------------------|---------|-------------|---------------|--------------------|
| Chassis | | | JN112F007AHB | TXP |
| Midplane | REV 05 | 710-022574 | TS4027 | SFC Midplane |
| FPM Display | REV 03 | 710-024027 | DX0282 | TXP FPM Display |
| CIP 0 | REV 04 | 710-023792 | DW4889 | TXP CIP |
| CIP 1 | REV 04 | 710-023792 | DW4887 | TXP CIP |
| PEM 0 | Rev 07 | 740-027463 | UM26368 | Power Entry Module |
| Routing Engine 0 | REV 01 | 740-026942 | 737A-1064 | SFC RE |
| Routing Engine 1 | REV 01 | 740-026942 | 737A-1082 | SFC RE |
| CB 0 | REV 09 | 710-022606 | DW6099 | SFC Control Board |
| CB 1 | REV 09 | 710-022606 | DW6096 | SFC Control Board |
| SPMB 0 | | BUILTIN | | SFC Switch CPU |
| SPMB 1 | | BUILTIN | | SFC Switch CPU |
| SIB F13 0 | REV 04 | 710-022600 | DX0841 | F13 SIB |
| B Board | REV 03 | 710-023431 | DX0966 | F13 SIB Mezz |
| SIB F13 1 | REV 04 | 750-024564 | DW5776 | F13 SIB |
| B Board | REV 03 | 710-023431 | DW9028 | F13 SIB |
| SIB F13 3 | REV 04 | 750-024564 | DW5762 | F13 SIB |
| B Board | REV 03 | 710-023431 | DW9059 | F13 SIB |
| SIB F13 4 | REV 04 | 750-024564 | DW5797 | F13 SIB |
| B Board | REV 03 | 710-023431 | DW9041 | F13 SIB |
| SIB F13 6 | REV 04 | 750-024564 | DW5770 | F13 SIB |
| B Board | REV 03 | 710-023431 | DW9079 | F13 SIB Mezz |
| SIB F13 7 | REV 04 | 750-024564 | DW5758 | F13 SIB |
| B Board | REV 03 | 710-023431 | DW9047 | F13 SIB |
| SIB F13 8 | REV 04 | 750-024564 | DW5761 | F13 SIB |
| B Board | REV 03 | 710-023431 | DW9043 | F13 SIB Mezz |
| SIB F13 9 | REV 04 | 750-024564 | DW5754 | F13 SIB |
| B Board | REV 03 | 710-023431 | DW9078 | F13 SIB Mezz |
| SIB F13 11 | REV 04 | 710-022600 | DX0826 | F13 SIB |
| B Board | REV 03 | 710-023431 | DX0967 | F13 SIB Mezz |
| SIB F13 12 | REV 04 | 750-024564 | DW5794 | F13 SIB |
| B Board | REV 03 | 710-023431 | DW9044 | F13 SIB Mezz |
| SIB F2S 0/0 | REV 05 | 710-022603 | DW7897 | F2S SIB |
| B Board | REV 05 | 710-023787 | DW7657 | NEO PMB |
| SIB F2S 0/2 | REV 05 | 710-022603 | DW7833 | F2S SIB |
| B Board | REV 05 | 710-023787 | DW7526 | NEO PMB |
| SIB F2S 0/4 | REV 05 | 710-022603 | DW7875 | F2S SIB |
| B Board | REV 05 | 710-023787 | DW7588 | NEO PMB |
| SIB F2S 0/6 | REV 05 | 710-022603 | DW7860 | F2S SIB |
| B Board | REV 05 | 710-023787 | DW7589 | NEO PMB |
| SIB F2S 1/0 | REV 04 | 710-022603 | DW4820 | F2S SIB |
| B Board | REV 05 | 710-023787 | DW8510 | NEO PMB |
| SIB F2S 1/2 | REV 05 | 710-022603 | DW7849 | F2S SIB |
| B Board | REV 05 | 710-023787 | DW7525 | NEO PMB |
| SIB F2S 1/4 | REV 05 | 710-022603 | DW7927 | F2S SIB |
| B Board | REV 05 | 710-023787 | DW7556 | F2S SIB Mezz |

| | | | | |
|-------------|--------|------------|--------|----------------|
| SIB F2S 1/6 | REV 05 | 710-022603 | DW7866 | F2S SIB |
| B Board | REV 05 | 710-023787 | DW7651 | NEO PMB |
| SIB F2S 2/0 | REV 05 | 710-022603 | DW7880 | F2S SIB |
| B Board | REV 05 | 710-023787 | DW7523 | NEO PMB |
| SIB F2S 2/2 | REV 05 | 710-022603 | DW7895 | F2S SIB |
| B Board | REV 05 | 710-023787 | DW7591 | NEO PMB |
| SIB F2S 2/4 | REV 05 | 710-022603 | DW7907 | F2S SIB |
| B Board | REV 05 | 710-023787 | DW7590 | NEO PMB |
| SIB F2S 2/6 | REV 05 | 710-022603 | DW7785 | F2S SIB |
| B Board | REV 05 | 710-023787 | DW7524 | NEO PMB |
| SIB F2S 3/0 | REV 05 | 710-022603 | DW7782 | F2S SIB |
| B Board | REV 05 | 710-023787 | DW7634 | NEO PMB |
| SIB F2S 3/2 | REV 05 | 710-022603 | DW7793 | F2S SIB |
| B Board | REV 05 | 710-023787 | DW7548 | NEO PMB |
| SIB F2S 3/4 | REV 05 | 710-022603 | DW7779 | F2S SIB |
| B Board | REV 05 | 710-023787 | DW7587 | NEO PMB |
| SIB F2S 3/6 | REV 05 | 710-022603 | DW7930 | F2S SIB |
| B Board | REV 05 | 710-023787 | DW7505 | NEO PMB |
| SIB F2S 4/0 | REV 05 | 710-022603 | DW7867 | F2S SIB |
| B Board | REV 05 | 710-023787 | DW7656 | NEO PMB |
| SIB F2S 4/2 | REV 05 | 710-022603 | DW7917 | F2S SIB |
| B Board | REV 05 | 710-023787 | DW7640 | NEO PMB |
| SIB F2S 4/4 | REV 05 | 710-022603 | DW7929 | F2S SIB |
| B Board | REV 05 | 710-023787 | DW7643 | NEO PMB |
| SIB F2S 4/6 | REV 05 | 710-022603 | DW7870 | F2S SIB |
| B Board | REV 05 | 710-023787 | DW7635 | NEO PMB |
| Fan Tray 0 | REV 06 | 760-024497 | DV7831 | Front Fan Tray |
| Fan Tray 1 | REV 06 | 760-024497 | DV9614 | Front Fan Tray |
| Fan Tray 2 | REV 06 | 760-024502 | DV9618 | Rear Fan Tray |
| Fan Tray 3 | REV 06 | 760-024502 | DV9616 | Rear Fan Tray |
| Fan Tray 4 | REV 06 | 760-024502 | DV7807 | Rear Fan Tray |
| Fan Tray 5 | REV 06 | 760-024502 | DV7828 | Rear Fan Tray |

show chassis hardware extensive (TX Matrix Plus Router)

```
user@host> show chassis hardware extensive
```

```
sfc0-re0:
```

```
-----
Hardware inventory:
```

| Item | Version | Part number | Serial number | Description |
|---------|---------|-------------|---------------|-------------|
| Chassis | | | JN112F007AHB | TXP |

| | | | |
|-------------|--------|-----------------|--------------|
| Jedec Code: | 0x7fb0 | EEPROM Version: | 0x02 |
| | | S/N: | JN112F007AHB |

| | | | |
|--------------|------------|-------------------|-------|
| Assembly ID: | 0x052c | Assembly Version: | 00.00 |
| Date: | 00-00-0000 | Assembly Flags: | 0x00 |

```
ID: TXP
```

```
Board Information Record:
```

```
Address 0x00: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
```

```
I2C Hex Data:
```

```
Address 0x00: 7f b0 02 ff 05 2c 00 00 00 00 00 00 00 00 00 00
```

```
Address 0x10: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
```

```
Address 0x20: 4a 4e 31 31 32 46 30 30 37 41 48 42 00 00 00 00
```

```
Address 0x30: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
```

```
Address 0x40: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
```

```
Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
```

```
Address 0x60: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
```

```
Address 0x70: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
```

| | | | | |
|----------|--------|------------|--------|--------------|
| Midplane | REV 05 | 710-022574 | TS4027 | SFC Midplane |
|----------|--------|------------|--------|--------------|

| | | | |
|-------------|--------|-----------------|------|
| Jedec Code: | 0x7fb0 | EEPROM Version: | 0x01 |
|-------------|--------|-----------------|------|

| | | | |
|------|------------|------|--------|
| P/N: | 710-022574 | S/N: | TS4027 |
|------|------------|------|--------|

| | | | |
|--------------|--------|-------------------|-------|
| Assembly ID: | 0x0962 | Assembly Version: | 01.05 |
|--------------|--------|-------------------|-------|

```

Date:          03-23-2009      Assembly Flags:  0x00
Version:       REV 05
ID: SFC Midplane
Board Information Record:
Address 0x00: ad 01 ff ff 00 1d b5 14 00 00 ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 01 ff 09 62 01 05 52 45 56 20 30 35 00 00
Address 0x10: 00 00 00 00 37 31 30 2d 30 32 32 35 37 34 00 00
Address 0x20: 53 2f 4e 20 54 53 34 30 32 37 00 00 00 17 03 07
Address 0x30: d9 ff ff ff ad 01 ff ff 00 1d b5 14 00 00 ff ff
Address 0x40: ff ff ff ff 00 ff ff ff ff ff ff ff ff ff ff
Address 0x50: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x60: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x70: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
FPM Display      REV 03      710-024027      DX0282      TXP FPM Display
Jedec Code:     0x7fb0      EEPROM Version:  0x01
P/N:            710-024027      S/N:            DX0282
Assembly ID:    0x096c      Assembly Version: 01.03
Date:           02-10-2009      Assembly Flags:  0x00
Version:        REV 03
ID: TXP FPM Display      FRU Model Number: CRAFT-TXP
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 01 ff 09 6c 01 03 52 45 56 20 30 33 00 00
Address 0x10: 00 00 00 00 37 31 30 2d 30 32 34 30 32 37 00 00
Address 0x20: 53 2f 4e 20 44 58 30 32 38 32 00 00 00 0a 02 07
Address 0x30: d9 ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 00 00 00 00 00 00 00 00 00 00 43
Address 0x50: 52 41 46 54 2d 54 58 50 00 00 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 ff ff ff ff ff ff ff ff ff ff
Address 0x70: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
CIP 0            REV 04      710-023792      DW4889      TXP CIP
Jedec Code:     0x7fb0      EEPROM Version:  0x01
P/N:            710-023792      S/N:            DW4889
Assembly ID:    0x0969      Assembly Version: 01.04
Date:           01-26-2009      Assembly Flags:  0x00
Version:        REV 04
ID: TXP CIP      FRU Model Number: CIP-TXP
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff

```

show chassis hardware clei-models (TX Matrix Plus Router)

```

user@host> show chassis hardware clei-models
sfc0-re0:
-----
Hardware inventory:
Item          Version  Part number  CLEI code  FRU model number
Midplane      REV 05   710-022574
FPM Display   REV 03   710-024027
CIP 0         REV 05   710-023792
CIP 1         REV 05   710-023792
PEM 0         Rev 04   740-027463  IPUPAFGKTA PWR-TXP-7-60-DC
PEM 1         Rev 04   740-027463  IPUPAFGKTA PWR-TXP-7-60-DC
Routing Engine 0 REV 06   740-026942
Routing Engine 1 REV 06   740-026942
CB 0          REV 05   710-022606
CB 1          REV 09   710-022606
SIB F13 0     REV 04   750-024564
SIB F13 3     REV 04   750-024564

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| | | | |
|-------------|--------|------------|-----------------|
| SIB F13 8 | REV 04 | 750-024564 | SIB-TXP-F13 |
| SIB F13 11 | REV 04 | 750-024564 | SIB-TXP-F13 |
| SIB F13 12 | REV 03 | 750-024564 | SIB-TXP-F13 |
| SIB F2S 0/0 | REV 05 | 710-022603 | SIB-TXP-F2S-S |
| SIB F2S 0/2 | REV 05 | 710-022603 | SIB-TXP-F2S-S |
| SIB F2S 0/4 | REV 04 | 710-022603 | SIB-TXP-F2S-S |
| SIB F2S 0/6 | REV 04 | 710-022603 | SIB-TXP-F2S-S |
| SIB F2S 1/0 | REV 04 | 710-022603 | SIB-TXP-F2S-S |
| SIB F2S 1/2 | REV 05 | 710-022603 | SIB-TXP-F2S-S |
| SIB F2S 1/4 | REV 04 | 710-022603 | SIB-TXP-F2S-S |
| SIB F2S 1/6 | REV 05 | 710-022603 | SIB-TXP-F2S-S |
| SIB F2S 2/0 | REV 04 | 710-022603 | SIB-TXP-F2S-S |
| SIB F2S 2/2 | REV 04 | 710-022603 | SIB-TXP-F2S-S |
| SIB F2S 2/4 | REV 05 | 710-022603 | SIB-TXP-F2S-S |
| SIB F2S 2/6 | REV 04 | 710-022603 | SIB-TXP-F2S-S |
| SIB F2S 3/0 | REV 05 | 710-022603 | SIB-TXP-F2S-S |
| SIB F2S 3/2 | REV 03 | 710-022603 | SIB-TXP-F2S-S |
| SIB F2S 3/4 | REV 05 | 710-022603 | SIB-TXP-F2S-S |
| SIB F2S 3/6 | REV 03 | 710-022603 | SIB-TXP-F2S-S |
| SIB F2S 4/0 | REV 03 | 710-022603 | SIB-TXP-F2S-S |
| SIB F2S 4/2 | REV 05 | 710-022603 | SIB-TXP-F2S-S |
| SIB F2S 4/4 | REV 04 | 710-022603 | SIB-TXP-F2S-S |
| SIB F2S 4/6 | REV 03 | 710-022603 | SIB-TXP-F2S-S |
| Fan Tray 0 | REV 02 | 760-024497 | FANTRAY-TXP-H-S |
| Fan Tray 1 | REV 02 | 760-024497 | FANTRAY-TXP-H-S |
| Fan Tray 2 | REV 05 | 760-024502 | FANTRAY-TXP-V-S |
| Fan Tray 3 | | | |
| Fan Tray 4 | REV 05 | 760-024502 | FANTRAY-TXP-V-S |
| Fan Tray 5 | REV 02 | 760-024502 | FANTRAY-TXP-V-S |

lcc0-re0:

Hardware inventory:

| Item | Version | Part number | CLEI code | FRU model number |
|------------------|---------|-------------|------------|-------------------------|
| Midplane | REV 03 | 710-017247 | | CHAS-BP-T1600-S |
| FPM Display | REV 01 | 710-021387 | | CRAFT-T1600-S |
| CIP | REV 06 | 710-002895 | | CIP-L-T640-S |
| PEM 1 | Rev 02 | 740-023211 | IPUPAC8KTA | PWR-T1600-4-60-DC-S |
| SCG 0 | REV 15 | 710-003423 | | SCG-T-S |
| SCG 1 | REV 15 | 710-003423 | | SCG-T-S |
| Routing Engine 0 | REV 01 | 740-026941 | | RE-DUO-C1800-8G-S |
| Routing Engine 1 | REV 01 | 740-026941 | | RE-DUO-C1800-8G-S |
| CB 0 | REV 06 | 710-022597 | | CB-LCC-S |
| CB 1 | REV 06 | 710-022597 | | CB-LCC-S |
| FPC 1 | REV 07 | 710-013035 | | T640-FPC3-ES |
| PIC 0 | REV 05 | 750-015217 | | PC-8GE-TYPE3-SFP-IQ2 |
| PIC 1 | REV 03 | 750-004424 | | PC-1XGE-LR |
| PIC 2 | REV 01 | 750-003336 | | PC-40C48-SON-SMSR |
| FPC 3 | REV 12 | 710-013037 | | T1600-FPC4-ES |
| PIC 0 | REV 02 | 750-010850 | | PD-10C768-SON-SR |
| FPC 4 | REV 05 | 710-021534 | | T640-FPC1-ES |
| PIC 0 | REV 04 | 750-014627 | | PB-40C3-10C12-SON-SFP |
| PIC 1 | REV 22 | 750-005634 | | PB-1CHOC12SMIR-QPP |
| PIC 2 | REV 09 | 750-002911 | | PB-4FE-TX |
| PIC 3 | REV 08 | 750-021652 | | PB-1CHOC12-STM4-IQE-SFP |
| FPC 5 | REV 07 | 710-007529 | | T640-FPC3 |
| PIC 0 | REV 14 | 750-009567 | | PC-1XGE-XENPAK |
| PIC 1 | REV 16 | 750-007141 | | PC-10GE-SFP |
| PIC 2 | REV 12 | 750-009567 | | PC-1XGE-XENPAK |
| FPC 6 | REV 07 | 710-013035 | | T640-FPC3-ES |
| PIC 0 | REV 09 | 750-009567 | | PC-1XGE-XENPAK |

| | | | |
|------------|--------|------------|----------------------|
| PIC 1 | REV 06 | 750-015217 | PC-8GE-TYPE3-SFP-IQ2 |
| PIC 2 | REV 06 | 750-015217 | PC-8GE-TYPE3-SFP-IQ2 |
| FPC 7 | REV 03 | 710-021540 | T640-FPC2-ES |
| PIC 0 | REV 13 | 750-001901 | PB-40C12-SON-SMIR |
| PIC 1 | REV 05 | 750-001900 | PB-10C48-SON-SMSR |
| PIC 2 | REV 10 | 750-008155 | PB-2GE-SFP-QPP |
| PIC 3 | REV 03 | 750-014638 | PB-10C48-SON-B-SFP |
| SIB 0 | REV 07 | 710-022594 | SIB-TXP-T1600-S |
| SIB 1 | REV 07 | 710-022594 | SIB-TXP-T1600-S |
| SIB 3 | REV 06 | 710-022594 | SIB-TXP-T1600-S |
| SIB 4 | REV 08 | 710-022594 | SIB-TXP-T1600-S |
| Fan Tray 0 | | | FANTRAY-T-S |
| Fan Tray 1 | | | FANTRAY-T-S |
| Fan Tray 2 | | | FANTRAY-TXP-R-S |

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lcc1-re0:
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Hardware inventory:
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| Item | Version | Part number | CLEI code | FRU model number |
|------------------|---------|-------------|------------|-----------------------|
| Midplane | REV 04 | 710-017247 | | CHAS-BP-T1600-S |
| FPM Display | REV 01 | 710-021387 | | CRAFT-T1600-S |
| CIP | REV 06 | 710-002895 | | CIP-L-T640-S |
| PEM 0 | Rev 02 | 740-023211 | IPUPAC8KTA | PWR-T1600-4-60-DC-S |
| SCG 0 | REV 15 | 710-003423 | | SCG-T-S |
| SCG 1 | REV 15 | 710-003423 | | SCG-T-S |
| Routing Engine 0 | REV 01 | 740-026941 | | RE-DUO-C1800-8G-S |
| Routing Engine 1 | REV 01 | 740-026941 | | RE-DUO-C1800-8G-S |
| CB 0 | REV 06 | 710-022597 | | CB-LCC-S |
| CB 1 | REV 06 | 710-022597 | | CB-LCC-S |
| FPC 0 | REV 02 | 710-010845 | | T640-FPC4-ES |
| PIC 0 | REV 11 | 750-017405 | | PD-4XGE-XFP |
| FPC 1 | REV 16 | 710-013037 | | T1600-FPC4-ES |
| PIC 1 | REV 06 | 750-034781 | | PD-1CE-CFP |
| FPC 2 | REV 16 | 710-013037 | | T1600-FPC4-ES |
| PIC 1 | REV 05 | 750-034781 | | PD-1CE-CFP |
| FPC 3 | REV 10 | 710-021534 | | T640-FPC1-ES |
| PIC 0 | REV 13 | 750-012266 | | PB-4GE-TYPE1-SFP-IQ2 |
| PIC 1 | REV 01 | 750-007641 | | PE-1GE-SFP-QPP |
| PIC 3 | REV 17 | 750-007444 | | PB-1CHSTM1-SMIR-QPP |
| FPC 4 | REV 06 | 710-013035 | | T640-FPC3-ES |
| PIC 0 | REV 22 | 750-007141 | | PC-10GE-SFP |
| PIC 1 | REV 16 | 750-009450 | | PC-10C192-SON-SR2 |
| PIC 2 | REV 05 | 750-004424 | | PC-1XGE-LR |
| PIC 3 | REV 12 | 750-013423 | | PC-MS-500-3 |
| FPC 5 | REV 07 | 710-013560 | | T640-FPC3-E2 |
| PIC 0 | REV 11 | 750-012793 | | PC-1XGE-TYPE3-XFP-IQ2 |
| PIC 1 | REV 01 | 750-004695 | | PC-TUNNEL |
| PIC 2 | REV 32 | 750-003700 | | PC-10C192-SON-VSR |
| PIC 3 | REV 12 | 750-009553 | | PC-40C48-SON-SFP |
| FPC 6 | REV 07 | 710-013035 | | T640-FPC3-ES |
| PIC 0 | REV 07 | 750-015217 | | PC-8GE-TYPE3-SFP-IQ2 |
| PIC 1 | REV 03 | 750-003336 | | PC-40C48-SON-SMSR |
| PIC 3 | REV 02 | 750-012793 | | PC-1XGE-TYPE3-XFP-IQ2 |
| FPC 7 | REV 08 | 710-010845 | | T640-FPC4-ES |
| PIC 0 | REV 11 | 750-017405 | | PD-4XGE-XFP |
| SIB 0 | REV 07 | 710-022594 | | SIB-TXP-T1600-S |
| SIB 1 | REV 07 | 710-022594 | | SIB-TXP-T1600-S |
| SIB 3 | REV 07 | 710-022594 | | SIB-TXP-T1600-S |
| SIB 4 | REV 08 | 710-022594 | | SIB-TXP-T1600-S |
| Fan Tray 0 | | | | FANTRAY-T-S |

Fan Tray 1
Fan Tray 2

FANTRAY-T-S
FANTRAY-TXP-R-S

show chassis hardware detail (TX Matrix Plus Router)

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user@host> show chassis hardware detail
sfc0-re0:
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Hardware inventory:

| Item | Version | Part number | Serial number | Description |
|------------------|----------|-------------------------|----------------------|--------------------|
| Chassis | | | JN111B023AHB | TXP |
| Midplane | REV 01 | 710-022574 | TR7990 | SFC Midplane |
| FPM Display | REV 03 | 710-024027 | DW4699 | TXP FPM Display |
| CIP 0 | REV 01 | 710-023792 | DR1437 | TXP CIP |
| CIP 1 | REV 02 | 710-023792 | DS4564 | TXP CIP |
| PEM 0 | Rev 07 | 740-027463 | UM26360 | Power Entry Module |
| Routing Engine 0 | REV 01 | 740-026942 | 737A-1024 | SFC RE |
| ad0 | 3887 MB | SMART CF | 200811050193CEB1CEB1 | Compact Flash |
| ad1 | 30533 MB | SAMSUNG MCBQE32G8MPP-0V | SY814A0762 | Disk 1 |
| Routing Engine 1 | REV 01 | 740-026942 | 737A-1024 | SFC RE |
| ad0 | 3887 MB | SMART CF | 20081105004C19A019A0 | Compact Flash |
| ad1 | 30533 MB | SAMSUNG MCBQE32G8MPP-0V | SY814A0794 | Disk 1 |
| CB 0 | REV 03 | 710-022606 | DR7134 | SFC Control Board |
| CB 1 | REV 01 | 710-022606 | DP8890 | SFC Control Board |
| SPMB 0 | | BUILTIN | | SFC Switch CPU |
| SPMB 1 | | BUILTIN | | SFC Switch CPU |
| SIB F13 0 | REV 03 | 750-024564 | DT9478 | F13 SIB |
| B Board | REV 02 | 710-023431 | DT6554 | F13 SIB |
| SIB F13 1 | REV 03 | 750-024564 | DT9454 | F13 SIB |
| B Board | REV 02 | 710-023431 | DT6551 | F13 SIB |
| SIB F2S 0/0 | REV 02 | 710-022603 | DT2838 | F2S SIB |
| B Board | REV 02 | 710-023787 | DT1725 | NEO PMB |
| SIB F2S 0/2 | REV 02 | 710-022603 | DT2824 | F2S SIB |
| B Board | REV 02 | 710-023787 | DT1706 | NEO PMB |
| SIB F2S 0/4 | REV 02 | 710-022603 | DT2822 | F2S SIB |
| B Board | REV 02 | 710-023787 | DT1696 | NEO PMB |
| SIB F2S 0/6 | REV 02 | 710-022603 | DT2823 | F2S SIB |
| B Board | REV 02 | 710-023787 | DT1717 | NEO PMB |
| SIB F2S 1/0 | REV 03 | 710-022603 | DV0059 | F2S SIB |
| B Board | REV 03 | 710-023787 | DT9942 | NEO PMB |
| SIB F2S 1/2 | REV 02 | 710-022603 | DT2826 | F2S SIB |
| B Board | REV 02 | 710-023787 | DT1713 | NEO PMB |
| SIB F2S 1/4 | REV 03 | 710-022603 | DV0092 | F2S SIB |
| B Board | REV 03 | 710-023787 | DV0000 | NEO PMB |
| SIB F2S 1/6 | REV 03 | 710-022603 | DV0079 | F2S SIB |
| B Board | REV 03 | 710-023787 | DT9972 | NEO PMB |
| SIB F2S 2/0 | REV 03 | 710-022603 | DV0100 | F2S SIB |
| B Board | REV 03 | 710-023787 | DT9925 | NEO PMB |
| SIB F2S 2/2 | REV 03 | 710-022603 | DV0050 | F2S SIB |
| B Board | REV 03 | 710-023787 | DV0005 | NEO PMB |
| SIB F2S 2/4 | REV 03 | 710-022603 | DV0097 | F2S SIB |
| B Board | REV 03 | 710-023787 | DT9936 | NEO PMB |
| Fan Tray 0 | REV 02 | 760-024497 | DR8286 | Front Fan Tray |
| Fan Tray 1 | REV 06 | 760-024497 | DV9624 | Front Fan Tray |
| Fan Tray 2 | REV 02 | 760-024502 | DR8259 | Rear Fan Tray |
| Fan Tray 3 | REV 02 | 760-024502 | DR8270 | Rear Fan Tray |
| Fan Tray 4 | REV 02 | 760-024502 | DR8284 | Rear Fan Tray |
| Fan Tray 5 | REV 06 | 760-024502 | DV7813 | Rear Fan Tray |

1cc0-re0:

Hardware inventory:

| Item | Version | Part number | Serial number | Description |
|------------------|----------|-------------|----------------------------|-------------------------|
| Chassis | | | JN1101F27AHA | T1600 |
| Midplane | REV 04 | 710-017247 | RC5317 | T Series Backplane |
| FPM GBUS | REV 10 | 710-002901 | DS8197 | T640 FPM Board |
| FPM Display | REV 01 | 710-021387 | DS6433 | T1600 FPM Display |
| CIP | REV 06 | 710-002895 | DS1493 | T Series CIP |
| PEM 0 | Rev 08 | 740-017906 | UD26601 | Power Entry Module 3x80 |
| SCG 0 | REV 15 | 710-003423 | DP5847 | T640 Sonet Clock Gen. |
| SCG 1 | REV 15 | 710-003423 | DR0924 | T640 Sonet Clock Gen. |
| Routing Engine 0 | REV 01 | 740-026942 | 737F-1024 | LCC RE |
| ad0 | 3887 MB | SMART CF | 2008110502B63E513E51 | Compact Flash |
| ad1 | 30533 MB | SAMSUNG | MCBQE32G8MPP-0V SY814A1208 | Disk 1 |
| Routing Engine 1 | REV 01 | 740-026942 | 737F-1024 | LCC RE |
| ad0 | 3887 MB | SMART CF | 2008110500F9A8A8A8A8 | Compact Flash |
| ad1 | 30533 MB | SAMSUNG | MCBQE32G8MPP-0V SY814A1076 | Disk 1 |
| CB 0 | REV 05 | 710-022597 | DV4264 | LCC Control Board |
| CB 1 | REV 03 | 710-022597 | DP8558 | LCC Control Board |
| FPC 0 | REV 14 | 710-013037 | DS9967 | FPC Type 4-ES |
| CPU | REV 08 | 710-016744 | DS3989 | ST-PMB2 |
| PIC 0 | REV 12 | 750-013198 | DL7506 | 1x Tunnel |
| PIC 1 | REV 12 | 750-013198 | DL7505 | 1x Tunnel |
| MMB 0 | REV 01 | 710-025563 | DS8524 | ST-MMB2 |
| MMB 1 | REV 01 | 710-025563 | DS8373 | ST-MMB2 |
| FPC 1 | REV 14 | 710-013037 | DT0027 | FPC Type 4-ES |
| CPU | REV 09 | 710-016744 | DS7684 | ST-PMB2 |
| PIC 0 | REV 12 | 750-013198 | DL7512 | 1x Tunnel |
| PIC 1 | REV 12 | 750-013198 | DL7498 | 1x Tunnel |
| MMB 0 | REV 01 | 710-025563 | DS8494 | ST-MMB2 |
| MMB 1 | REV 01 | 710-025563 | DS8436 | ST-MMB2 |
| SPMB 0 | REV 04 | 710-023321 | DV3867 | LCC Switch CPU |
| SPMB 1 | REV 02 | 710-023321 | DP0238 | LCC Switch CPU |
| SIB 0 | REV 06 | 710-022594 | DT8268 | LCC SIB |
| B Board | REV 06 | 710-023185 | DT5791 | LCC SIB Mezz |
| SIB 1 | REV 06 | 710-022594 | DT8261 | LCC SIB |
| B Board | REV 06 | 710-023185 | DT5769 | LCC SIB Mezz |
| SIB 2 | REV 04 | 710-022594 | DS2315 | LCC SIB |
| B Board | REV 06 | 710-023185 | DT5788 | LCC SIB Mezz |
| SIB 3 | REV 06 | 710-022594 | DT8253 | LCC SIB |
| B Board | REV 06 | 710-023185 | DT5811 | LCC SIB Mezz |
| SIB 4 | REV 06 | 710-022594 | DT8248 | LCC SIB |
| B Board | REV 06 | 710-023185 | DT5812 | LCC SIB Mezz |
| Fan Tray 0 | | | | Front Top Fan Tray |
| Fan Tray 1 | | | | Front Bottom Fan Tray |
| Fan Tray 2 | | | | Rear Fan Tray |

show chassis hardware models (TX Matrix Plus Router)

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user@host> show chassis hardware models
sfc0-re0:
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Hardware inventory:

| Item | Version | Part number | Serial number | FRU model number |
|------------------|---------|-------------|---------------|-------------------------|
| FPM Display | REV 03 | 710-024027 | DX0282 | CRAFT-TXP |
| CIP 0 | REV 04 | 710-023792 | DW4889 | CIP-TXP |
| CIP 1 | REV 04 | 710-023792 | DW4887 | CIP-TXP |
| PEM 0 | Rev 07 | 740-027463 | UM26368 | yyyyyyyyyyyyyyyyyyyy |
| Routing Engine 0 | REV 01 | 740-026942 | 737A-1064 | RE-TXP-SFC-DU0-2600-16G |
| Routing Engine 1 | REV 01 | 740-026942 | 737A-1082 | RE-TXP-SFC-DU0-2600-16G |
| CB 0 | REV 09 | 710-022606 | DW6099 | CB-TXP |
| CB 1 | REV 09 | 710-022606 | DW6096 | CB-TXP |

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|-------------|--------|------------|--------|---------------|
| SIB F13 1 | REV 04 | 750-024564 | DW5776 | SIB-TXP-F13 |
| SIB F13 3 | REV 04 | 750-024564 | DW5762 | SIB-TXP-F13 |
| SIB F13 4 | REV 04 | 750-024564 | DW5797 | SIB-TXP-F13 |
| SIB F13 6 | REV 04 | 750-024564 | DW5770 | SIB-TXP-F13 |
| SIB F13 7 | REV 04 | 750-024564 | DW5758 | SIB-TXP-F13 |
| SIB F13 8 | REV 04 | 750-024564 | DW5761 | SIB-TXP-F13 |
| SIB F13 9 | REV 04 | 750-024564 | DW5754 | SIB-TXP-F13 |
| SIB F13 12 | REV 04 | 750-024564 | DW5794 | SIB-TXP-F13 |
| SIB F2S 0/0 | REV 05 | 710-022603 | DW7897 | |
| SIB F2S 0/2 | REV 05 | 710-022603 | DW7833 | |
| SIB F2S 0/4 | REV 05 | 710-022603 | DW7875 | |
| SIB F2S 0/6 | REV 05 | 710-022603 | DW7860 | |
| SIB F2S 1/0 | REV 04 | 710-022603 | DW4820 | |
| SIB F2S 1/2 | REV 05 | 710-022603 | DW7849 | |
| SIB F2S 1/4 | REV 05 | 710-022603 | DW7927 | SIB-TXP-F2S |
| SIB F2S 1/6 | REV 05 | 710-022603 | DW7866 | |
| SIB F2S 2/0 | REV 05 | 710-022603 | DW7880 | |
| SIB F2S 2/2 | REV 05 | 710-022603 | DW7895 | |
| SIB F2S 2/4 | REV 05 | 710-022603 | DW7907 | |
| SIB F2S 2/6 | REV 05 | 710-022603 | DW7785 | |
| SIB F2S 3/0 | REV 05 | 710-022603 | DW7782 | |
| SIB F2S 3/2 | REV 05 | 710-022603 | DW7793 | |
| SIB F2S 3/4 | REV 05 | 710-022603 | DW7779 | |
| SIB F2S 3/6 | REV 05 | 710-022603 | DW7930 | |
| SIB F2S 4/0 | REV 05 | 710-022603 | DW7867 | |
| SIB F2S 4/2 | REV 05 | 710-022603 | DW7917 | |
| SIB F2S 4/4 | REV 05 | 710-022603 | DW7929 | |
| SIB F2S 4/6 | REV 05 | 710-022603 | DW7870 | |
| Fan Tray 0 | REV 06 | 760-024497 | DV7831 | FANTRAY-TXP-F |
| Fan Tray 1 | REV 06 | 760-024497 | DV9614 | FANTRAY-TXP-F |
| Fan Tray 2 | REV 06 | 760-024502 | DV9618 | FANTRAY-TXP-R |
| Fan Tray 3 | REV 06 | 760-024502 | DV9616 | FANTRAY-TXP-R |
| Fan Tray 4 | REV 06 | 760-024502 | DV7807 | FANTRAY-TXP-R |
| Fan Tray 5 | REV 06 | 760-024502 | DV7828 | FANTRAY-TXP-R |

lcc0-re0:

Hardware inventory:

| Item | Version | Part number | Serial number | FRU model number |
|-------------|---------|-------------|---------------|---------------------|
| Midplane | REV 03 | 710-017247 | RC3765 | CHAS-BP-T1600-S |
| FPM Display | REV 01 | 710-021387 | DN5441 | CRAFT-T1600-S |
| CIP | REV 06 | 710-002895 | DP6021 | CIP-L-T640-S |
| PEM 0 | Rev 07 | 740-017906 | UA26384 | PWR-T1600-3-80-DC-S |
| PEM 1 | Rev 07 | 740-017906 | UA26296 | PWR-T1600-3-80-DC-S |
| SCG 0 | REV 15 | 710-003423 | DR0875 | SCG-T-S |
| CB 0 | REV 06 | 710-022597 | DW8534 | CB-LCC |
| CB 1 | REV 06 | 710-022597 | DW8527 | CB-LCC |
| FPC 4 | REV 12 | 710-013037 | DJ8717 | T1600-FPC4-ES |
| PIC 0 | REV 11 | 750-017405 | DP8795 | PD-4XGE-XFP |
| PIC 1 | REV 11 | 750-017405 | DP8794 | PD-4XGE-XFP |
| FPC 6 | REV 14 | 710-013037 | DS5335 | T1600-FPC4-ES |
| PIC 0 | REV 13 | 750-017405 | DS7634 | PD-4XGE-XFP |
| PIC 1 | REV 13 | 750-017405 | DS7637 | PD-4XGE-XFP |
| FPC 7 | REV 07 | 710-013035 | DM0990 | T1600-FPC3-ES |
| PIC 0 | REV 16 | 750-007141 | JJ8067 | PC-10GE-SFP |
| PIC 1 | REV 08 | 750-015749 | WE9598 | PC-10C192-SON-XFP |
| PIC 2 | REV 10 | 750-009450 | HX6466 | PC-10C192-SON-SR2 |
| SIB 0 | REV 08 | 710-022594 | DW8033 | SIB-TXP-T1600-S |
| SIB 1 | REV 08 | 710-022594 | DW8044 | SIB-TXP-T1600-S |
| SIB 2 | REV 08 | 710-022594 | DW8020 | SIB-TXP-T1600-S |
| SIB 3 | REV 08 | 710-022594 | DW8063 | SIB-TXP-T1600-S |

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SIB 4          REV 08  710-022594  DW8064          SIB-TXP-T1600-S
Fan Tray 0
Fan Tray 1
Fan Tray 2          FANTRAY-T-S
                   FANTRAY-T-S
                   FANTRAY-TXP-R-S

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lcc1-re0:
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Hardware inventory:
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| Item | Version | Part number | Serial number | FRU model number |
|-------------|---------|-------------|---------------|---------------------|
| Midplane | REV 04 | 710-017247 | RC5361 | CHAS-BP-T1600-S |
| FPM Display | REV 01 | 710-021387 | DS6430 | CRAFT-T1600-S |
| CIP | REV 06 | 710-002895 | DS4239 | CIP-L-T640-S |
| PEM 0 | Rev 08 | 740-017906 | UD26649 | PWR-T1600-3-80-DC-S |
| SCG 0 | REV 15 | 710-003423 | DP5820 | SCG-T-S |
| CB 0 | REV 06 | 710-022597 | DW8523 | CB-LCC |
| CB 1 | REV 06 | 710-022597 | DW8528 | CB-LCC |
| FPC 4 | REV 12 | 710-013037 | DP8509 | T1600-FPC4-ES |
| PIC 0 | REV 11 | 750-017405 | DP8808 | PD-4XGE-XFP |
| PIC 1 | REV 11 | 750-017405 | DP7263 | PD-4XGE-XFP |
| FPC 6 | REV 14 | 710-013037 | DS9961 | T1600-FPC4-ES |
| PIC 0 | REV 13 | 750-017405 | DS5532 | PD-4XGE-XFP |
| PIC 1 | REV 13 | 750-017405 | DS7639 | PD-4XGE-XFP |
| FPC 7 | REV 03 | 710-013035 | DF5564 | T1600-FPC3-ES |
| PIC 0 | REV 16 | 750-007141 | JJ8063 | PC-10GE-SFP |
| SIB 0 | REV 08 | 710-022594 | DW8035 | SIB-TXP-T1600-S |
| SIB 1 | REV 10 | 710-022594 | DX7672 | SIB-TXP-T1600-S |
| SIB 2 | REV 08 | 710-022594 | DW8060 | SIB-TXP-T1600-S |
| SIB 3 | REV 08 | 710-022594 | DW8072 | SIB-TXP-T1600-S |
| SIB 4 | REV 08 | 710-022594 | DW8043 | SIB-TXP-T1600-S |
| Fan Tray 0 | | | | FANTRAY-T-S |
| Fan Tray 1 | | | | FANTRAY-T-S |
| Fan Tray 2 | | | | FANTRAY-TXP-R-S |

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lcc2-re0:
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Hardware inventory:
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| Item | Version | Part number | Serial number | FRU model number |
|-------------|---------|-------------|---------------|---------------------|
| Midplane | REV 03 | 710-017247 | RC3956 | CHAS-BP-T1600-S |
| FPM Display | REV 01 | 710-021387 | DN7030 | CRAFT-T1600-S |
| CIP | REV 06 | 710-002895 | DM3962 | CIP-L-T640-S |
| PEM 0 | Rev 08 | 740-017906 | UD26519 | PWR-T1600-3-80-DC-S |
| PEM 1 | Rev 07 | 740-017906 | UC26601 | PWR-T1600-3-80-DC-S |
| SCG 0 | REV 15 | 710-003423 | DP0277 | SCG-T-S |
| CB 0 | REV 06 | 710-022597 | DW8524 | CB-LCC |
| CB 1 | REV 06 | 710-022597 | DW8536 | CB-LCC |
| FPC 4 | REV 12 | 710-013037 | DR1194 | T1600-FPC4-ES |
| PIC 0 | REV 11 | 750-017405 | DP8811 | PD-4XGE-XFP |
| PIC 1 | REV 11 | 750-017405 | DP8823 | PD-4XGE-XFP |
| FPC 5 | REV 12 | 710-013037 | DR1184 | T1600-FPC4-ES |
| PIC 1 | REV 11 | 750-017405 | DP4744 | PD-4XGE-XFP |
| FPC 6 | REV 12 | 710-013037 | DN8622 | T1600-FPC4-ES |
| PIC 0 | REV 14 | 750-012518 | JY9924 | PD-40C192-S0N-XFP |
| PIC 1 | REV 11 | 750-017405 | DP8776 | PD-4XGE-XFP |
| FPC 7 | REV 04 | 710-013560 | JR3968 | T640-FPC3-E2 |
| PIC 0 | REV 16 | 750-007141 | NC9330 | PC-10GE-SFP |
| SIB 0 | REV 07 | 710-022594 | DW4217 | SIB-TXP-T1600-S |
| SIB 1 | REV 07 | 710-022594 | DW4213 | SIB-TXP-T1600-S |
| SIB 2 | REV 07 | 710-022594 | DW4189 | SIB-TXP-T1600-S |
| SIB 3 | REV 07 | 710-022594 | DW4173 | SIB-TXP-T1600-S |
| SIB 4 | REV 07 | 710-022594 | DW4201 | SIB-TXP-T1600-S |
| Fan Tray 0 | | | | FANTRAY-T-S |

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Fan Tray 1
Fan Tray 2

FANTRAY-T-S
FANTRAY-TXP-R-S

lcc3-re0:
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Hardware inventory:
Item          Version  Part number  Serial number  FRU model number
Midplane      REV 04   710-017247  RC5319         CHAS-BP-T1600-S
FPM Display   REV 01   710-021387  DS6402         CRAFT-T1600-S
CIP           REV 06   710-002895  DR9973         CIP-L-T640-S
PEM 0         Rev 07   740-017906  UC26496        PWR-T1600-3-80-DC-S
PEM 1         Rev 07   740-017906  UC26599        PWR-T1600-3-80-DC-S
SCG 0         REV 15   710-003423  DP5831         SCG-T-S
CB 0          REV 06   710-022597  DW8533         CB-LCC
CB 1          REV 06   710-022597  DW8538         CB-LCC
FPC 0         REV 14   710-013037  DS5345         T1600-FPC4-ES
  PIC 0       REV 13   750-017405  DS7641         PD-4XGE-XFP
  PIC 1       REV 13   750-017405  DS5479         PD-4XGE-XFP
FPC 1         REV 14   710-013037  DS7338         T1600-FPC4-ES
  PIC 0       REV 13   750-017405  DS7631         PD-4XGE-XFP
  PIC 1       REV 13   750-017405  DS7632         PD-4XGE-XFP
FPC 2         REV 14   710-013037  DS9962         T1600-FPC4-ES
  PIC 0       REV 13   750-017405  DS7581         PD-4XGE-XFP
  PIC 1       REV 13   750-017405  DS7627         PD-4XGE-XFP
FPC 4         REV 10   710-010845  JZ6573         T640-FPC4-ES
  PIC 0       REV 14   750-012518  JT5124         PD-40C192-SON-XFP
FPC 5         REV 14   710-013037  DT0016         T1600-FPC4-ES
  PIC 0       REV 14   750-012518  JY9918         PD-40C192-SON-XFP
FPC 7         REV 07   710-013035  DM0967         T1600-FPC3-ES
  PIC 0       REV 16   750-007141  JJ8059         PC-10GE-SFP
  PIC 1       REV 13   750-004695  DM5712         PC-TUNNEL
SIB 0         REV 07   710-022594  DW4174         SIB-TXP-T1600-S
SIB 1         REV 07   710-022594  DW4207         SIB-TXP-T1600-S
SIB 2         REV 06   710-022594  DT8231         SIB-TXP-T1600-S
SIB 3         REV 07   710-022594  DW4175         SIB-TXP-T1600-S
SIB 4         REV 07   710-022594  DW4209         SIB-TXP-T1600-S
Fan Tray 0    FANTRAY-T-S
Fan Tray 1    FANTRAY-T-S
Fan Tray 2    FANTRAY-TXP-R-S

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show chassis hardware (TX Matrix Plus Router with 3D SIBs)

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user@host> show chassis hardware
sfc0-re0:
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Hardware inventory:
Item          Version  Part number  Serial number  Description
Chassis              JN11CAAA4AHB  TXP
Midplane            REV 05   710-022574  ABAC4696      SFC Midplane
FPM Display         REV 09   710-024027  EH3138        TXP FPM Display
CIP 0               REV 12   710-023792  EF6349        TXP CIP
CIP 1               REV 12   710-023792  EG5294        TXP CIP
PEM 0               Rev 06   740-027463  XH04595       Power Entry Module
PEM 1               Rev 06   740-027463  XH04592       Power Entry Module
Routing Engine 0    REV 07   740-026942  P737A-002541  RE-DUO-2600
Routing Engine 1    REV 07   740-026942  P737A-002602  RE-DUO-2600
CB 0                REV 15   710-022606  EH4376        SFC Control Board
CB 1                REV 15   710-022606  EH4379        SFC Control Board
SPMB 0              BUILTIN                      SFC Switch CPU
SPMB 1              BUILTIN                      SFC Switch CPU
SIB F13 0           REV 10   750-035002  EM9305        F13 SIB 3D

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| | | | | |
|-------------|--------|------------|-----------|------------------|
| B Board | REV 06 | 711-035082 | EM9667 | F13 SIB 3D Mezz |
| P Board | REV 05 | 711-043544 | EM9708 | F13 SIB 3D Power |
| Xcvr 0 | REV 01 | 740-047547 | XB34FB00S | CXP Module |
| Xcvr 2 | REV 01 | 740-047547 | XB48FB01H | CXP Module |
| Xcvr 4 | REV 01 | 740-047547 | XB34FB02W | CXP Module |
| Xcvr 6 | REV 01 | 740-047547 | XB34FB01T | CXP Module |
| Xcvr 8 | REV 01 | 740-047547 | XB48FB00W | CXP Module |
| Xcvr 10 | REV 01 | 740-047547 | XB34FB01S | CXP Module |
| Xcvr 12 | REV 01 | 740-047547 | XB34FB03H | CXP Module |
| Xcvr 14 | REV 01 | 740-047547 | XB34FB023 | CXP Module |
| SIB F13 3 | REV 01 | 710-035001 | EJ2612 | F13 SIB 3D |
| B Board | REV 01 | 711-035082 | EJ3815 | F13 SIB 3D Mezz |
| P Board | REV 01 | 711-043544 | EJ2678 | F13 SIB 3D Power |
| Xcvr 0 | REV 01 | 740-047547 | XB48FB04C | CXP Module |
| Xcvr 2 | REV 01 | 740-047547 | XB48FB00Z | CXP Module |
| Xcvr 4 | REV 01 | 740-047547 | XB47FB036 | CXP Module |
| Xcvr 6 | REV 01 | 740-047547 | XB47FB029 | CXP Module |
| Xcvr 8 | REV 01 | 740-047547 | XB48FB02N | CXP Module |
| Xcvr 10 | REV 01 | 740-047547 | XB42FB0CS | CXP Module |
| Xcvr 12 | REV 01 | 740-047547 | XB47FB01X | CXP Module |
| Xcvr 14 | REV 01 | 740-047547 | XB48FB02F | CXP Module |
| SIB F13 6 | REV 05 | 750-035002 | EK2675 | F13 SIB 3D |
| B Board | REV 03 | 711-035082 | EK2612 | F13 SIB 3D Mezz |
| P Board | REV 04 | 711-043544 | EK1179 | F13 SIB 3D Power |
| Xcvr 0 | REV 01 | 740-047547 | XB48FB01T | CXP Module |
| Xcvr 2 | REV 01 | 740-047547 | XB48FB02M | CXP Module |
| Xcvr 4 | REV 01 | 740-047547 | XB48FB031 | CXP Module |
| Xcvr 6 | REV 01 | 740-047547 | XB48FB04P | CXP Module |
| Xcvr 8 | REV 01 | 740-047547 | XB48FB02T | CXP Module |
| Xcvr 10 | REV 01 | 740-047547 | XB34FB01V | CXP Module |
| Xcvr 12 | REV 01 | 740-047547 | XB48FB02C | CXP Module |
| Xcvr 14 | | NON-JNPR | | No Module |
| SIB F13 12 | REV 01 | 710-035001 | EJ2631 | F13 SIB 3D |
| B Board | REV 01 | 711-035082 | EJ3808 | F13 SIB 3D Mezz |
| P Board | REV 01 | 711-043544 | EJ2676 | F13 SIB 3D Power |
| SIB F2S 0/0 | REV 01 | 711-034977 | EH9829 | F2S SIB 3D |
| B Board | REV 01 | 711-034979 | EH9927 | F2S SIB 3D Mezz |
| SIB F2S 0/2 | REV 01 | 711-034977 | EH9791 | F2S SIB 3D |
| B Board | REV 01 | 711-034979 | EH9852 | F2S SIB 3D Mezz |
| SIB F2S 0/4 | REV 01 | 711-034977 | EH9803 | F2S SIB 3D |
| B Board | REV 01 | 711-034979 | EH9915 | F2S SIB 3D Mezz |
| SIB F2S 0/6 | REV 01 | 711-034977 | EH9763 | F2S SIB 3D |
| B Board | REV 01 | 711-034979 | EH9880 | F2S SIB 3D Mezz |
| SIB F2S 1/0 | REV 01 | 711-034977 | EH9757 | F2S SIB 3D |
| B Board | REV 01 | 711-034979 | EH9889 | F2S SIB 3D Mezz |
| SIB F2S 1/2 | REV 01 | 711-034977 | EH9815 | F2S SIB 3D |
| B Board | REV 01 | 711-034979 | EH9890 | F2S SIB 3D Mezz |
| SIB F2S 1/4 | REV 08 | 750-034978 | EN1954 | F2S SIB 3D |
| B Board | REV 02 | 711-034979 | EN1436 | F2S SIB 3D Mezz |
| SIB F2S 1/6 | REV 01 | 711-034977 | EJ7054 | F2S SIB 3D |
| B Board | REV 01 | 711-034979 | EJ8238 | F2S SIB 3D Mezz |
| SIB F2S 2/0 | REV 01 | 711-034977 | EH9830 | F2S SIB 3D |
| B Board | REV 01 | 711-034979 | EH9844 | F2S SIB 3D Mezz |
| SIB F2S 2/2 | REV 01 | 711-034977 | EH9818 | F2S SIB 3D |
| B Board | REV 01 | 711-034979 | EH9888 | F2S SIB 3D Mezz |
| SIB F2S 2/4 | REV 01 | 711-034977 | EH9795 | F2S SIB 3D |
| B Board | REV 01 | 711-034979 | EH9869 | F2S SIB 3D Mezz |
| SIB F2S 2/6 | REV 01 | 711-034977 | EJ7026 | F2S SIB 3D |
| B Board | REV 01 | 711-034979 | EJ8273 | F2S SIB 3D Mezz |
| SIB F2S 3/0 | REV 01 | 711-034977 | EH9811 | F2S SIB 3D |
| B Board | REV 01 | 711-034979 | EH9892 | F2S SIB 3D Mezz |

| | | | | |
|-------------|--------|------------|--------|-----------------|
| SIB F2S 3/2 | REV 01 | 711-034977 | EH9812 | F2S SIB 3D |
| B Board | REV 01 | 711-034979 | EH9877 | F2S SIB 3D Mezz |
| SIB F2S 3/4 | REV 08 | 750-034978 | EN1947 | F2S SIB 3D |
| B Board | REV 02 | 711-034979 | EN1471 | F2S SIB 3D Mezz |
| Fan Tray 0 | REV 10 | 760-024497 | EH3313 | Front Fan Tray |
| Fan Tray 1 | REV 10 | 760-024497 | EH3290 | Front Fan Tray |
| Fan Tray 2 | REV 10 | 760-024502 | EH3292 | Rear Fan Tray |
| Fan Tray 3 | REV 10 | 760-024502 | EH3287 | Rear Fan Tray |
| Fan Tray 4 | REV 10 | 760-024502 | EH3286 | Rear Fan Tray |
| Fan Tray 5 | REV 10 | 760-024502 | EH3285 | Rear Fan Tray |

lcc0-re0:

Hardware inventory:

| Item | Version | Part number | Serial number | Description |
|------------------|---------|-------------|---------------|-------------------------|
| Chassis | | | JN11B23FEAHA | T1600 |
| Midplane | REV 01 | 710-027486 | RC9787 | T-series Backplane |
| FPM GBUS | REV 13 | 710-002901 | BBAG5132 | T640 FPM Board |
| FPM Display | REV 04 | 710-021387 | BBAL9612 | T1600 FPM Display |
| CIP | REV 06 | 710-002895 | BBAN0605 | T-series CIP |
| PEM 0 | REV 05 | 740-036442 | 1G022060143 | Power Entry Module 6x60 |
| PEM 1 | REV 05 | 740-036442 | 1G022060011 | Power Entry Module 6x60 |
| SCG 0 | REV 18 | 710-003423 | BBAL7318 | T640 Sonet Clock Gen. |
| SCG 1 | REV 18 | 710-003423 | BBAL7255 | T640 Sonet Clock Gen. |
| Routing Engine 0 | REV 07 | 740-026941 | P737F-002933 | RE-DUO-1800 |
| Routing Engine 1 | REV 06 | 740-026941 | P737F-002749 | RE-DUO-1800 |
| CB 0 | REV 11 | 710-022597 | EH3611 | LCC Control Board |
| CB 1 | REV 11 | 710-022597 | EH4798 | LCC Control Board |
| FPC 5 | REV 17 | 710-013037 | BBAC5333 | FPC Type 4-ES |
| CPU | REV 10 | 710-016744 | BBAB7619 | ST-PMB2 |
| PIC 0 | REV 18 | 750-017405 | BBAE3420 | 4x 10GE (LAN/WAN) XFP |
| Xcvr 0 | REV 03 | 740-014289 | T10C90659 | XFP-10G-SR |
| MMB 0 | REV 05 | 710-025563 | BBAB9538 | ST-MMB2 |
| MMB 1 | REV 05 | 710-025563 | BBAB9502 | ST-MMB2 |
| FPC 7 | REV 01 | 750-045173 | BBAV0032 | FPC Type 5-3D |
| CPU | | | | |
| SPMB 0 | REV 05 | 710-023321 | EG9434 | LCC Switch CPU |
| SPMB 1 | REV 05 | 710-023321 | EH3878 | LCC Switch CPU |
| SIB 0 | REV 01 | 750-041657 | EH7997 | LCC SIB 3D |
| B Board | REV 01 | 711-042424 | EH7674 | LCC SIB 3D Mezz |
| Xcvr 0 | REV 01 | 740-047547 | XB48FB014 | CXP Module |
| Xcvr 2 | REV 01 | 740-047547 | XB48FB05A | CXP Module |
| Xcvr 4 | REV 01 | 740-047547 | XB48FB052 | CXP Module |
| Xcvr 6 | REV 01 | 740-047547 | XB48FB01B | CXP Module |
| SIB 1 | REV 01 | 750-041657 | EH8023 | LCC SIB 3D |
| B Board | REV 01 | 711-042424 | EH7659 | LCC SIB 3D Mezz |
| Xcvr 0 | REV 01 | 740-047547 | XB48FB05J | CXP Module |
| Xcvr 2 | REV 01 | 740-047547 | XB48FB01E | CXP Module |
| Xcvr 4 | REV 01 | 740-047547 | XB48FB01J | CXP Module |
| Xcvr 6 | REV 01 | 740-047547 | XB48FB02S | CXP Module |
| SIB 2 | REV 03 | 750-041657 | EJ6554 | LCC SIB 3D |
| B Board | REV 02 | 711-042424 | EJ5756 | LCC SIB 3D Mezz |
| Xcvr 0 | REV 01 | 740-047547 | XB34FB01Z | CXP Module |
| Xcvr 2 | REV 01 | 740-047547 | XB34FB013 | CXP Module |
| Xcvr 4 | REV 01 | 740-047547 | XB48FB04Z | CXP Module |
| Xcvr 6 | REV 01 | 740-047547 | XB48FB05N | CXP Module |
| Fan Tray 0 | | | | Front Top Fan Tray |
| Fan Tray 1 | | | | Front Bottom Fan Tray |
| Fan Tray 2 | | | | Rear Fan Tray -- Rev 4 |

lcc2-re0:


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Hardware inventory:
Item          Version  Part number  Serial number  Description
Chassis              REV 01  710-027486  JN11B3975AHA  T1600
Midplane              REV 13  710-002901  BBAG5124      T-series Backplane
FPM GBUS              REV 03  710-021387  BBAJ1112      T640 FPM Board
FPM Display           REV 06  710-002895  BBAL3744      T1600 FPM Display
CIP                   REV 05  740-036442  1G022060081   T-series CIP
PEM 0                  REV 05  740-036442  1G022060188   Power Entry Module 6x60
PEM 1                  REV 18  710-003423  BBAH8775      Power Entry Module 6x60
SCG 0                  REV 18  710-003423  BBAL7272      T640 Sonet Clock Gen.
SCG 1                  REV 07  740-026941  P737F-002992  T640 Sonet Clock Gen.
Routing Engine 0       REV 07  740-026941  P737F-002992  RE-DUO-1800
Routing Engine 1       REV 07  740-026941  P737F-002938  RE-DUO-1800
CB 0                   REV 11  710-022597  EH4805        LCC Control Board
CB 1                   REV 11  710-022597  EH4786        LCC Control Board
FPC 1                  REV 01  710-033873  BBAH0320      FPC Type 3-ES
CPU                    REV 11  710-016744  BBAF3281      ST-PMB2
MMB 0                  REV 06  710-025563  BBAF5061      ST-MMB2
FPC 5                  REV 04  710-033871  BBAM5070      FPC Type 4-ES
CPU                    REV 11  710-016744  BBAM6653      ST-PMB2
PIC 1                  REV 20  750-017405  BBAM1296      4x 10GE (LAN/WAN) XFP
Xcvr 0                 REV 03  740-014289  T10B42981     XFP-10G-SR
MMB 1                  REV 07  710-025563  BBAN2631      ST-MMB2
MMB 1                  REV 07  710-025563  BBAN2538      ST-MMB2
SPMB 0                 REV 05  710-023321  EH3903        LCC Switch CPU
SPMB 1                 REV 05  710-023321  EH3902        LCC Switch CPU
SIB 0                  REV 01  750-041657  EH8019        LCC SIB 3D
B Board                REV 01  711-042424  EH7680        LCC SIB 3D Mezz
Xcvr 0                 REV 01  740-047547  XB48FB04F     CXP Module
Xcvr 2                 REV 01  740-047547  XB48FB04S     CXP Module
Xcvr 4                 REV 01  740-047547  XB48FB04B     CXP Module
Xcvr 6                 REV 01  740-047547  XB48FB043     CXP Module
SIB 1                  REV 01  750-041657  EH8012        LCC SIB 3D
B Board                REV 01  711-042424  EH7658        LCC SIB 3D Mezz
Xcvr 0                 REV 01  740-047547  XB48FB05E     CXP Module
Xcvr 2                 REV 01  740-047547  XB48FB01Z     CXP Module
Xcvr 4                 REV 01  740-047547  XB48FB018     CXP Module
Xcvr 6                 REV 01  740-047547  XB48FB054     CXP Module
SIB 2                  REV 01  750-041657  EH7993        LCC SIB 3D
B Board                REV 01  711-042424  EH7678        LCC SIB 3D Mezz
Xcvr 0                 REV 01  740-047547  XB48FB05C     CXP Module
Xcvr 2                 REV 01  740-047547  XB47FB00N     CXP Module
Xcvr 4                 REV 01  740-047547  XB48FB05U     CXP Module
Xcvr 6                 REV 01  740-047547  XB48FB05L     CXP Module
Fan Tray 0              REV 01  740-047547  IPUPAFGKTA    Front Top Fan Tray
Fan Tray 1              REV 01  740-047547  IPUPAFGKTA    Front Bottom Fan Tray
Fan Tray 2              REV 01  740-047547  IPUPAFGKTA    Rear Fan Tray -- Rev 4

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show chassis hardware clei-models (TX Matrix Plus Router with 3D SIBs)

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user@host> show chassis hardware clei-models
sfc0-re0:
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Hardware inventory:
Item          Version  Part number  CLEI code  FRU model number
Midplane              REV 05  710-022574  CHAS-BP-TXP-S
FPM Display           REV 09  710-024027  CRAFT-TXP-S
CIP 0                  REV 12  710-023792  CIP-TXP-S
CIP 1                  REV 12  710-023792  CIP-TXP-S
PEM 0                  Rev 06  740-027463  IPUPAFGKTA  PWR-TXP-7-60-DC-S

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|------------------|--------|------------|------------|--------------------|
| Routing Engine 0 | REV 07 | 740-026942 | | RE-DUO-C2600-16G-S |
| Routing Engine 1 | REV 07 | 740-026942 | | RE-DUO-C2600-16G-S |
| CB 0 | REV 13 | 710-022606 | | CB-TXP-S |
| CB 1 | REV 14 | 710-022606 | | CB-TXP-S |
| SIB F13 0 | REV 10 | 750-035002 | PROTOXCLEI | SIB-TXP-3D-F13-S |
| Xcvr 0 | REV 01 | 740-048813 | | |
| Xcvr 1 | REV 01 | 740-048813 | | |
| Xcvr 2 | REV 01 | 740-048813 | | |
| Xcvr 3 | REV 01 | 740-048813 | | |
| Xcvr 4 | REV 01 | 740-048813 | | |
| Xcvr 5 | REV 01 | 740-048813 | | |
| Xcvr 6 | REV 01 | 740-048813 | | |
| Xcvr 7 | REV 01 | 740-048813 | | |
| Xcvr 8 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 10 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 12 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 14 | REV 01 | 740-047547 | | CXP-TXP-3D |
| SIB F13 1 | REV 10 | 750-035002 | PROTOXCLEI | SIB-TXP-3D-F13-S |
| Xcvr 0 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 1 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 2 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 3 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 4 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 5 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 6 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 7 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 8 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 10 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 12 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 14 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 0 | REV 01 | 740-048813 | | |
| Xcvr 1 | REV 01 | 740-048813 | | |
| Xcvr 2 | REV 01 | 740-048813 | | |
| Xcvr 3 | REV 01 | 740-048813 | | |
| Xcvr 4 | REV 01 | 740-048813 | | |
| Xcvr 5 | REV 01 | 740-048813 | | |
| Xcvr 6 | REV 01 | 740-048813 | | |
| Xcvr 7 | REV 01 | 740-048813 | | |
| Xcvr 8 | REV 01 | 740-048813 | | |
| Xcvr 10 | REV 01 | 740-048813 | | |
| Xcvr 12 | REV 01 | 740-048813 | | |
| Xcvr 14 | REV 01 | 740-048813 | | |
| Xcvr 0 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 1 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 2 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 3 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 4 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 5 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 6 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 7 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 8 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 10 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 12 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 14 | REV 01 | 740-047547 | | CXP-TXP-3D |
| SIB F13 6 | REV 16 | 750-035002 | PROTOXCLEI | SIB-TXP-3D-F13 |
| Xcvr 0 | REV 01 | 740-048813 | | |
| Xcvr 1 | REV 01 | 740-048813 | | |
| Xcvr 2 | REV 01 | 740-048813 | | |
| Xcvr 3 | REV 01 | 740-048813 | | |
| Xcvr 4 | REV 01 | 740-048813 | | |
| Xcvr 5 | REV 01 | 740-048813 | | |

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|------------|--------|------------|------------|------------------|
| Xcvr 6 | REV 01 | 740-048813 | | |
| Xcvr 7 | REV 01 | 740-048813 | | |
| Xcvr 8 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 10 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 12 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 14 | REV 01 | 740-047547 | | CXP-TXP-3D |
| SIB F13 7 | REV 10 | 750-035002 | PROTOXCLEI | SIB-TXP-3D-F13-S |
| Xcvr 0 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 1 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 2 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 3 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 4 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 5 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 6 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 7 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 8 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 10 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 12 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 14 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 0 | REV 01 | 740-048813 | | |
| Xcvr 1 | REV 01 | 740-048813 | | |
| Xcvr 2 | REV 01 | 740-048813 | | |
| Xcvr 3 | REV 01 | 740-048813 | | |
| Xcvr 4 | REV 01 | 740-048813 | | |
| Xcvr 5 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 6 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 7 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 8 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 10 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 12 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 14 | REV 01 | 740-047547 | | CXP-TXP-3D |
| SIB F13 9 | REV 16 | 750-035002 | PROTOXCLEI | SIB-TXP-3D-F13 |
| Xcvr 0 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 1 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 2 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 3 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 4 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 5 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 6 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 7 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 8 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 10 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 12 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 14 | REV 01 | 740-047547 | | CXP-TXP-3D |
| SIB F13 11 | REV 10 | 750-035002 | PROTOXCLEI | 750-035002 |
| Xcvr 0 | REV 01 | 740-048813 | | |
| Xcvr 1 | REV 01 | 740-048813 | | |
| Xcvr 2 | REV 01 | 740-048813 | | |
| Xcvr 3 | REV 01 | 740-048813 | | |
| Xcvr 4 | REV 01 | 740-048813 | | |
| Xcvr 5 | REV 01 | 740-048813 | | |
| Xcvr 6 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 7 | REV 01 | 740-048813 | | |
| Xcvr 8 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 12 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 14 | REV 01 | 740-047547 | | CXP-TXP-3D |
| SIB F13 12 | REV 16 | 750-035002 | PROTOXCLEI | SIB-TXP-3D-F13 |
| Xcvr 0 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 1 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 2 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 3 | REV 01 | 740-047547 | | CXP-TXP-3D |

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|-------------|--------|------------|------------|-----------------|
| Xcvr 4 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 5 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 6 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 7 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 8 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 10 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 12 | REV 01 | 740-047547 | | CXP-TXP-3D |
| Xcvr 14 | REV 01 | 740-047547 | | CXP-TXP-3D |
| SIB F2S 0/0 | REV 06 | 750-034978 | PROTOXCLEI | SIB-TXP-3D-F2S |
| SIB F2S 0/2 | REV 07 | 750-034978 | PROTOXCLEI | SIB-TXP-3D-F2S |
| SIB F2S 0/4 | REV 06 | 750-034978 | PROTOXCLEI | SIB-TXP-3D-F2S |
| SIB F2S 0/6 | REV 06 | 750-034978 | PROTOXCLEI | SIB-TXP-3D-F2S |
| SIB F2S 1/0 | REV 07 | 750-034978 | PROTOXCLEI | SIB-TXP-3D-F2S |
| SIB F2S 1/2 | REV 07 | 750-034978 | PROTOXCLEI | SIB-TXP-3D-F2S |
| SIB F2S 1/4 | REV 07 | 750-034978 | PROTOXCLEI | SIB-TXP-3D-F2S |
| SIB F2S 1/6 | REV 08 | 750-034978 | PROTOXCLEI | SIB-TXP-3D-F2S |
| SIB F2S 2/0 | REV 06 | 750-034978 | PROTOXCLEI | SIB-TXP-3D-F2S |
| SIB F2S 2/2 | REV 06 | 750-034978 | PROTOXCLEI | SIB-TXP-3D-F2S |
| SIB F2S 2/4 | REV 07 | 750-034978 | PROTOXCLEI | SIB-TXP-3D-F2S |
| SIB F2S 2/6 | REV 06 | 750-034978 | PROTOXCLEI | SIB-TXP-3D-F2S |
| SIB F2S 3/0 | REV 07 | 750-034978 | PROTOXCLEI | SIB-TXP-3D-F2S |
| SIB F2S 3/2 | REV 06 | 750-034978 | PROTOXCLEI | SIB-TXP-3D-F2S |
| SIB F2S 3/4 | REV 06 | 750-034978 | PROTOXCLEI | SIB-TXP-3D-F2S |
| SIB F2S 3/6 | REV 06 | 750-034978 | PROTOXCLEI | SIB-TXP-3D-F2S |
| SIB F2S 4/0 | REV 07 | 750-034978 | PROTOXCLEI | SIB-TXP-3D-F2S |
| SIB F2S 4/2 | REV 06 | 750-034978 | PROTOXCLEI | SIB-TXP-3D-F2S |
| SIB F2S 4/4 | REV 06 | 750-034978 | PROTOXCLEI | SIB-TXP-3D-F2S |
| SIB F2S 4/6 | REV 06 | 750-034978 | PROTOXCLEI | SIB-TXP-3D-F2S |
| Fan Tray 0 | REV 10 | 760-024497 | | FANTRAY-TXP-H-S |
| Fan Tray 1 | REV 10 | 760-024497 | | FANTRAY-TXP-H-S |
| Fan Tray 2 | REV 10 | 760-024502 | | FANTRAY-TXP-V-S |
| Fan Tray 3 | REV 10 | 760-024502 | | FANTRAY-TXP-V-S |
| Fan Tray 4 | REV 10 | 760-024502 | | FANTRAY-TXP-V-S |
| Fan Tray 5 | REV 10 | 760-024502 | | FANTRAY-TXP-V-S |

lcc0-re0:

Hardware inventory:

| Item | Version | Part number | CLEI code | FRU model number |
|------------------|---------|-------------|------------|-------------------|
| Midplane | REV 01 | 710-027486 | IPMJ700DRD | CHAS-BP-T1600-S |
| FPM Display | REV 04 | 710-021387 | | CRAFT-T1600-S |
| CIP | REV 06 | 710-002895 | | CIP-L-T640-S |
| PEM 0 | REV 05 | 740-036442 | IPUPAG6KAA | PWR-T-6-60-DC-S |
| PEM 1 | REV 05 | 740-036442 | IPUPAG6KAA | PWR-T-6-60-DC-S |
| SCG 0 | REV 18 | 710-003423 | | SCG-T-S |
| SCG 1 | REV 18 | 710-003423 | | SCG-T-S |
| Routing Engine 0 | REV 10 | 740-026941 | | RE-DUO-C1800-8G-S |
| Routing Engine 1 | REV 07 | 740-026941 | | RE-DUO-C1800-8G-S |
| CB 0 | REV 11 | 710-022597 | | CB-LCC-S |
| CB 1 | REV 11 | 710-022597 | | CB-LCC-S |
| FPC 0 | REV 01 | 750-045173 | IP9IAL4DAB | T4000-FPC5-3D |
| PIC 0 | REV 17 | 750-034624 | IP9IAL2DAA | PF-12XGE-SFPP |
| PIC 1 | REV 17 | 750-034624 | IP9IAL2DAA | PF-12XGE-SFPP |
| FPC 3 | REV 01 | 750-045173 | IP9IAL4DAB | T4000-FPC5-3D |
| PIC 0 | REV 13 | 750-033423 | XXXXXXXXDD | PF-12-24XGE-SFPP |
| FPC 4 | REV 02 | 750-045173 | IP9IAL4DAC | T4000-FPC5-3D |
| PIC 0 | REV 17 | 750-034624 | IP9IAL2DAA | PF-12XGE-SFPP |
| PIC 1 | REV 17 | 750-034624 | IP9IAL2DAA | PF-12XGE-SFPP |
| FPC 5 | REV 01 | 750-045173 | IP9IAL4DAB | T4000-FPC5-3D |
| PIC 0 | REV 17 | 750-034624 | IP9IAL2DAA | PF-12XGE-SFPP |
| PIC 1 | REV 17 | 750-034624 | IP9IAL2DAA | PF-12XGE-SFPP |

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|--------------------|--------|------------|------------|-----------------------|
| FPC 6 | REV 01 | 750-045173 | IP9IAL4DAB | T4000-FPC5-3D |
| PIC 0 | REV 17 | 750-034624 | IP9IAL2DAA | PF-12XGE-SFPP |
| PIC 1 | REV 10 | 750-035293 | IP9IAL3DAA | PF-1CGE-CFP |
| SIB 0 | REV 06 | 750-041657 | PROTOXCLEI | SIB-TXP-3D-LCC |
| Xcvr 0 | REV 01 | 740-048813 | | |
| Xcvr 1 | REV 01 | 740-048813 | | |
| Xcvr 2 | REV 01 | 740-048813 | | |
| Xcvr 3 | REV 01 | 740-048813 | | |
| Xcvr 4 | REV 01 | 740-048813 | | |
| Xcvr 5 | REV 01 | 740-048813 | | |
| Xcvr 6 | REV 01 | 740-048813 | | |
| Xcvr 7 | REV 01 | 740-048813 | | |
| SIB 1 | REV 06 | 750-041657 | PROTOXCLEI | SIB-TXP-3D-LCC |
| Xcvr 0 | REV 01 | 740-048813 | | |
| Xcvr 1 | REV 01 | 740-048813 | | |
| Xcvr 2 | REV 01 | 740-048813 | | |
| Xcvr 3 | REV 01 | 740-048813 | | |
| Xcvr 4 | REV 01 | 740-048813 | | |
| Xcvr 5 | REV 01 | 740-048813 | | |
| Xcvr 6 | REV 01 | 740-048813 | | |
| Xcvr 7 | REV 01 | 740-048813 | | |
| SIB 2 | REV 06 | 750-041657 | PROTOXCLEI | SIB-TXP-3D-LCC |
| Xcvr 0 | REV 01 | 740-048813 | | |
| Xcvr 1 | REV 01 | 740-048813 | | |
| Xcvr 2 | REV 01 | 740-048813 | | |
| Xcvr 3 | REV 01 | 740-048813 | | |
| Xcvr 4 | REV 01 | 740-048813 | | |
| Xcvr 5 | REV 01 | 740-048813 | | |
| Xcvr 6 | REV 01 | 740-048813 | | |
| Xcvr 7 | REV 01 | 740-048813 | | |
| SIB 3 | REV 07 | 750-041657 | PROTOXCLEI | SIB-TXP-3D-LCC |
| Xcvr 0 | REV 01 | 740-048813 | | |
| Xcvr 1 | REV 01 | 740-048813 | | |
| Xcvr 2 | REV 01 | 740-048813 | | |
| Xcvr 3 | REV 01 | 740-048813 | | |
| Xcvr 4 | REV 01 | 740-048813 | | |
| Xcvr 5 | REV 01 | 740-048813 | | |
| Xcvr 6 | REV 01 | 740-048813 | | |
| Xcvr 7 | REV 01 | 740-048813 | | |
| SIB 4 | REV 06 | 750-041657 | PROTOXCLEI | SIB-TXP-3D-LCC |
| Xcvr 0 | REV 01 | 740-048813 | | |
| Xcvr 1 | REV 01 | 740-048813 | | |
| Xcvr 2 | REV 01 | 740-048813 | | |
| Xcvr 3 | REV 01 | 740-048813 | | |
| Xcvr 4 | REV 01 | 740-048813 | | |
| Xcvr 5 | REV 01 | 740-048813 | | |
| Xcvr 6 | REV 01 | 740-048813 | | |
| Xcvr 7 | REV 01 | 740-048813 | | |
| Fan Tray 0 | | | | FANTRAY-T-S |
| Fan Tray 1 | | | | FANTRAY-T-S |
| Fan Tray 2 | | | | FANTRAY-TXP3D-LCC-R-S |
| [Output Truncated] | | | | |

show chassis hardware detail (TX Matrix Plus Router with 3D SIBs)

```
user@host> show chassis hardware detail
sfc0-re0:
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Hardware inventory:
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| Item | Version | Part number | Serial number | Description |
|---------|---------|-------------|---------------|-------------|
| Chassis | | | JN11CAA4AHB | TXP |

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|------------------|-----------------------|------------|----------------------|--------------------|
| Midplane | REV 05 | 710-022574 | ABAC4696 | SFC Midplane |
| FPM Display | REV 09 | 710-024027 | EH3138 | TXP FPM Display |
| CIP 0 | REV 12 | 710-023792 | EF6349 | TXP CIP |
| CIP 1 | REV 12 | 710-023792 | EG5294 | TXP CIP |
| PEM 0 | Rev 06 | 740-027463 | XH04595 | Power Entry Module |
| PEM 1 | Rev 06 | 740-027463 | XH04592 | Power Entry Module |
| Routing Engine 0 | REV 07 | 740-026942 | P737A-002541 | RE-DUO-2600 |
| ad0 3823 MB | SMART CF | | 2011030400062C132C13 | Compact Flash |
| ad1 62720 MB | SMART Lite SATA Drive | | 201105100009A452A452 | Disk 1 |
| Routing Engine 1 | REV 07 | 740-026942 | P737A-002602 | RE-DUO-2600 |
| ad0 3823 MB | SMART CF | | 20110508085EE471E471 | Compact Flash |
| ad1 62720 MB | SMART Lite SATA Drive | | 201110210089DF39DF39 | Disk 1 |
| CB 0 | REV 15 | 710-022606 | EH4376 | SFC Control Board |
| CB 1 | REV 15 | 710-022606 | EH4379 | SFC Control Board |
| SPMB 0 | | BUILTIN | | SFC Switch CPU |
| SPMB 1 | | BUILTIN | | SFC Switch CPU |
| SIB F13 0 | REV 10 | 750-035002 | EM9305 | F13 SIB 3D |
| B Board | REV 06 | 711-035082 | EM9667 | F13 SIB 3D Mezz |
| P Board | REV 05 | 711-043544 | EM9708 | F13 SIB 3D Power |
| Xcvr 0 | REV 01 | 740-047547 | XB34FB00S | CXP Module |
| Xcvr 2 | REV 01 | 740-047547 | XB48FB01H | CXP Module |
| Xcvr 4 | REV 01 | 740-047547 | XB34FB02W | CXP Module |
| Xcvr 6 | REV 01 | 740-047547 | XB34FB01T | CXP Module |
| Xcvr 8 | REV 01 | 740-047547 | XB48FB00W | CXP Module |
| Xcvr 10 | REV 01 | 740-047547 | XB34FB01S | CXP Module |
| Xcvr 12 | REV 01 | 740-047547 | XB34FB03H | CXP Module |
| Xcvr 14 | REV 01 | 740-047547 | XB34FB023 | CXP Module |
| SIB F13 3 | REV 01 | 710-035001 | EJ2612 | F13 SIB 3D |
| B Board | REV 01 | 711-035082 | EJ3815 | F13 SIB 3D Mezz |
| P Board | REV 01 | 711-043544 | EJ2678 | F13 SIB 3D Power |
| Xcvr 0 | REV 01 | 740-047547 | XB48FB04C | CXP Module |
| Xcvr 2 | REV 01 | 740-047547 | XB48FB00Z | CXP Module |
| Xcvr 4 | REV 01 | 740-047547 | XB47FB036 | CXP Module |
| Xcvr 6 | REV 01 | 740-047547 | XB47FB029 | CXP Module |
| Xcvr 8 | REV 01 | 740-047547 | XB48FB02N | CXP Module |
| Xcvr 10 | REV 01 | 740-047547 | XB42FB0CS | CXP Module |
| Xcvr 12 | REV 01 | 740-047547 | XB47FB01X | CXP Module |
| Xcvr 14 | REV 01 | 740-047547 | XB48FB02F | CXP Module |
| SIB F13 6 | REV 05 | 750-035002 | EK2675 | F13 SIB 3D |
| B Board | REV 03 | 711-035082 | EK2612 | F13 SIB 3D Mezz |
| P Board | REV 04 | 711-043544 | EK1179 | F13 SIB 3D Power |
| Xcvr 0 | REV 01 | 740-047547 | XB48FB01T | CXP Module |
| Xcvr 2 | REV 01 | 740-047547 | XB48FB02M | CXP Module |
| Xcvr 4 | REV 01 | 740-047547 | XB48FB031 | CXP Module |
| Xcvr 6 | REV 01 | 740-047547 | XB48FB04P | CXP Module |
| Xcvr 8 | REV 01 | 740-047547 | XB48FB02T | CXP Module |
| Xcvr 10 | REV 01 | 740-047547 | XB34FB01V | CXP Module |
| Xcvr 12 | REV 01 | 740-047547 | XB48FB02C | CXP Module |
| Xcvr 14 | | NON-JNPR | | No Module |
| SIB F13 12 | REV 01 | 710-035001 | EJ2631 | F13 SIB 3D |
| B Board | REV 01 | 711-035082 | EJ3808 | F13 SIB 3D Mezz |
| P Board | REV 01 | 711-043544 | EJ2676 | F13 SIB 3D Power |
| SIB F2S 0/0 | REV 01 | 711-034977 | EH9829 | F2S SIB 3D |
| B Board | REV 01 | 711-034979 | EH9927 | F2S SIB 3D Mezz |
| SIB F2S 0/2 | REV 01 | 711-034977 | EH9791 | F2S SIB 3D |
| B Board | REV 01 | 711-034979 | EH9852 | F2S SIB 3D Mezz |
| SIB F2S 0/4 | REV 01 | 711-034977 | EH9803 | F2S SIB 3D |
| B Board | REV 01 | 711-034979 | EH9915 | F2S SIB 3D Mezz |
| SIB F2S 0/6 | REV 01 | 711-034977 | EH9763 | F2S SIB 3D |
| B Board | REV 01 | 711-034979 | EH9880 | F2S SIB 3D Mezz |
| SIB F2S 1/0 | REV 01 | 711-034977 | EH9757 | F2S SIB 3D |

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|-------------|--------|------------|--------|-----------------|
| B Board | REV 01 | 711-034979 | EH9889 | F2S SIB 3D Mezz |
| SIB F2S 1/2 | REV 01 | 711-034977 | EH9815 | F2S SIB 3D |
| B Board | REV 01 | 711-034979 | EH9890 | F2S SIB 3D Mezz |
| SIB F2S 1/4 | REV 08 | 750-034978 | EN1954 | F2S SIB 3D |
| B Board | REV 02 | 711-034979 | EN1436 | F2S SIB 3D Mezz |
| SIB F2S 1/6 | REV 01 | 711-034977 | EJ7054 | F2S SIB 3D |
| B Board | REV 01 | 711-034979 | EJ8238 | F2S SIB 3D Mezz |
| SIB F2S 2/0 | REV 01 | 711-034977 | EH9830 | F2S SIB 3D |
| B Board | REV 01 | 711-034979 | EH9844 | F2S SIB 3D Mezz |
| SIB F2S 2/2 | REV 01 | 711-034977 | EH9818 | F2S SIB 3D |
| B Board | REV 01 | 711-034979 | EH9888 | F2S SIB 3D Mezz |
| SIB F2S 2/4 | REV 01 | 711-034977 | EH9795 | F2S SIB 3D |
| B Board | REV 01 | 711-034979 | EH9869 | F2S SIB 3D Mezz |
| SIB F2S 2/6 | REV 01 | 711-034977 | EJ7026 | F2S SIB 3D |
| B Board | REV 01 | 711-034979 | EJ8273 | F2S SIB 3D Mezz |
| SIB F2S 3/0 | REV 01 | 711-034977 | EH9811 | F2S SIB 3D |
| B Board | REV 01 | 711-034979 | EH9892 | F2S SIB 3D Mezz |
| SIB F2S 3/2 | REV 01 | 711-034977 | EH9812 | F2S SIB 3D |
| B Board | REV 01 | 711-034979 | EH9877 | F2S SIB 3D Mezz |
| SIB F2S 3/4 | REV 08 | 750-034978 | EN1947 | F2S SIB 3D |
| B Board | REV 02 | 711-034979 | EN1471 | F2S SIB 3D Mezz |
| Fan Tray 0 | REV 10 | 760-024497 | EH3313 | Front Fan Tray |
| Fan Tray 1 | REV 10 | 760-024497 | EH3290 | Front Fan Tray |
| Fan Tray 2 | REV 10 | 760-024502 | EH3292 | Rear Fan Tray |
| Fan Tray 3 | REV 10 | 760-024502 | EH3287 | Rear Fan Tray |
| Fan Tray 4 | REV 10 | 760-024502 | EH3286 | Rear Fan Tray |
| Fan Tray 5 | REV 10 | 760-024502 | EH3285 | Rear Fan Tray |

1cc0-re0:

Hardware inventory:

| Item | Version | Part number | Serial number | Description |
|------------------|----------|-----------------------|----------------------|-------------------------|
| Chassis | | | JN11B23FEAHA | T1600 |
| Midplane | REV 01 | 710-027486 | RC9787 | T-series Backplane |
| FPM GBUS | REV 13 | 710-002901 | BBAG5132 | T640 FPM Board |
| FPM Display | REV 04 | 710-021387 | BBAL9612 | T1600 FPM Display |
| CIP | REV 06 | 710-002895 | BBAN0605 | T-series CIP |
| PEM 0 | REV 05 | 740-036442 | 1G022060143 | Power Entry Module 6x60 |
| PEM 1 | REV 05 | 740-036442 | 1G022060011 | Power Entry Module 6x60 |
| SCG 0 | REV 18 | 710-003423 | BBAL7318 | T640 Sonet Clock Gen. |
| SCG 1 | REV 18 | 710-003423 | BBAL7255 | T640 Sonet Clock Gen. |
| Routing Engine 0 | REV 07 | 740-026941 | P737F-002933 | RE-DUO-1800 |
| ad0 | 3823 MB | SMART CF | 201103030490604E604E | Compact Flash |
| ad1 | 62720 MB | SMART Lite SATA Drive | 20110729028B11D411D4 | Disk 1 |
| Routing Engine 1 | REV 06 | 740-026941 | P737F-002749 | RE-DUO-1800 |
| ad0 | 3823 MB | SMART CF | 2011010504EB99649964 | Compact Flash |
| ad1 | 62720 MB | SMART Lite SATA Drive | 201102140058934A934A | Disk 1 |
| CB 0 | REV 11 | 710-022597 | EH3611 | LCC Control Board |
| CB 1 | REV 11 | 710-022597 | EH4798 | LCC Control Board |
| FPC 5 | REV 17 | 710-013037 | BBAC5333 | FPC Type 4-ES |
| CPU | REV 10 | 710-016744 | BBAB7619 | ST-PMB2 |
| PIC 0 | REV 18 | 750-017405 | BBAE3420 | 4x 10GE (LAN/WAN) XFP |
| Xcvr 0 | REV 03 | 740-014289 | T10C90659 | XFP-10G-SR |
| MMB 0 | REV 05 | 710-025563 | BBAB9538 | ST-MMB2 |
| MMB 1 | REV 05 | 710-025563 | BBAB9502 | ST-MMB2 |
| FPC 7 | REV 01 | 750-045173 | BBAV0032 | FPC Type 5-3D |
| CPU | | | | |
| SPMB 0 | REV 05 | 710-023321 | EG9434 | LCC Switch CPU |
| SPMB 1 | REV 05 | 710-023321 | EH3878 | LCC Switch CPU |
| SIB 0 | REV 01 | 750-041657 | EH7997 | LCC SIB 3D |
| B Board | REV 01 | 711-042424 | EH7674 | LCC SIB 3D Mezz |

| | | | | |
|------------|--------|------------|-----------|------------------------|
| Xcvr 0 | REV 01 | 740-047547 | XB48FB014 | CXP Module |
| Xcvr 2 | REV 01 | 740-047547 | XB48FB05A | CXP Module |
| Xcvr 4 | REV 01 | 740-047547 | XB48FB052 | CXP Module |
| Xcvr 6 | REV 01 | 740-047547 | XB48FB01B | CXP Module |
| SIB 1 | REV 01 | 750-041657 | EH8023 | LCC SIB 3D |
| B Board | REV 01 | 711-042424 | EH7659 | LCC SIB 3D Mezz |
| Xcvr 0 | REV 01 | 740-047547 | XB48FB05J | CXP Module |
| Xcvr 2 | REV 01 | 740-047547 | XB48FB01E | CXP Module |
| Xcvr 4 | REV 01 | 740-047547 | XB48FB01J | CXP Module |
| Xcvr 6 | REV 01 | 740-047547 | XB48FB02S | CXP Module |
| SIB 2 | REV 03 | 750-041657 | EJ6554 | LCC SIB 3D |
| B Board | REV 02 | 711-042424 | EJ5756 | LCC SIB 3D Mezz |
| Xcvr 0 | REV 01 | 740-047547 | XB34FB01Z | CXP Module |
| Xcvr 2 | REV 01 | 740-047547 | XB34FB013 | CXP Module |
| Xcvr 4 | REV 01 | 740-047547 | XB48FB04Z | CXP Module |
| Xcvr 6 | REV 01 | 740-047547 | XB48FB05N | CXP Module |
| Fan Tray 0 | | | | Front Top Fan Tray |
| Fan Tray 1 | | | | Front Bottom Fan Tray |
| Fan Tray 2 | | | | Rear Fan Tray -- Rev 4 |

lcc2-re0:

Hardware inventory:

| Item | Version | Part number | Serial number | Description |
|------------------|-----------------------|-------------|----------------------|-------------------------|
| Chassis | | | JN11B3975AHA | T1600 |
| Midplane | REV 01 | 710-027486 | RC9826 | T-series Backplane |
| FPM GBUS | REV 13 | 710-002901 | BBAG5124 | T640 FPM Board |
| FPM Display | REV 03 | 710-021387 | BBAJ1112 | T1600 FPM Display |
| CIP | REV 06 | 710-002895 | BBAL3744 | T-series CIP |
| PEM 0 | REV 05 | 740-036442 | 1G022060081 | Power Entry Module 6x60 |
| PEM 1 | REV 05 | 740-036442 | 1G022060188 | Power Entry Module 6x60 |
| SCG 0 | REV 18 | 710-003423 | BBAH8775 | T640 Sonet Clock Gen. |
| SCG 1 | REV 18 | 710-003423 | BBAL7272 | T640 Sonet Clock Gen. |
| Routing Engine 0 | REV 07 | 740-026941 | P737F-002992 | RE-DUO-1800 |
| ad0 3823 MB | SMART CF | | 201103030356329E329E | Compact Flash |
| ad1 62720 MB | SMART Lite SATA Drive | | 2011051000488D8B8D8B | Disk 1 |
| Routing Engine 1 | REV 07 | 740-026941 | P737F-002938 | RE-DUO-1800 |
| ad0 3823 MB | SMART CF | | 20110304000F02680268 | Compact Flash |
| ad1 62720 MB | SMART Lite SATA Drive | | 201105300A70F325F325 | Disk 1 |
| CB 0 | REV 11 | 710-022597 | EH4805 | LCC Control Board |
| CB 1 | REV 11 | 710-022597 | EH4786 | LCC Control Board |
| FPC 1 | REV 01 | 710-033873 | BBAH0320 | FPC Type 3-ES |
| CPU | REV 11 | 710-016744 | BBAF3281 | ST-PMB2 |
| MMB 0 | REV 06 | 710-025563 | BBAF5061 | ST-MMB2 |
| FPC 5 | REV 04 | 710-033871 | BBAM5070 | FPC Type 4-ES |
| CPU | REV 11 | 710-016744 | BBAM6653 | ST-PMB2 |
| PIC 1 | REV 20 | 750-017405 | BBAM1296 | 4x 10GE (LAN/WAN) XFP |
| Xcvr 0 | REV 03 | 740-014289 | T10B42981 | XFP-10G-SR |
| MMB 0 | REV 07 | 710-025563 | BBAN2631 | ST-MMB2 |
| MMB 1 | REV 07 | 710-025563 | BBAN2538 | ST-MMB2 |
| SPMB 0 | REV 05 | 710-023321 | EH3903 | LCC Switch CPU |
| SPMB 1 | REV 05 | 710-023321 | EH3902 | LCC Switch CPU |
| SIB 0 | REV 01 | 750-041657 | EH8019 | LCC SIB 3D |
| B Board | REV 01 | 711-042424 | EH7680 | LCC SIB 3D Mezz |
| Xcvr 0 | REV 01 | 740-047547 | XB48FB04F | CXP Module |
| Xcvr 2 | REV 01 | 740-047547 | XB48FB04S | CXP Module |
| Xcvr 4 | REV 01 | 740-047547 | XB48FB04B | CXP Module |
| Xcvr 6 | REV 01 | 740-047547 | XB48FB043 | CXP Module |
| SIB 1 | REV 01 | 750-041657 | EH8012 | LCC SIB 3D |
| B Board | REV 01 | 711-042424 | EH7658 | LCC SIB 3D Mezz |
| Xcvr 0 | REV 01 | 740-047547 | XB48FB05E | CXP Module |

| | | | | |
|------------|--------|------------|-----------|------------------------|
| Xcvr 2 | REV 01 | 740-047547 | XB48FB01Z | CXP Module |
| Xcvr 4 | REV 01 | 740-047547 | XB48FB018 | CXP Module |
| Xcvr 6 | REV 01 | 740-047547 | XB48FB054 | CXP Module |
| SIB 2 | REV 01 | 750-041657 | EH7993 | LCC SIB 3D |
| B Board | REV 01 | 711-042424 | EH7678 | LCC SIB 3D Mezz |
| Xcvr 0 | REV 01 | 740-047547 | XB48FB05C | CXP Module |
| Xcvr 2 | REV 01 | 740-047547 | XB47FB00N | CXP Module |
| Xcvr 4 | REV 01 | 740-047547 | XB48FB05U | CXP Module |
| Xcvr 6 | REV 01 | 740-047547 | XB48FB05L | CXP Module |
| Fan Tray 0 | | | | Front Top Fan Tray |
| Fan Tray 1 | | | | Front Bottom Fan Tray |
| Fan Tray 2 | | | | Rear Fan Tray -- Rev 4 |

show chassis hardware lcc (TX Matrix Plus Router with 3D SIBs)

```
user@host> show chassis hardware lcc 0
lcc0-re0:
```

Hardware inventory:

| Item | Version | Part number | Serial number | Description |
|------------------|---------|-------------|---------------|-------------------------|
| Chassis | | | JN11B23FEAHA | T1600 |
| Midplane | REV 01 | 710-027486 | RC9787 | T-series Backplane |
| FPM GBUS | REV 13 | 710-002901 | BBAG5132 | T640 FPM Board |
| FPM Display | REV 04 | 710-021387 | BBAL9612 | T1600 FPM Display |
| CIP | REV 06 | 710-002895 | BBAN0605 | T-series CIP |
| PEM 0 | REV 05 | 740-036442 | 1G022060143 | Power Entry Module 6x60 |
| PEM 1 | REV 05 | 740-036442 | 1G022060011 | Power Entry Module 6x60 |
| SCG 0 | REV 18 | 710-003423 | BBAL7318 | T640 Sonet Clock Gen. |
| SCG 1 | REV 18 | 710-003423 | BBAL7255 | T640 Sonet Clock Gen. |
| Routing Engine 0 | REV 07 | 740-026941 | P737F-002933 | RE-DUO-1800 |
| Routing Engine 1 | REV 06 | 740-026941 | P737F-002749 | RE-DUO-1800 |
| CB 0 | REV 11 | 710-022597 | EH3611 | LCC Control Board |
| CB 1 | REV 11 | 710-022597 | EH4798 | LCC Control Board |
| FPC 5 | REV 17 | 710-013037 | BBAC5333 | FPC Type 4-ES |
| CPU | REV 10 | 710-016744 | BBAB7619 | ST-PMB2 |
| PIC 0 | REV 18 | 750-017405 | BBAE3420 | 4x 10GE (LAN/WAN) XFP |
| Xcvr 0 | REV 03 | 740-014289 | T10C90659 | XFP-10G-SR |
| MMB 0 | REV 05 | 710-025563 | BBAB9538 | ST-MMB2 |
| MMB 1 | REV 05 | 710-025563 | BBAB9502 | ST-MMB2 |
| FPC 7 | REV 01 | 750-045173 | BBAV0032 | FPC Type 5-3D |
| CPU | | | | |
| SPMB 0 | REV 05 | 710-023321 | EG9434 | LCC Switch CPU |
| SPMB 1 | REV 05 | 710-023321 | EH3878 | LCC Switch CPU |
| SIB 0 | REV 01 | 750-041657 | EH7997 | LCC SIB 3D |
| B Board | REV 01 | 711-042424 | EH7674 | LCC SIB 3D Mezz |
| Xcvr 0 | REV 01 | 740-047547 | XB48FB014 | CXP Module |
| Xcvr 2 | REV 01 | 740-047547 | XB48FB05A | CXP Module |
| Xcvr 4 | REV 01 | 740-047547 | XB48FB052 | CXP Module |
| Xcvr 6 | REV 01 | 740-047547 | XB48FB01B | CXP Module |
| SIB 1 | REV 01 | 750-041657 | EH8023 | LCC SIB 3D |
| B Board | REV 01 | 711-042424 | EH7659 | LCC SIB 3D Mezz |
| Xcvr 0 | REV 01 | 740-047547 | XB48FB05J | CXP Module |
| Xcvr 2 | REV 01 | 740-047547 | XB48FB01E | CXP Module |
| Xcvr 4 | REV 01 | 740-047547 | XB48FB01J | CXP Module |
| Xcvr 6 | REV 01 | 740-047547 | XB48FB02S | CXP Module |
| SIB 2 | REV 03 | 750-041657 | EJ6554 | LCC SIB 3D |
| B Board | REV 02 | 711-042424 | EJ5756 | LCC SIB 3D Mezz |
| Xcvr 0 | REV 01 | 740-047547 | XB34FB01Z | CXP Module |
| Xcvr 2 | REV 01 | 740-047547 | XB34FB013 | CXP Module |
| Xcvr 4 | REV 01 | 740-047547 | XB48FB04Z | CXP Module |
| Xcvr 6 | REV 01 | 740-047547 | XB48FB05N | CXP Module |

Fan Tray 0
Fan Tray 1
Fan Tray 2

Front Top Fan Tray
Front Bottom Fan Tray
Rear Fan Tray -- Rev 4

show chassis hardware sfc (TX Matrix Plus Router with 3D SIBs)

```
user@host> show chassis hardware sfc 0
sfc0-re0:
```

Hardware inventory:

| Item | Version | Part number | Serial number | Description |
|------------------|---------|-------------|---------------|--------------------|
| Chassis | | | JN11CAAA4AHB | TXP |
| Midplane | REV 05 | 710-022574 | ABAC4696 | SFC Midplane |
| FPM Display | REV 09 | 710-024027 | EH3138 | TXP FPM Display |
| CIP 0 | REV 12 | 710-023792 | EF6349 | TXP CIP |
| CIP 1 | REV 12 | 710-023792 | EG5294 | TXP CIP |
| PEM 0 | Rev 06 | 740-027463 | XH04595 | Power Entry Module |
| PEM 1 | Rev 06 | 740-027463 | XH04592 | Power Entry Module |
| Routing Engine 0 | REV 07 | 740-026942 | P737A-002541 | RE-DUO-2600 |
| Routing Engine 1 | REV 07 | 740-026942 | P737A-002602 | RE-DUO-2600 |
| CB 0 | REV 15 | 710-022606 | EH4376 | SFC Control Board |
| CB 1 | REV 15 | 710-022606 | EH4379 | SFC Control Board |
| SPMB 0 | | BUILTIN | | SFC Switch CPU |
| SPMB 1 | | BUILTIN | | SFC Switch CPU |
| SIB F13 0 | REV 10 | 750-035002 | EM9305 | F13 SIB 3D |
| B Board | REV 06 | 711-035082 | EM9667 | F13 SIB 3D Mezz |
| P Board | REV 05 | 711-043544 | EM9708 | F13 SIB 3D Power |
| Xcvr 0 | REV 01 | 740-047547 | XB34FB00S | CXP Module |
| Xcvr 2 | REV 01 | 740-047547 | XB48FB01H | CXP Module |
| Xcvr 4 | REV 01 | 740-047547 | XB34FB02W | CXP Module |
| Xcvr 6 | REV 01 | 740-047547 | XB34FB01T | CXP Module |
| Xcvr 8 | REV 01 | 740-047547 | XB48FB00W | CXP Module |
| Xcvr 10 | REV 01 | 740-047547 | XB34FB01S | CXP Module |
| Xcvr 12 | REV 01 | 740-047547 | XB34FB03H | CXP Module |
| Xcvr 14 | REV 01 | 740-047547 | XB34FB023 | CXP Module |
| SIB F13 3 | REV 01 | 710-035001 | EJ2612 | F13 SIB 3D |
| B Board | REV 01 | 711-035082 | EJ3815 | F13 SIB 3D Mezz |
| P Board | REV 01 | 711-043544 | EJ2678 | F13 SIB 3D Power |
| Xcvr 0 | REV 01 | 740-047547 | XB48FB04C | CXP Module |
| Xcvr 2 | REV 01 | 740-047547 | XB48FB00Z | CXP Module |
| Xcvr 4 | REV 01 | 740-047547 | XB47FB036 | CXP Module |
| Xcvr 6 | REV 01 | 740-047547 | XB47FB029 | CXP Module |
| Xcvr 8 | REV 01 | 740-047547 | XB48FB02N | CXP Module |
| Xcvr 10 | REV 01 | 740-047547 | XB42FB0CS | CXP Module |
| Xcvr 12 | REV 01 | 740-047547 | XB47FB01X | CXP Module |
| Xcvr 14 | REV 01 | 740-047547 | XB48FB02F | CXP Module |
| SIB F13 6 | REV 05 | 750-035002 | EK2675 | F13 SIB 3D |
| B Board | REV 03 | 711-035082 | EK2612 | F13 SIB 3D Mezz |
| P Board | REV 04 | 711-043544 | EK1179 | F13 SIB 3D Power |
| Xcvr 0 | REV 01 | 740-047547 | XB48FB01T | CXP Module |
| Xcvr 2 | REV 01 | 740-047547 | XB48FB02M | CXP Module |
| Xcvr 4 | REV 01 | 740-047547 | XB48FB031 | CXP Module |
| Xcvr 6 | REV 01 | 740-047547 | XB48FB04P | CXP Module |
| Xcvr 8 | REV 01 | 740-047547 | XB48FB02T | CXP Module |
| Xcvr 10 | REV 01 | 740-047547 | XB34FB01V | CXP Module |
| Xcvr 12 | REV 01 | 740-047547 | XB48FB02C | CXP Module |
| Xcvr 14 | | NON-JNPR | | No Module |
| SIB F13 12 | REV 01 | 710-035001 | EJ2631 | F13 SIB 3D |
| B Board | REV 01 | 711-035082 | EJ3808 | F13 SIB 3D Mezz |
| P Board | REV 01 | 711-043544 | EJ2676 | F13 SIB 3D Power |
| SIB F2S 0/0 | REV 01 | 711-034977 | EH9829 | F2S SIB 3D |

| | | | | |
|-------------|--------|------------|--------|-----------------|
| B Board | REV 01 | 711-034979 | EH9927 | F2S SIB 3D Mezz |
| SIB F2S 0/2 | REV 01 | 711-034977 | EH9791 | F2S SIB 3D |
| B Board | REV 01 | 711-034979 | EH9852 | F2S SIB 3D Mezz |
| SIB F2S 0/4 | REV 01 | 711-034977 | EH9803 | F2S SIB 3D |
| B Board | REV 01 | 711-034979 | EH9915 | F2S SIB 3D Mezz |
| SIB F2S 0/6 | REV 01 | 711-034977 | EH9763 | F2S SIB 3D |
| B Board | REV 01 | 711-034979 | EH9880 | F2S SIB 3D Mezz |
| SIB F2S 1/0 | REV 01 | 711-034977 | EH9757 | F2S SIB 3D |
| B Board | REV 01 | 711-034979 | EH9889 | F2S SIB 3D Mezz |
| SIB F2S 1/2 | REV 01 | 711-034977 | EH9815 | F2S SIB 3D |
| B Board | REV 01 | 711-034979 | EH9890 | F2S SIB 3D Mezz |
| SIB F2S 1/4 | REV 08 | 750-034978 | EN1954 | F2S SIB 3D |
| B Board | REV 02 | 711-034979 | EN1436 | F2S SIB 3D Mezz |
| SIB F2S 1/6 | REV 01 | 711-034977 | EJ7054 | F2S SIB 3D |
| B Board | REV 01 | 711-034979 | EJ8238 | F2S SIB 3D Mezz |
| SIB F2S 2/0 | REV 01 | 711-034977 | EH9830 | F2S SIB 3D |
| B Board | REV 01 | 711-034979 | EH9844 | F2S SIB 3D Mezz |
| SIB F2S 2/2 | REV 01 | 711-034977 | EH9818 | F2S SIB 3D |
| B Board | REV 01 | 711-034979 | EH9888 | F2S SIB 3D Mezz |
| SIB F2S 2/4 | REV 01 | 711-034977 | EH9795 | F2S SIB 3D |
| B Board | REV 01 | 711-034979 | EH9869 | F2S SIB 3D Mezz |
| SIB F2S 2/6 | REV 01 | 711-034977 | EJ7026 | F2S SIB 3D |
| B Board | REV 01 | 711-034979 | EJ8273 | F2S SIB 3D Mezz |
| SIB F2S 3/0 | REV 01 | 711-034977 | EH9811 | F2S SIB 3D |
| B Board | REV 01 | 711-034979 | EH9892 | F2S SIB 3D Mezz |
| SIB F2S 3/2 | REV 01 | 711-034977 | EH9812 | F2S SIB 3D |
| B Board | REV 01 | 711-034979 | EH9877 | F2S SIB 3D Mezz |
| SIB F2S 3/4 | REV 08 | 750-034978 | EN1947 | F2S SIB 3D |
| B Board | REV 02 | 711-034979 | EN1471 | F2S SIB 3D Mezz |
| Fan Tray 0 | REV 10 | 760-024497 | EH3313 | Front Fan Tray |
| Fan Tray 1 | REV 10 | 760-024497 | EH3290 | Front Fan Tray |
| Fan Tray 2 | REV 10 | 760-024502 | EH3292 | Rear Fan Tray |
| Fan Tray 3 | REV 10 | 760-024502 | EH3287 | Rear Fan Tray |
| Fan Tray 4 | REV 10 | 760-024502 | EH3286 | Rear Fan Tray |
| Fan Tray 5 | REV 10 | 760-024502 | EH3285 | Rear Fan Tray |

show chassis hardware (16-Port 10-Gigabit Ethernet MPC with SFP+ Optics [MX Series Routers])

```
user@host> show chassis hardware
```

```
Hardware inventory:
```

| Item | Version | Part number | Serial number | Description |
|------------------|---------|-------------|---------------|----------------------|
| Chassis | | | JN112D865AFA | MX960 |
| Midplane | REV 03 | 710-013698 | TS3339 | MX960 Backplane |
| FPM Board | REV 03 | 710-014974 | WW6267 | Front Panel Display |
| PDM | Rev 03 | 740-013110 | QCS12485026 | Power Distribution |
| Module | | | | |
| PEM 0 | Rev 04 | 740-013682 | QCS12434086 | PS 1.7kW; 200-240VAC |
| in | | | | |
| PEM 1 | Rev 04 | 740-013682 | QCS1243408Z | PS 1.7kW; 200-240VAC |
| in | | | | |
| PEM 2 | Rev 04 | 740-013682 | QCS1243407X | PS 1.7kW; 200-240VAC |
| in | | | | |
| Routing Engine 0 | REV 07 | 740-015113 | 9009009677 | RE-S-1300 |
| Routing Engine 1 | REV 07 | 740-015113 | 9009011510 | RE-S-1300 |
| CB 0 | REV 03 | 710-021523 | XF0394 | MX SCB |
| CB 1 | REV 03 | 710-021523 | XF0550 | MX SCB |
| CB 2 | REV 03 | 710-021523 | XD7455 | MX SCB |
| FPC 4 | REV 02 | 750-028467 | JR6127 | MPC M 16x 10GE |
| CPU | REV 02 | 711-029089 | JX0129 | AS PMB |
| PIC 0 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |

| | | | | |
|------------|--------|------------|---------|-------------------|
| PIC 1 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| PIC 2 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| PIC 3 | | BUILTIN | BUILTIN | 4x 10GE(LAN) SFP+ |
| Fan Tray 0 | REV 05 | 740-014971 | TP9990 | Fan Tray |
| Fan Tray 1 | REV 05 | 740-014971 | VS1709 | Fan Tray |

show chassis hardware (MPC3E [MX Series Routers])

user@host> show chassis hardware

Hardware inventory:

| Item | Version | Part number | Serial number | Description |
|------------------|-------------|-------------|---------------|------------------------|
| Chassis | | | JN1101AFEAFB | MX480 |
| Midplane | REV 05 | 710-017414 | TR4444 | MX480 Midplane |
| FPM Board | REV 02 | 710-017254 | KG6056 | Front Panel Display |
| PEM 0 | Rev 03 | 740-017330 | QCS082090FC | PS 1.2-1.7kW; 100-240V |
| PEM 1 | Rev 03 | 740-017330 | QCS082090FD | PS 1.2-1.7kW; 100-240V |
| Routing Engine 0 | REV 07 | 740-013063 | 9009004124 | RE-S-2000 |
| Routing Engine 1 | REV 07 | 740-013063 | 9009005569 | RE-S-2000 |
| CB 0 | REV 07 | 710-021523 | XZ3587 | MX SCB |
| CB 1 | REV 03 | 710-021523 | KH8306 | MX SCB |
| FPC 1 | REV 04.1.07 | 750-033205 | P1240 | MPC Type 3 |
| CPU | REV 01 | 711-035209 | YL0504 | HMPC PMB 2G |
| MIC 1 | REV 10 | 750-033199 | YX4495 | 1X100GE CFP |
| PIC 2 | | BUILTIN | BUILTIN | 1X100GE CFP |
| Xcvr 0 | REV 01 | 740-032210 | C22CQNE | CFP-100G-LR4 |
| FPC 2 | REV 26 | 750-016670 | KH0045 | DPCE 40x 1GE R EQ |
| CPU | REV 07 | 710-013713 | KF5448 | DPC PMB |
| PIC 0 | | BUILTIN | BUILTIN | 10x 1GE(LAN) EQ |
| Xcvr 0 | REV 01 | 740-011613 | PF21JHU | SFP-SX |
| PIC 1 | | BUILTIN | BUILTIN | 10x 1GE(LAN) EQ |
| Xcvr 9 | REV 01 | 740-011613 | AM0813S8ZL6 | SFP-SX |
| PIC 2 | | BUILTIN | BUILTIN | 10x 1GE(LAN) EQ |
| Xcvr 0 | REV 02 | 740-011613 | PGL2KYF | SFP-SX |
| Xcvr 2 | REV 01 | 740-011613 | AM0806S8N4P | SFP-SX |
| PIC 3 | | BUILTIN | BUILTIN | 10x 1GE(LAN) EQ |
| Xcvr 5 | REV 01 | 740-011613 | AM0815S967N | SFP-SX |
| Xcvr 7 | REV 01 | 740-011613 | AM0806S8N1X | SFP-SX |
| Xcvr 8 | REV 01 | 740-011613 | AM0815S967J | SFP-SX |
| Xcvr 9 | REV 01 | 740-011613 | AM0815S967M | SFP-SX |
| FPC 3 | REV 12.2.09 | 750-033205 | YR9443 | MPC Type 3 |
| CPU | REV 03 | 711-035209 | YL6931 | HMPC PMB 2G |
| MIC 0 | REV 05 | 750-033199 | YR3269 | 1X100GE CFP |
| PIC 0 | | BUILTIN | BUILTIN | 1X100GE CFP |
| Xcvr 0 | REV 01 | 740-032210 | ULH0KG3 | CFP-100G-LR4 |
| MIC 1 | REV 02 | 750-033199 | YG3245 | 1X100GE CFP |
| PIC 2 | | BUILTIN | BUILTIN | 1X100GE CFP |
| Xcvr 0 | REV 01 | 740-032210 | ULH0KGF | CFP-100G-LR4 |
| FPC 4 | REV 12.3.09 | 750-033205 | YR9437 | MPC Type 3 |
| CPU | REV 03 | 711-035209 | YT5857 | HMPC PMB 2G |
| MIC 0 | REV 05 | 750-033199 | YR3295 | 1X100GE CFP |
| PIC 0 | | BUILTIN | BUILTIN | 1X100GE CFP |
| Xcvr 0 | | NON-JNPR | X12000187 | CFP-100G-SR10 |
| MIC 1 | REV 10 | 750-033199 | YX4518 | 1X100GE CFP |
| PIC 2 | | BUILTIN | BUILTIN | 1X100GE CFP |
| Xcvr 0 | REV 01 | 740-035329 | X12J00008 | CFP-100G-SR10 |
| FPC 5 | REV 06 | 750-024884 | JW9769 | MPC Type 2 3D EQ |
| CPU | REV 02 | 711-028401 | JR6158 | MPC PMB 2G Proto |
| MIC 0 | REV 05 | 750-028387 | JR6197 | 3D 4x 10GE XFP |

| | | | | |
|----------|--------|------------|-------------|---------------------|
| PIC 0 | | BUILTIN | BUILTIN | 2x 10GE XFP |
| Xcvr 0 | REV 01 | 740-014289 | T07M71112 | XFP-10G-SR |
| Xcvr 1 | REV 02 | 740-014289 | T08L85610 | XFP-10G-SR |
| PIC 1 | | BUILTIN | BUILTIN | 2x 10GE XFP |
| MIC 1 | REV 22 | 750-028392 | YM0053 | 3D 20x 1GE(LAN) SFP |
| PIC 2 | | BUILTIN | BUILTIN | 10x 1GE(LAN) SFP |
| Xcvr 0 | REV 01 | 740-011613 | AM0703S005B | SFP-SX |
| Xcvr 1 | REV 01 | 740-011613 | E07L01352 | SFP-SX |
| PIC 3 | | BUILTIN | BUILTIN | 10x 1GE(LAN) SFP |
| Xcvr 5 | REV 01 | 740-013111 | 6500217 | SFP-T |
| Xcvr 9 | REV 02 | 740-013111 | 8499527 | SFP-T |
| Fan Tray | | | | Left Fan Tray |

The PIC number for MIC 1 always starts from 2 (even if the first MIC is a 1X100GE CFP or a legacy MIC).

show chassis hardware (QFX3500 Switches)

```
user@switch> show chassis hardware
```

Hardware inventory:

| Item | Version | Part number | Serial number | Description |
|------------------|---------|-------------|---------------|-----------------------|
| Chassis | | | | QFX3500 |
| Routing Engine 0 | | BUILTIN | BUILTIN | QFX Routing Engine |
| FPC 0 | REV 04 | 750-044071 | BBAR3902 | QFX3500-48S4Q-AFI |
| CPU | | BUILTIN | BUILTIN | FPC CPU |
| PIC 0 | | BUILTIN | BUILTIN | 48x 10G-SFP+ |
| PIC 1 | | BUILTIN | BUILTIN | 15x 10G-SFP+ |
| MGMT BRD | REV 02 | 750-044063 | BBAR0398 | QFX3500-MGMT-SFP-AFO |
| Xcvr 0 | REV 01 | 740-011614 | AC0946S0BD1 | SFP-LX10 |
| Xcvr 1 | REV 02 | 740-013111 | A281922 | SFP-T |
| Power Supply 0 | Rev 04 | 740-032091 | UI00677 | JPSU-650W-AC-AFI |
| Power Supply 1 | REV 00 | 740-041741 | VJ00162 | JPSU-650W-AC-AFO |
| Fan Tray 0 | | | | QFX Fan Tray, Back to |
| Front Airflow | | | | |
| Fan Tray 1 | | | | QFX Fan Tray, Back to |
| Front Airflow | | | | |
| Fan Tray 2 | | | | QFX Fan Tray, Back to |
| Front Airflow | | | | |

show chassis hardware detail (QFX3500 Switches)

```
user@switch> show chassis hardware detail
```

Hardware inventory:

| Item | Version | Part number | Serial number | Description |
|------------------|---------|-------------|---------------|--------------------|
| Chassis | | | JN000TEST5 | QFX3500 |
| Routing Engine 0 | | BUILTIN | BUILTIN | QFX Routing Engine |
| FPC 0 | REV 05 | 750-036931 | EE0823 | QFX3500-48S4Q-AFI |
| CPU | | BUILTIN | BUILTIN | FPC CPU |
| PIC 0 | | BUILTIN | BUILTIN | 48x 10G-SFP+ |
| Xcvr 0 | REV 01 | 740-030589 | S99E270079 | SFP+-10G-LPBK |
| Xcvr 1 | REV 01 | 740-030589 | S9AK450099 | SFP+-10G-LPBK |
| Xcvr 2 | REV 01 | 740-030589 | S99E270078 | SFP+-10G-LPBK |
| Xcvr 3 | REV 01 | 740-030589 | S9AK450098 | SFP+-10G-LPBK |
| Xcvr 4 | REV 01 | 740-030589 | S99E270075 | SFP+-10G-LPBK |
| Xcvr 5 | REV 01 | 740-030589 | S9AK450093 | SFP+-10G-LPBK |
| Xcvr 6 | REV 01 | 740-030589 | S9AK450097 | SFP+-10G-LPBK |
| Xcvr 7 | REV 01 | 740-030589 | S9AK450095 | SFP+-10G-LPBK |

| | | | | |
|----------------|--------|------------|------------|----------------|
| Xcvr 8 | REV 01 | 740-030589 | S99E270072 | SFP+-10G-LPBK |
| Xcvr 9 | REV 01 | 740-030589 | S99E270073 | SFP+-10G-LPBK |
| Xcvr 10 | REV 01 | 740-030589 | S99E270080 | SFP+-10G-LPBK |
| Xcvr 11 | REV 01 | 740-030589 | S9AK450169 | SFP+-10G-LPBK |
| Xcvr 12 | REV 01 | 740-030589 | S99E270076 | SFP+-10G-LPBK |
| Xcvr 13 | REV 01 | 740-030589 | S9AK450167 | SFP+-10G-LPBK |
| Xcvr 14 | REV 01 | 740-030589 | S9AK450170 | SFP+-10G-LPBK |
| Xcvr 15 | REV 01 | 740-030589 | S9AK450166 | SFP+-10G-LPBK |
| Xcvr 16 | REV 01 | 740-030589 | S9AK450092 | SFP+-10G-LPBK |
| Xcvr 17 | REV 01 | 740-030589 | S9AK450163 | SFP+-10G-LPBK |
| Xcvr 18 | REV 01 | 740-030589 | S9AK450094 | SFP+-10G-LPBK |
| Xcvr 19 | REV 01 | 740-030589 | S9AK450100 | SFP+-10G-LPBK |
| Xcvr 20 | REV 01 | 740-030589 | S9AK450168 | SFP+-10G-LPBK |
| Xcvr 21 | REV 01 | 740-030589 | S9AK450165 | SFP+-10G-LPBK |
| Xcvr 22 | REV 01 | 740-030589 | S9AK450073 | SFP+-10G-LPBK |
| Xcvr 23 | REV 01 | 740-030589 | S9AK450164 | SFP+-10G-LPBK |
| Xcvr 24 | REV 01 | 740-030589 | S9AK450074 | SFP+-10G-LPBK |
| Xcvr 25 | REV 01 | 740-030589 | SA62270195 | SFP+-10G-LPBK |
| Xcvr 26 | REV 01 | 740-030589 | S9AK450078 | SFP+-10G-LPBK |
| Xcvr 27 | REV 01 | 740-030589 | S9AK450024 | SFP+-10G-LPBK |
| Xcvr 28 | REV 01 | 740-030589 | S9AK450027 | SFP+-10G-LPBK |
| Xcvr 29 | REV 01 | 740-030589 | S9AK450080 | SFP+-10G-LPBK |
| Xcvr 30 | REV 01 | 740-030589 | S9AK450030 | SFP+-10G-LPBK |
| Xcvr 31 | REV 01 | 740-030589 | S9AK450025 | SFP+-10G-LPBK |
| Xcvr 32 | REV 01 | 740-030589 | S9AK450023 | SFP+-10G-LPBK |
| Xcvr 33 | REV 01 | 740-030589 | S9AK450075 | SFP+-10G-LPBK |
| Xcvr 34 | REV 01 | 740-030589 | S9AK450161 | SFP+-10G-LPBK |
| Xcvr 35 | REV 01 | 740-030589 | S9AK450071 | SFP+-10G-LPBK |
| Xcvr 36 | REV 01 | 740-030589 | S9AK450072 | SFP+-10G-LPBK |
| Xcvr 37 | REV 01 | 740-030589 | S9AK450022 | SFP+-10G-LPBK |
| Xcvr 38 | REV 01 | 740-030589 | S9AK450021 | SFP+-10G-LPBK |
| Xcvr 39 | REV 01 | 740-030589 | S9AK450175 | SFP+-10G-LPBK |
| Xcvr 40 | REV 01 | 740-030589 | S9AK450162 | SFP+-10G-LPBK |
| Xcvr 41 | REV 01 | 740-030589 | S99E270074 | SFP+-10G-LPBK |
| Xcvr 42 | REV 01 | 740-030589 | S9AK450174 | SFP+-10G-LPBK |
| Xcvr 43 | REV 01 | 740-030589 | S9AK450077 | SFP+-10G-LPBK |
| Xcvr 44 | REV 01 | 740-030589 | S9AK450076 | SFP+-10G-LPBK |
| Xcvr 45 | REV 01 | 740-030589 | S9AK450026 | SFP+-10G-LPBK |
| Xcvr 46 | REV 01 | 740-030589 | S9AK450079 | SFP+-10G-LPBK |
| Xcvr 47 | REV 01 | 740-030589 | S9AK450029 | SFP+-10G-LPBK |
| PIC 1 | | BUILTIN | BUILTIN | 15x 10G-SFP+ |
| Xcvr 1 | REV 01 | 740-032986 | QA170087 | QSFP+-40G-SR4 |
| Xcvr 4 | REV 01 | 740-032986 | QA360442 | QSFP+-40G-SR4 |
| Xcvr 8 | REV 01 | 740-032986 | QA170091 | QSFP+-40G-SR4 |
| Xcvr 12 | REV 01 | 740-032986 | QA170042 | QSFP+-40G-SR4 |
| MGMT BRD | REV 08 | 750-036946 | EE0731 | QFX3500-MB |
| Power Supply 0 | Rev 04 | 740-032091 | UI00690 | QFX PS 650W AC |
| Power Supply 1 | Rev 04 | 740-032091 | UI00679 | QFX PS 650W AC |
| Fan Tray 0 | | | | QFX Fan Tray |
| Fan Tray 1 | | | | QFX Fan Tray |

show chassis hardware models (QFX3500 Switches)

```

user@switch> show chassis hardware models
Hardware inventory:
Item          Version  Part number  Serial number  FRU model number
Routing Engine 0
FPC 0         REV 02    711-032234   EC4074
Power Supply 0 PSMI 2C    11-d65800    --

```

show chassis hardware clei-models (QFX3500 Switches)

```

user@switch> show chassis hardware clei-models
Hardware inventory:
Item          Version  Part number  CLEI code      FRU model number
Routing Engine 0
FPC 0         REV 02    711-032234
Power Supply 0  PSMI 2C  11-d65800

```

show chassis hardware clei-models (QFX5100 Switches)

```

user@switch> show chassis hardware clei-models
Hardware inventory:
Item          Version  Part number  CLEI code      FRU model number
Routing Engine 0
FPC 0         REV 01    611-053010  CMMNV10BRA
PIC 0         BUILTIN
Power Supply 0  REV 03    740-053352  MUPABHBAA      JPSU-850W-AC-AFO
Power Supply 1  REV 03    740-053352  MUPABHBAA      JPSU-850W-AC-AFO
Fan Tray 0
Fan Tray 1
Fan Tray 2
QFX5100-96S-FANAFO
QFX5100-96S-FANAFO
QFX5100-96S-FANAFO

```

show chassis hardware (QFX10002 Switches)

```

user@switch> show chassis hardware
Hardware inventory:
Item          Version  Part number  Serial number  Description
Chassis
Pseudo CB 0
Routing Engine 0
FPC 0         REV 26    750-059497  ACNL1387      QFX10002-36Q
CPU
PIC 0         BUILTIN
Xcvr 0        REV 01    740-038623  MOC15476230389  QSFP+-40G-CU1M
Xcvr 1        REV 01    740-038623  MOC15476230438  QSFP+-40G-CU1M
Xcvr 2        REV 01    740-038623  MOC15446231917  QSFP+-40G-CU1M
Xcvr 3        REV 01    740-038623  MOC15446232043  QSFP+-40G-CU1M
Xcvr 4        REV      740-038624  APF15470032AVB  QSFP+-40G-CU3M
Xcvr 5        REV      740-038624  APF15470032H15  QSFP+-40G-CU3M
Xcvr 6        REV      740-038624  APF15470032A9J  QSFP+-40G-CU3M
Xcvr 7        REV      740-038624  APF15470032AG7  QSFP+-40G-CU3M
Xcvr 8        REV      740-038624  APF15470032ALD  QSFP+-40G-CU3M
Xcvr 9        REV 01    740-053203  APF15470071V43  QSFP+-40G-ACU7M
Xcvr 10       REV 01    740-053203  APF15470071V15  QSFP+-40G-ACU7M
Xcvr 11       REV 01    740-053203  APF15470071V12  QSFP+-40G-ACU7M
Xcvr 13       REV      740-038624  APF15470032H1N  QSFP+-40G-CU3M
Xcvr 18       REV 01    740-053203  APF154800738HW  QSFP+-40G-ACU7M
Xcvr 19       REV 01    740-038153  MOC12161530041  QSFP+-40G-CU3M
Xcvr 20       REV 01    740-038153  APF15500034A29  QSFP+-40G-CU3M
Xcvr 30       REV 01    740-038623  MOC15476230444  QSFP+-40G-CU1M
Xcvr 31       REV 01    740-032986  QC330038        QSFP+-40G-SR4
Xcvr 32       REV 01    740-032986  QC290540        QSFP+-40G-SR4
Mezz          REV 02    711-059316  ACNG9344        QFX10002 36X40G Mezz
Power Supply 0  REV 03    740-054405  1EDN5389293     AC AFO 1600W PSU
Power Supply 1  REV 03    740-054405  1EDN5346300     AC AFO 1600W PSU
Fan Tray 0
Front to Back Airflow - AFO
Fan Tray 1
QFX10002 Fan Tray 0,
QFX10002 Fan Tray 1,

```

```

Front to Back Airflow - AFO
Fan Tray 2
Front to Back Airflow - AFO
QFX10002 Fan Tray 2,

```

show chassis hardware detail (QFX10002 Switches)

```

user@switch> show chassis hardware detail
Hardware inventory:
Item          Version  Part number  Serial number  Description
Chassis                               12345         QFX10002-72Q
Pseudo CB 0
Routing Engine 0      BUILTIN    BUILTIN      RE-QFX10002-72Q
ada0    8193 MB  QEMU                QM000001     Virtio Block Disk
ada1    4096 MB  QEMU                QM000002     Virtio Block Disk
ada2    512 MB  QEMU                QM000003     Virtio Block Disk
ada3    1024 MB  QEMU                QM000004     Virtio Block Disk
usb0 (addr 0.1)  UHCI root HUB 0  Intel        uhub0
usb0 (addr 1.1)  EHCI root HUB 0  Intel        uhub1
usb0 (addr 1.2)  product 0x0020 32 vendor 0x8087 uhub2
usb0 (addr 1.3)  Ultra Fit 21891 SanDisk       umass0
FPC 0          REV 05    750-055415  ACAM4724     QFX10002-72Q
CPU            BUILTIN    BUILTIN      FPC CPU

```

show chassis hardware (QFX10008 and QFX10016 Switches)

```

user@switch> show chassis hardware
Hardware inventory:
Item          Version  Part number  Serial number  Description
Chassis                               DE994         QFX10008
Midplane      REV 28    750-054097  ACPG3671      QFX10008 Midplane
Routing Engine 0      BUILTIN    BUILTIN      Routing Engine
Routing Engine 1      BUILTIN    BUILTIN      Routing Engine
CB 0          REV 03    750-068820  ACPA3224      Control Board
CB 1          REV 03    750-068820  ACPM9059      Control Board
FPC 0          REV 33    750-051354  ACNP4522      ULC-36Q-12Q28
CPU            BUILTIN    BUILTIN      FPC CPU
PIC 0          BUILTIN    BUILTIN      36X40G
Xcvr 0        REV 01    740-038623  MOC16016230802 QSFP+-40G-CU1M
Xcvr 1        REV 01    740-038623  MOC16016230802 QSFP+-40G-CU1M
Xcvr 2        REV 01    740-038623  MOC16016231080 QSFP+-40G-CU1M
Xcvr 3        REV 01    740-038623  MOC16016231080 QSFP+-40G-CU1M
Xcvr 4        REV      740-038624  APF16220038H15 QSFP+-40G-CU3M
Xcvr 5        REV      740-038624  APF16220038H5M QSFP+-40G-CU3M
Xcvr 6        REV      740-038624  APF160600308W8 QSFP+-40G-CU3M
Xcvr 8        REV      740-038624  APF16210038FFL QSFP+-40G-CU3M
Xcvr 9        REV      740-038624  APF16210038F6F QSFP+-40G-CU3M
Xcvr 10       REV      740-038624  APF1605003032B QSFP+-40G-CU3M
Xcvr 11       REV      740-038624  APF16070030CDB QSFP+-40G-CU3M
Xcvr 13       REV      740-038624  APF16210038FEW QSFP+-40G-CU3M
Xcvr 15       REV 01    740-052307  APF16100071C1L QSFP+-40G-ACU7M
Xcvr 16       REV      740-038625  APF1623005048E QSFP+-40G-CU5M
Xcvr 17       REV      740-038625  APF16230050471 QSFP+-40G-CU5M
Xcvr 18       REV      740-038625  APF1623005044D QSFP+-40G-CU5M
Xcvr 19       REV 01    740-052307  APF16100071C30 QSFP+-40G-ACU7M
Xcvr 20       REV      740-038625  APF16290055004 QSFP+-40G-CU5M
Xcvr 21       REV 01    740-038153  APF1622003970G QSFP+-40G-CU3M
Xcvr 22       REV      740-038624  APF16190036R90 QSFP+-40G-CU3M
Xcvr 23       REV      740-038624  APF16050030374 QSFP+-40G-CU3M
Xcvr 24       REV 01    740-038153  APF162400318HC QSFP+-40G-CU3M

```


| | | | | |
|----------------|--------|------------|----------------|-----------------|
| Xcvr 30 | REV | 740-038624 | APF1606003097A | QSFP+-40G-CU3M |
| Xcvr 31 | REV 01 | 740-052307 | APF160500702R9 | QSFP+-40G-ACU7M |
| Xcvr 32 | REV | 740-038624 | APF16220038GVR | QSFP+-40G-CU3M |
| FPD Board | REV 07 | 711-054687 | ACPC7158 | QFX10000 FPD |
| Power Supply 0 | REV 02 | 740-049388 | 1EDL63104D6 | QFX10000 AC |
| Power Supply 1 | REV 02 | 740-049388 | 1EDL62503XC | QFX10000 AC |
| Power Supply 2 | REV 02 | 740-049388 | 1EDL62503XS | QFX10000 AC |
| Power Supply 3 | REV 02 | 740-049388 | 1EDL62503T8 | QFX10000 AC |
| Power Supply 4 | REV 02 | 740-049388 | 1EDL62503TR | QFX10000 AC |
| Power Supply 5 | REV 02 | 740-049388 | 1EDL62503T5 | QFX10000 AC |
| FTC 0 | REV 15 | 750-050108 | ACPF4227 | QFX10000 FTC |
| FTC 1 | REV 15 | 750-050108 | ACPF4228 | QFX10000 FTC |
| Fan Tray 0 | REV 09 | 760-054372 | ACNV5506 | QFX10008 FHB |
| Fan Tray 1 | REV 09 | 760-054372 | ACNV5365 | QFX10008 FHB |
| SIB 0 | REV 27 | 750-050058 | ACPM4212 | QFX10008 SIB |
| SIB 1 | REV 27 | 750-050058 | ACPM4253 | QFX10008 SIB |
| SIB 2 | REV 27 | 750-050058 | ACPM4174 | QFX10008 SIB |
| SIB 3 | REV 27 | 750-050058 | ACPM4191 | QFX10008 SIB |
| SIB 4 | REV 27 | 750-050058 | ACPM4216 | QFX10008 SIB |
| SIB 5 | REV 27 | 750-050058 | ACPM4286 | QFX10008 SIB |

show chassis hardware detail (QFX10008 and QFX10016 Switches)

```

user@switch> show chassis hardware details
Hardware inventory:
Item          Version  Part number  Serial number  Description
Chassis                               12345         QFX10008
Midplane      REV 01   750-054097   ACAM1754       QFX10008 Midplane
Routing Engine 0  BUILTIN  BUILTIN      Routing Engine
ada0  8193 MB  QEMU          QM00001       Virtio Block Disk
ada1  4096 MB  QEMU          QM00002       Virtio Block Disk
ada2  512 MB   QEMU          QM00003       Virtio Block Disk
ada3  1024 MB  QEMU          QM00004       Virtio Block Disk
usb0 (addr 1)  UHCI root HUB 0  Intel        uhub0
usb0 (addr 1)  EHCI root HUB 0  Intel        uhub1
usb0 (addr 2)  product 0x0020 32 vendor 0x8087 uhub2
Routing Engine 1  BUILTIN  BUILTIN      Routing Engine
ada0  8193 MB  QEMU          QM00001       Virtio Block Disk
ada1  4096 MB  QEMU          QM00002       Virtio Block Disk
ada2  512 MB   QEMU          QM00003       Virtio Block Disk
ada3  1024 MB  QEMU          QM00004       Virtio Block Disk
usb0 (addr 0.1) UHCI root HUB 0  Intel        uhub0
usb0 (addr 1.1) EHCI root HUB 0  Intel        uhub1
usb0 (addr 1.2) product 0x0020 32 vendor 0x8087 uhub2
CB 0          REV 16   750-052688   ACAM7936       Control Board
CB 1          REV 18   750-052688   ACAM7708       Control Board
FPC 0         REV 26   750-051351   ACPJ1372       ULC-60S-6Q Main Board
CPU           BUILTIN  BUILTIN      FPC CPU

```

show chassis hardware interconnect-device (QFabric Systems)

```

user@switch> show chassis hardware interconnect-device interconnect1
Hardware inventory:
Item          Version  Part number  Serial number  Description
Chassis       REV 07                               QFX_olive
Midplane      REV 07   750-021261   BH0208188289  QFX Midplane
CB 0          REV 07   750-021261   BH0208188289  QFXIC08-CB4S

```

show chassis hardware node-device (QFabric Systems)

```

user@switch> show chassis hardware node-device node1
Routing Engine 0  BUILTIN  BUILTIN  QFX Routing Engine
node1            REV 05  711-032234  ED3694  QFX3500-48S4Q-AFI

CPU
PIC 0
Xcvr 8          REV 01  740-030658  AD0946A028B  FPC CPU
                                     48x 10G-SFP+
                                     SFP+-10G-USR
...

```

show chassis hardware (PTX5000 Packet Transport Router)

```

user@host> show chassis hardware
Hardware inventory:
Item          Version  Part number  Serial number  Description
Chassis                               JN1D1FD7AJA    PTX5000
Midplane      REV 03  711-031896  ABAC5589      Midplane-8S
FPM           REV 08  760-030647  EG1679        Front Panel Display
PDU 0         Rev 05  740-032019  ZE00006       DC Power Dist Unit
  PSM 0        Rev 05  740-032022  ZJ00018       DC 12V Power Supply
  PSM 1        Rev 04  740-032022  ZC00052       DC 12V Power Supply
  PSM 2        Rev 04  740-032022  ZD00051       DC 12V Power Supply
  PSM 3        Rev 05  740-032022  ZJ00060       DC 12V Power Supply
CCG 0         REV 04  750-030653  EG3703        Clock Generator
CCG 1         REV 04  750-030653  EG3698        Clock Generator
Routing Engine 0 REV 05  740-026942  P737A-002231  RE-DUO-2600
Routing Engine 1 REV 06  740-026942  P737A-002438  RE-DUO-2600
CB 0          REV 08  750-030625  EG5519        Control Board
CB 1          REV 08  750-030625  EG5516        Control Board
FPC 0         REV 18  750-036844  EJ3080        FPC
  CPU         REV 12  711-030686  EJ3260        SNG PMB
FPC 2         REV 13  750-036844  EG5065        FPC
  CPU         REV 09  711-030686  EG4082        SNG PMB
  PIC 0        REV 14  750-031913  EG5127        24x 10GE(LAN) SFP+
    Xcvr 0      REV 01  740-031980  143363A00240  SFP+-10G-SR
    Xcvr 1      REV 01  740-031981  UK90PZ1       SFP+-10G-LR
    Xcvr 2      REV 01  740-031980  AD1141A04XH   SFP+-10G-SR
    Xcvr 3      REV 01  740-031981  UK90Q46       SFP+-10G-LR
    Xcvr 4      REV 01  740-031980  AD1141A04X4   SFP+-10G-SR
    Xcvr 6      REV 01  740-031980  B11H02560     SFP+-10G-SR
    Xcvr 7      REV 01  740-031980  B11C01589     SFP+-10G-SR
    Xcvr 8      REV 01  740-031980  AD1141A04XF   SFP+-10G-SR
    Xcvr 10     REV 01  740-031980  123363A01094  SFP+-10G-SR
    Xcvr 11     REV 01  740-031980  AK80LKF       SFP+-10G-SR
    Xcvr 12     REV 01  740-031980  183363A01528  SFP+-10G-SR
    Xcvr 14     REV 01  740-031980  193363A01079  SFP+-10G-SR
    Xcvr 15     REV 01  740-031980  AK80MC8       SFP+-10G-SR
    Xcvr 16     REV 01  740-031980  AJC0BHC       SFP+-10G-SR
    Xcvr 19     REV 01  740-021309  J08D26856     SFP+-10G-LR
    Xcvr 21     REV 01  740-031980  AK80KCT       SFP+-10G-SR
    Xcvr 22     REV 01  740-031981  UK90PZL       SFP+-10G-LR
    Xcvr 23     REV 01  740-031980  AK80N1V       SFP+-10G-SR
FPC 3         REV 13  750-036844  EG5074        FPC
  CPU         REV 09  711-030686  EG4064        SNG PMB
  PIC 1        REV 10  750-031903  EG0325        SNG Load
FPC 5         REV 06  750-036844  EH3198        FPC
  CPU
  PIC 0        REV 14  750-031913  EG5134        24x 10GE(LAN) SFP+

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| | | | | |
|------------|--------|------------|--------------|---------------------|
| Xcvr 0 | REV 01 | 740-031980 | AK80LBH | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | B11B03724 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AK80FMH | SFP+-10G-SR |
| Xcvr 5 | REV 01 | 740-031980 | B11J00818 | SFP+-10G-SR |
| Xcvr 6 | REV 01 | 740-031980 | 193363A00743 | SFP+-10G-SR |
| Xcvr 7 | REV 01 | 740-031980 | B11B06125 | SFP+-10G-SR |
| Xcvr 10 | REV 01 | 740-031980 | B11H02529 | SFP+-10G-SR |
| Xcvr 11 | REV 01 | 740-031980 | AK80LFB | SFP+-10G-SR |
| Xcvr 12 | REV 01 | 740-031980 | 193363A01061 | SFP+-10G-SR |
| Xcvr 15 | REV 01 | 740-031980 | B11J00687 | SFP+-10G-SR |
| Xcvr 16 | REV 01 | 740-031980 | 193363A00738 | SFP+-10G-SR |
| Xcvr 18 | REV 01 | 740-031980 | AK80MQX | SFP+-10G-SR |
| Xcvr 19 | REV 01 | 740-021309 | J08C17257 | SFP+-10G-LR |
| Xcvr 22 | REV 01 | 740-031980 | B11J00730 | SFP+-10G-SR |
| Xcvr 23 | REV 01 | 740-031980 | AK80KEE | SFP+-10G-SR |
| PIC 1 | REV 08 | 750-036710 | EG3105 | 2x 40GE CFP |
| Xcvr 0 | REV 01 | 740-034554 | B260HLT | CFP-40G-LR4 |
| Xcvr 1 | REV 01 | 740-034554 | B11C02847 | CFP-40G-LR4 |
| FPC 6 | REV 18 | 750-036844 | EJ4391 | FPC |
| CPU | REV 12 | 711-030686 | EJ3257 | SNG PMB |
| FPC 7 | REV 18 | 750-036844 | EJ4382 | FPC |
| CPU | REV 12 | 711-030686 | EJ3238 | SNG PMB |
| SPMB 0 | REV 10 | 711-030686 | EG5418 | SNG PMB |
| SPMB 1 | REV 09 | 711-030686 | EG5373 | SNG PMB |
| SIB 0 | REV 07 | 750-030631 | EG4858 | SIB-I-8S |
| SIB 1 | REV 07 | 750-030631 | EG4872 | SIB-I-8S |
| SIB 2 | REV 07 | 750-030631 | EG4866 | SIB-I-8S |
| SIB 3 | REV 07 | 750-030631 | EG6011 | SIB-I-8S |
| SIB 4 | REV 07 | 750-030631 | EG4907 | SIB-I-8S |
| SIB 5 | REV 07 | 750-030631 | EG4879 | SIB-I-8S |
| SIB 6 | REV 07 | 750-030631 | EG4864 | SIB-I-8S |
| SIB 7 | REV 07 | 750-030631 | EG4899 | SIB-I-8S |
| SIB 8 | REV 07 | 750-030631 | EG4880 | SIB-I-8S |
| Fan Tray 0 | REV 04 | 760-032784 | EG1496 | Vertical Fan Tray |
| Fan Tray 1 | REV 04 | 760-030642 | EG1335 | Horizontal Fan Tray |
| Fan Tray 2 | REV 02 | 760-030642 | ED4952 | Horizontal Fan Tray |

show chassis hardware (PTX5000 Packet Transport Router with AC PSM and PDU)

```
user@host> show chassis hardware
```

| Hardware inventory: | | | | |
|---------------------|---------|-------------|---------------|--------------------------|
| Item | Version | Part number | Serial number | Description |
| Chassis | | | JN12223A6AJA | PTX5000 |
| Midplane | REV 16 | 750-035893 | ACRA1350 | Midplane-8S |
| FPM | REV 12 | 760-030647 | BBBD5625 | Front Panel Display |
| PDU 0 | Rev 01 | 740-048338 | 1GB83360005 | High Capacity AC WYE PDU |
| | | | | |
| PSM 0 | Rev 01 | 740-048334 | 1GB43360074 | High Capacity AC PSM |
| PSM 1 | Rev 01 | 740-048334 | 1GB43360001 | High Capacity AC PSM |
| PSM 2 | Rev 01 | 740-048334 | 1GB43360104 | High Capacity AC PSM |
| PSM 3 | Rev 01 | 740-048334 | 1GB43360042 | High Capacity AC PSM |
| PSM 4 | Rev 01 | 740-048334 | 1GB43360068 | High Capacity AC PSM |
| PSM 5 | Rev 01 | 740-048334 | 1GB43360080 | High Capacity AC PSM |
| PSM 6 | Rev 01 | 740-048334 | 1GB43360046 | High Capacity AC PSM |
| PSM 7 | Rev 01 | 740-048334 | 1GB43360100 | High Capacity AC PSM |
| PDU 1 | Rev 01 | 740-048338 | 1GB83360006 | High Capacity AC WYE PDU |
| | | | | |
| PSM 0 | Rev 01 | 740-048334 | 1GB43360069 | High Capacity AC PSM |
| PSM 1 | Rev 01 | 740-048334 | 1GB43360099 | High Capacity AC PSM |
| PSM 2 | Rev 01 | 740-048334 | 1GB43360050 | High Capacity AC PSM |
| PSM 3 | Rev 01 | 740-048334 | 1GB43360095 | High Capacity AC PSM |

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PSM 4          Rev 01  740-048334  1GB43360101  High Capacity AC PSM
PSM 5          Rev 01  740-048334  1GB43360075  High Capacity AC PSM
PSM 6          Rev 01  740-048334  1GB43360047  High Capacity AC PSM
PSM 7          Rev 01  740-048334  1GB43360019  High Capacity AC PSM
CCG 0          REV 09  750-030653  BBAZ5345     Clock Generator
...

```

show chassis hardware (PTX5000 Packet Transport Router with FPC2-PTX-P1A)

```

user@host> show chassis hardware
Hardware inventory:
Item          Version  Part number  Serial number  Description
Chassis                               JN1204FC0AJA  PTX5000
Midplane      REV 11   750-035893  ACAB8038      Midplane-8S
FPM           REV 12   760-030647  BBBD5619      Front Panel
Display
PDU 0         Rev 04   740-048336  1GB93470043   High Capacity DC PDU
  PSM 0        Rev 04   740-046988  1GB63500184   High Capacity DC PSM
  PSM 2        Rev 04   740-046988  1GB63500169   High Capacity DC PSM
  PSM 4        Rev 04   740-046988  1GB63500306   High Capacity DC PSM
  PSM 6        Rev 04   740-046988  1GB63500074   High Capacity DC PSM
PDU 1         Rev 04   740-048336  1GB93470045   High Capacity DC PDU
  PSM 1        Rev 04   740-046988  1GB63500193   High Capacity DC PSM
  PSM 3        Rev 04   740-046988  1GB63500143   High Capacity DC PSM
  PSM 5        Rev 04   740-046988  1GB63500146   High Capacity DC PSM
  PSM 7        Rev 04   740-046988  1GB63500192   High Capacity DC PSM
CCG 0         REV 09   750-030653  BBBC1909      Clock Generator
CCG 1         REV 09   750-030653  BBBD2970      Clock Generator
...

```

show chassis hardware clei-models (PTX5000 Packet Transport Router)

```

user@host> show chassis hardware clei-models
Hardware inventory:
Item          Version  Part number  CLEI code      FRU model number
FPM           REV 08   760-030647  PROTOXCLEI     CRAFT-PTX5000-S
PDU 0         Rev 05   740-032019  IPUPAHLKAA     PWR-SAN-PDU-DC
  PSM 0        Rev 05   740-032022  IPUPAHNKAA     PSM-PTX-DC-120-S
  PSM 1        Rev 04   740-032022  032022XXXX     PWR-SAN-12-DC
  PSM 2        Rev 04   740-032022  032022XXXX     PWR-SAN-12-DC
  PSM 3        Rev 05   740-032022  IPUPAHNKAA     PSM-PTX-DC-120-S
CCG 0         REV 04   750-030653  PROTOXCLEI     CCG-PTX-S
CCG 1         REV 04   750-030653  PROTOXCLEI     CCG-PTX-S
Routing Engine 0 REV 05   740-026942                RE-DUO-C2600-16G-S
Routing Engine 1 REV 06   740-026942                RE-DUO-C2600-16G-S
CB 0          REV 08   750-030625  PROTOXCLEI     CB-PTX-S
CB 1          REV 08   750-030625  PROTOXCLEI     CB-PTX-S
FPC 0         REV 18   750-036844  PROTOXCLEI     FPC-PTX-P1-A
FPC 2         REV 13   750-036844  PROTOXCLEI     FPC-PTX-P1-A
  PIC 0        REV 14   750-031913  PROTOXCLEI     P1-PTX-24-10GE-SFPP
FPC 3         REV 13   750-036844  PROTOXCLEI     FPC-PTX-P1-A
FPC 5
  PIC 0        REV 14   750-031913  PROTOXCLEI     P1-PTX-24-10GE-SFPP
FPC 6         REV 18   750-036844  PROTOXCLEI     FPC-PTX-P1-A
FPC 7         REV 18   750-036844  PROTOXCLEI     FPC-PTX-P1-A
SIB 0         REV 07   750-030631  PROTOXCLEI     SIB-I-PTX5008
SIB 1         REV 07   750-030631  PROTOXCLEI     SIB-I-PTX5008
SIB 2         REV 07   750-030631  PROTOXCLEI     SIB-I-PTX5008
SIB 3         REV 07   750-030631  PROTOXCLEI     SIB-I-PTX5008
SIB 4         REV 07   750-030631  PROTOXCLEI     SIB-I-PTX5008

```

| | | | | |
|------------|--------|------------|------------|---------------|
| SIB 5 | REV 07 | 750-030631 | PROTOXCLEI | SIB-I-PTX5008 |
| SIB 6 | REV 07 | 750-030631 | PROTOXCLEI | SIB-I-PTX5008 |
| SIB 7 | REV 07 | 750-030631 | PROTOXCLEI | SIB-I-PTX5008 |
| SIB 8 | REV 07 | 750-030631 | PROTOXCLEI | SIB-I-PTX5008 |
| Fan Tray 1 | REV 04 | 760-030642 | PROTOXCLEI | FAN-PTX-H-S |

show chassis hardware clei-models (PTX5000 Packet Transport Router with AC PSM and PDU)

```
user@host> show chassis hardware clei-models
Hardware inventory:
Item          Version  Part number  CLEI code      FRU model number
Midplane      REV 16   750-035893  IPMUN00ARA     CHAS-MP-PTX5000-S
FPM           REV 12   760-030647  IPUCA7SCAA     CRAFT-PTX5000-S
PDU 0         Rev 01   740-048338  PROTOACPDU     PDU2-PTX-AC-W
  PSM 0       Rev 01   740-048334  PROTOACPSM     PSM2-PTX-AC
  PSM 1       Rev 01   740-048334  PROTOACPSM     PSM2-PTX-AC
  PSM 2       Rev 01   740-048334  PROTOACPSM     PSM2-PTX-AC
  PSM 3       Rev 01   740-048334  PROTOACPSM     PSM2-PTX-AC
  PSM 4       Rev 01   740-048334  PROTOACPSM     PSM2-PTX-AC
  PSM 5       Rev 01   740-048334  PROTOACPSM     PSM2-PTX-AC
  PSM 6       Rev 01   740-048334  PROTOACPSM     PSM2-PTX-AC
  PSM 7       Rev 01   740-048334  PROTOACPSM     PSM2-PTX-AC
PDU 1         Rev 01   740-048338  PROTOACPDU     PDU2-PTX-AC-W
  PSM 0       Rev 01   740-048334  PROTOACPSM     PSM2-PTX-AC
  PSM 1       Rev 01   740-048334  PROTOACPSM     PSM2-PTX-AC
  PSM 2       Rev 01   740-048334  PROTOACPSM     PSM2-PTX-AC
  PSM 3       Rev 01   740-048334  PROTOACPSM     PSM2-PTX-AC
  PSM 4       Rev 01   740-048334  PROTOACPSM     PSM2-PTX-AC
  PSM 5       Rev 01   740-048334  PROTOACPSM     PSM2-PTX-AC
  PSM 6       Rev 01   740-048334  PROTOACPSM     PSM2-PTX-AC
  PSM 7       Rev 01   740-048334  PROTOACPSM     PSM2-PTX-AC
CCG 0         REV 09   750-030653  IPUCA7DCAA     CCG-PTX-S
...
```

show chassis hardware clei-models (PTX5000 Packet Transport Router with FPC2-PTX-P1A)

```
user@host> show chassis hardware clei-models
Hardware inventory:
Item          Version  Part number  CLEI code      FRU model number
Midplane      REV 11   750-035893  IPMUN00ARA     CHAS-MP-PTX5000-S
FPM           REV 12   760-030647  IPUCA7SCAA     CRAFT-PTX5000-S
PDU 0         Rev 04   740-048336  IPUPAL7KAA     PDU2-PTX-DC-S
  PSM 0       Rev 04   740-046988  IPUPAL8KAA     PSM2-PTX-DC-S
  PSM 2       Rev 04   740-046988  IPUPAL8KAA     PSM2-PTX-DC-S
  PSM 4       Rev 04   740-046988  IPUPAL8KAA     PSM2-PTX-DC-S
  PSM 6       Rev 04   740-046988  IPUPAL8KAA     PSM2-PTX-DC-S
PDU 1         Rev 04   740-048336  IPUPAL7KAA     PDU2-PTX-DC-S
  PSM 1       Rev 04   740-046988  IPUPAL8KAA     PSM2-PTX-DC-S
  PSM 3       Rev 04   740-046988  IPUPAL8KAA     PSM2-PTX-DC-S
  PSM 5       Rev 04   740-046988  IPUPAL8KAA     PSM2-PTX-DC-S
  PSM 7       Rev 04   740-046988  IPUPAL8KAA     PSM2-PTX-DC-S
CCG 0         REV 09   750-030653  IPUCA7DCAA     CCG-PTX-S
CCG 1         REV 09   750-030653  IPUCA7DCAA     CCG-PTX-S
...
```

show chassis hardware detail (PTX5000 Packet Transport Router)

```
user@host> show chassis hardware detail
Hardware inventory:
Item          Version  Part number  Serial number  Description
```

| | | | | |
|------------------|--------------------------------|------------|----------------------|---------------------|
| Chassis | | | JN11D1FD7AJA | PTX5000 |
| Midplane | REV 03 | 711-031896 | ABAC5589 | Midplane-8S |
| FPM | REV 08 | 760-030647 | EG1679 | Front Panel Display |
| PDU 0 | Rev 05 | 740-032019 | ZE00006 | DC Power Dist Unit |
| PSM 0 | Rev 05 | 740-032022 | ZJ00018 | DC 12V Power Supply |
| PSM 1 | Rev 04 | 740-032022 | ZC00052 | DC 12V Power Supply |
| PSM 2 | Rev 04 | 740-032022 | ZD00051 | DC 12V Power Supply |
| PSM 3 | Rev 05 | 740-032022 | ZJ00060 | DC 12V Power Supply |
| CCG 0 | REV 04 | 750-030653 | EG3703 | Clock Generator |
| CCG 1 | REV 04 | 750-030653 | EG3698 | Clock Generator |
| Routing Engine 0 | REV 05 | 740-026942 | P737A-002231 | RE-DUO-2600 |
| ad0 | 3823 MB SMART CF | | 201006190039C02DC02D | Compact Flash |
| ad1 | 62720 MB SMART Lite SATA Drive | | 2011042300CF4C6B4C6B | Disk 1 |
| Routing Engine 1 | REV 06 | 740-026942 | P737A-002438 | RE-DUO-2600 |
| ad0 | 3823 MB SMART CF | | 20100619053455F055F0 | Compact Flash |
| ad1 | 62720 MB SMART Lite SATA Drive | | 20110423000AE8E7E8E7 | Disk 1 |
| CB 0 | REV 08 | 750-030625 | EG5519 | Control Board |
| CB 1 | REV 08 | 750-030625 | EG5516 | Control Board |
| FPC 0 | REV 18 | 750-036844 | EJ3080 | FPC |
| CPU | REV 12 | 711-030686 | EJ3260 | SNG PMB |
| FPC 2 | REV 13 | 750-036844 | EG5065 | FPC |
| CPU | REV 09 | 711-030686 | EG4082 | SNG PMB |
| PIC 0 | REV 14 | 750-031913 | EG5127 | 24x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | 143363A00240 | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031981 | UK90PZ1 | SFP+-10G-LR |
| Xcvr 2 | REV 01 | 740-031980 | AD1141A04XH | SFP+-10G-SR |
| Xcvr 3 | REV 01 | 740-031981 | UK90Q46 | SFP+-10G-LR |
| Xcvr 4 | REV 01 | 740-031980 | AD1141A04X4 | SFP+-10G-SR |
| Xcvr 6 | REV 01 | 740-031980 | B11H02560 | SFP+-10G-SR |
| Xcvr 7 | REV 01 | 740-031980 | B11C01589 | SFP+-10G-SR |
| Xcvr 8 | REV 01 | 740-031980 | AD1141A04XF | SFP+-10G-SR |
| Xcvr 10 | REV 01 | 740-031980 | 123363A01094 | SFP+-10G-SR |
| Xcvr 11 | REV 01 | 740-031980 | AK80LKF | SFP+-10G-SR |
| Xcvr 12 | REV 01 | 740-031980 | 183363A01528 | SFP+-10G-SR |
| Xcvr 14 | REV 01 | 740-031980 | 193363A01079 | SFP+-10G-SR |
| Xcvr 15 | REV 01 | 740-031980 | AK80MC8 | SFP+-10G-SR |
| Xcvr 16 | REV 01 | 740-031980 | AJCOBHC | SFP+-10G-SR |
| Xcvr 19 | REV 01 | 740-021309 | J08D26856 | SFP+-10G-LR |
| Xcvr 21 | REV 01 | 740-031980 | AK80KCT | SFP+-10G-SR |
| Xcvr 22 | REV 01 | 740-031981 | UK90PZL | SFP+-10G-LR |
| Xcvr 23 | REV 01 | 740-031980 | AK80N1V | SFP+-10G-SR |
| FPC 3 | REV 13 | 750-036844 | EG5074 | FPC |
| CPU | REV 09 | 711-030686 | EG4064 | SNG PMB |
| PIC 1 | REV 10 | 750-031903 | EG0325 | SNG Load |
| FPC 5 | REV 06 | 750-036844 | EH3198 | FPC |
| CPU | | | | |
| PIC 0 | REV 14 | 750-031913 | EG5134 | 24x 10GE(LAN) SFP+ |
| Xcvr 0 | REV 01 | 740-031980 | AK80LBH | SFP+-10G-SR |
| Xcvr 1 | REV 01 | 740-031980 | B11B03724 | SFP+-10G-SR |
| Xcvr 2 | REV 01 | 740-031980 | AK80FMH | SFP+-10G-SR |
| Xcvr 5 | REV 01 | 740-031980 | B11J00818 | SFP+-10G-SR |
| Xcvr 6 | REV 01 | 740-031980 | 193363A00743 | SFP+-10G-SR |
| Xcvr 7 | REV 01 | 740-031980 | B11B06125 | SFP+-10G-SR |
| Xcvr 10 | REV 01 | 740-031980 | B11H02529 | SFP+-10G-SR |
| Xcvr 11 | REV 01 | 740-031980 | AK80LFB | SFP+-10G-SR |
| Xcvr 12 | REV 01 | 740-031980 | 193363A01061 | SFP+-10G-SR |
| Xcvr 15 | REV 01 | 740-031980 | B11J00687 | SFP+-10G-SR |
| Xcvr 16 | REV 01 | 740-031980 | 193363A00738 | SFP+-10G-SR |
| Xcvr 18 | REV 01 | 740-031980 | AK80MQX | SFP+-10G-SR |
| Xcvr 19 | REV 01 | 740-021309 | J08C17257 | SFP+-10G-LR |
| Xcvr 22 | REV 01 | 740-031980 | B11J00730 | SFP+-10G-SR |

| | | | | |
|------------|--------|------------|-----------|---------------------|
| Xcvr 23 | REV 01 | 740-031980 | AK80KEE | SFP+-10G-SR |
| PIC 1 | REV 08 | 750-036710 | EG3105 | 2x 40GE CFP |
| Xcvr 0 | REV 01 | 740-034554 | B260HLT | CFP-40G-LR4 |
| Xcvr 1 | REV 01 | 740-034554 | B11C02847 | CFP-40G-LR4 |
| FPC 6 | REV 18 | 750-036844 | EJ4391 | FPC |
| CPU | REV 12 | 711-030686 | EJ3257 | SNG PMB |
| FPC 7 | REV 18 | 750-036844 | EJ4382 | FPC |
| CPU | REV 12 | 711-030686 | EJ3238 | SNG PMB |
| SPMB 0 | REV 10 | 711-030686 | EG5418 | SNG PMB |
| SPMB 1 | REV 09 | 711-030686 | EG5373 | SNG PMB |
| SIB 0 | REV 07 | 750-030631 | EG4858 | SIB-I-8S |
| SIB 1 | REV 07 | 750-030631 | EG4872 | SIB-I-8S |
| SIB 2 | REV 07 | 750-030631 | EG4866 | SIB-I-8S |
| SIB 3 | REV 07 | 750-030631 | EG6011 | SIB-I-8S |
| SIB 4 | REV 07 | 750-030631 | EG4907 | SIB-I-8S |
| SIB 5 | REV 07 | 750-030631 | EG4879 | SIB-I-8S |
| SIB 6 | REV 07 | 750-030631 | EG4864 | SIB-I-8S |
| SIB 7 | REV 07 | 750-030631 | EG4899 | SIB-I-8S |
| SIB 8 | REV 07 | 750-030631 | EG4880 | SIB-I-8S |
| Fan Tray 0 | REV 04 | 760-032784 | EG1496 | Vertical Fan Tray |
| Fan Tray 1 | REV 04 | 760-030642 | EG1335 | Horizontal Fan Tray |
| Fan Tray 2 | REV 02 | 760-030642 | ED4952 | Horizontal Fan Tray |

show chassis hardware detail (PTX5000 Packet Transport Router with AC PSM and PDU)

```
user@host> show chassis hardware detail
```

Hardware inventory:

| Item | Version | Part number | Serial number | Description |
|----------|---------|-------------|---------------|--------------------------|
| Chassis | | | JN12223A6AJA | PTX5000 |
| Midplane | REV 16 | 750-035893 | ACRA1350 | Midplane-8S |
| FPM | REV 12 | 760-030647 | BBBD5625 | Front Panel Display |
| PDU 0 | Rev 01 | 740-048338 | 1GB83360005 | High Capacity AC WYE PDU |
| PSM 0 | Rev 01 | 740-048334 | 1GB43360074 | High Capacity AC PSM |
| PSM 1 | Rev 01 | 740-048334 | 1GB43360001 | High Capacity AC PSM |
| PSM 2 | Rev 01 | 740-048334 | 1GB43360104 | High Capacity AC PSM |
| PSM 3 | Rev 01 | 740-048334 | 1GB43360042 | High Capacity AC PSM |
| PSM 4 | Rev 01 | 740-048334 | 1GB43360068 | High Capacity AC PSM |
| PSM 5 | Rev 01 | 740-048334 | 1GB43360080 | High Capacity AC PSM |
| PSM 6 | Rev 01 | 740-048334 | 1GB43360046 | High Capacity AC PSM |
| PSM 7 | Rev 01 | 740-048334 | 1GB43360100 | High Capacity AC PSM |
| PDU 1 | Rev 01 | 740-048338 | 1GB83360006 | High Capacity AC WYE PDU |
| PSM 0 | Rev 01 | 740-048334 | 1GB43360069 | High Capacity AC PSM |
| PSM 1 | Rev 01 | 740-048334 | 1GB43360099 | High Capacity AC PSM |
| PSM 2 | Rev 01 | 740-048334 | 1GB43360050 | High Capacity AC PSM |
| PSM 3 | Rev 01 | 740-048334 | 1GB43360095 | High Capacity AC PSM |
| PSM 4 | Rev 01 | 740-048334 | 1GB43360101 | High Capacity AC PSM |
| PSM 5 | Rev 01 | 740-048334 | 1GB43360075 | High Capacity AC PSM |
| PSM 6 | Rev 01 | 740-048334 | 1GB43360047 | High Capacity AC PSM |
| PSM 7 | Rev 01 | 740-048334 | 1GB43360019 | High Capacity AC PSM |
| CCG 0 | REV 09 | 750-030653 | BBAZ5345 | Clock Generator |

show chassis hardware detail (PTX5000 Packet Transport Router with FPC2-PTX-P1A)

```
user@host> show chassis hardware detail
```

Hardware inventory:

| Item | Version | Part number | Serial number | Description |
|----------|---------|-------------|---------------|-------------|
| Chassis | | | JN1204FC0AJA | PTX5000 |
| Midplane | REV 11 | 750-035893 | ACAB8038 | Midplane-8S |

| | | | | |
|---------|--------|------------|-------------|----------------------|
| FPM | REV 12 | 760-030647 | BBBD5619 | Front Panel |
| Display | | | | |
| PDU 0 | Rev 04 | 740-048336 | 1GB93470043 | High Capacity DC PDU |
| PSM 0 | Rev 04 | 740-046988 | 1GB63500184 | High Capacity DC PSM |
| PSM 2 | Rev 04 | 740-046988 | 1GB63500169 | High Capacity DC PSM |
| PSM 4 | Rev 04 | 740-046988 | 1GB63500306 | High Capacity DC PSM |
| PSM 6 | Rev 04 | 740-046988 | 1GB63500074 | High Capacity DC PSM |
| PDU 1 | Rev 04 | 740-048336 | 1GB93470045 | High Capacity DC PDU |
| PSM 1 | Rev 04 | 740-046988 | 1GB63500193 | High Capacity DC PSM |
| PSM 3 | Rev 04 | 740-046988 | 1GB63500143 | High Capacity DC PSM |
| PSM 5 | Rev 04 | 740-046988 | 1GB63500146 | High Capacity DC PSM |
| PSM 7 | Rev 04 | 740-046988 | 1GB63500192 | High Capacity DC PSM |
| CCG 0 | REV 09 | 750-030653 | BBBC1909 | Clock Generator |
| CCG 1 | REV 09 | 750-030653 | BBBD2970 | Clock Generator |
| ... | | | | |

show chassis hardware models (PTX5000 Packet Transport Router)

```
user@host> show chassis hardware models
```

Hardware inventory:

| Item | Version | Part number | Serial number | FRU model number |
|------------------|---------|-------------|---------------|---------------------|
| FPM | REV 08 | 760-030647 | EG1679 | CRAFT-PTX5000-S |
| PDU 0 | Rev 05 | 740-032019 | ZE00006 | PWR-SAN-PDU-DC |
| PSM 0 | Rev 05 | 740-032022 | ZJ00018 | PSM-PTX-DC-120-S |
| PSM 1 | Rev 04 | 740-032022 | ZC00052 | PWR-SAN-12-DC |
| PSM 2 | Rev 04 | 740-032022 | ZD00051 | PWR-SAN-12-DC |
| PSM 3 | Rev 05 | 740-032022 | ZJ00060 | PSM-PTX-DC-120-S |
| CCG 0 | REV 04 | 750-030653 | EG3703 | CCG-PTX-S |
| CCG 1 | REV 04 | 750-030653 | EG3698 | CCG-PTX-S |
| Routing Engine 0 | REV 05 | 740-026942 | P737A-002231 | RE-DUO-C2600-16G-S |
| Routing Engine 1 | REV 06 | 740-026942 | P737A-002438 | RE-DUO-C2600-16G-S |
| CB 0 | REV 08 | 750-030625 | EG5519 | CB-PTX-S |
| CB 1 | REV 08 | 750-030625 | EG5516 | CB-PTX-S |
| FPC 0 | REV 18 | 750-036844 | EJ3080 | FPC-PTX-P1-A |
| FPC 2 | REV 13 | 750-036844 | EG5065 | FPC-PTX-P1-A |
| PIC 0 | REV 14 | 750-031913 | EG5127 | P1-PTX-24-10GE-SFPP |
| FPC 3 | REV 13 | 750-036844 | EG5074 | FPC-PTX-P1-A |
| FPC 5 | | | | |
| PIC 0 | REV 14 | 750-031913 | EG5134 | P1-PTX-24-10GE-SFPP |
| FPC 6 | REV 18 | 750-036844 | EJ4391 | FPC-PTX-P1-A |
| FPC 7 | REV 18 | 750-036844 | EJ4382 | FPC-PTX-P1-A |
| SIB 0 | REV 07 | 750-030631 | EG4858 | SIB-I-PTX5008 |
| SIB 1 | REV 07 | 750-030631 | EG4872 | SIB-I-PTX5008 |
| SIB 2 | REV 07 | 750-030631 | EG4866 | SIB-I-PTX5008 |
| SIB 3 | REV 07 | 750-030631 | EG6011 | SIB-I-PTX5008 |
| SIB 4 | REV 07 | 750-030631 | EG4907 | SIB-I-PTX5008 |
| SIB 5 | REV 07 | 750-030631 | EG4879 | SIB-I-PTX5008 |
| SIB 6 | REV 07 | 750-030631 | EG4864 | SIB-I-PTX5008 |
| SIB 7 | REV 07 | 750-030631 | EG4899 | SIB-I-PTX5008 |
| SIB 8 | REV 07 | 750-030631 | EG4880 | SIB-I-PTX5008 |
| Fan Tray 1 | REV 04 | 760-030642 | EG1335 | FAN-PTX-H-S |

show chassis hardware models (PTX5000 Packet Transport Router with AC PSM and PDU)

```
user@host> show chassis hardware models
```

Hardware inventory:

| Item | Version | Part number | Serial number | FRU model number |
|----------|---------|-------------|---------------|-------------------|
| Midplane | REV 16 | 750-035893 | ACRA1350 | CHAS-MP-PTX5000-S |
| FPM | REV 12 | 760-030647 | BBBD5625 | CRAFT-PTX5000-S |
| PDU 0 | Rev 01 | 740-048338 | 1GB83360005 | PDU2-PTX-AC-W |


```

PSM 0      Rev 01  740-048334  1GB43360074  PSM2-PTX-AC
PSM 1      Rev 01  740-048334  1GB43360001  PSM2-PTX-AC
PSM 2      Rev 01  740-048334  1GB43360104  PSM2-PTX-AC
PSM 3      Rev 01  740-048334  1GB43360042  PSM2-PTX-AC
PSM 4      Rev 01  740-048334  1GB43360068  PSM2-PTX-AC
PSM 5      Rev 01  740-048334  1GB43360080  PSM2-PTX-AC
PSM 6      Rev 01  740-048334  1GB43360046  PSM2-PTX-AC
PSM 7      Rev 01  740-048334  1GB43360100  PSM2-PTX-AC
PDU 1      Rev 01  740-048338  1GB83360006  PDU2-PTX-AC-W
PSM 0      Rev 01  740-048334  1GB43360069  PSM2-PTX-AC
PSM 1      Rev 01  740-048334  1GB43360099  PSM2-PTX-AC
PSM 2      Rev 01  740-048334  1GB43360050  PSM2-PTX-AC
PSM 3      Rev 01  740-048334  1GB43360095  PSM2-PTX-AC
PSM 4      Rev 01  740-048334  1GB43360101  PSM2-PTX-AC
PSM 5      Rev 01  740-048334  1GB43360075  PSM2-PTX-AC
PSM 6      Rev 01  740-048334  1GB43360047  PSM2-PTX-AC
PSM 7      Rev 01  740-048334  1GB43360019  PSM2-PTX-AC
CCG 0      REV 09  750-030653  BBAZ5345     CCG-PTX-S
...

```

show chassis hardware models (PTX5000 Packet Transport Router with FPC2-PTX-P1A)

```

user@host> show chassis hardware models
Hardware inventory:
Item          Version  Part number  Serial number  FRU model number
Midplane     REV 11   750-035893  ACAB8038      CHAS-MP-PTX5000-S
FPM          REV 12   760-030647  BBBD5619      CRAFT-PTX5000-S
PDU 0        Rev 04   740-048336  1GB93470043   PDU2-PTX-DC-S
  PSM 0      Rev 04   740-046988  1GB63500184   PSM2-PTX-DC-S
  PSM 2      Rev 04   740-046988  1GB63500169   PSM2-PTX-DC-S
  PSM 4      Rev 04   740-046988  1GB63500306   PSM2-PTX-DC-S
  PSM 6      Rev 04   740-046988  1GB63500074   PSM2-PTX-DC-S
PDU 1        Rev 04   740-048336  1GB93470045   PDU2-PTX-DC-S
  PSM 1      Rev 04   740-046988  1GB63500193   PSM2-PTX-DC-S
  PSM 3      Rev 04   740-046988  1GB63500143   PSM2-PTX-DC-S
  PSM 5      Rev 04   740-046988  1GB63500146   PSM2-PTX-DC-S
  PSM 7      Rev 04   740-046988  1GB63500192   PSM2-PTX-DC-S
CCG 0        REV 09   750-030653  BBBC1909      CCG-PTX-S
CCG 1        REV 09   750-030653  BBBD2970      CCG-PTX-S
...

```

show chassis hardware extensive (PTX5000 Packet Transport Router)

```

user@host> show chassis hardware extensive
Hardware inventory:
Item          Version  Part number  Serial number  Description
.....
PDU 0        Rev 04   740-032019  UE0003        DC Power Dist Unit
Jedec Code:  0x7fb0          EEPROM Version:  0x02
P/N:         740-032019      S/N:            UE0003
Assembly ID: 0x043d          Assembly Version: 04.00
Date:        11-29-2010      Assembly Flags:  0x00
Version:     Rev 04          CLEI Code:       032022XXXX
ID: DC Power Dist Unit      FRU Model Number: PWR-SAN-PDU-DC
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 04 3d 04 00 52 65 76 20 30 34 00 00
Address 0x10: 00 00 00 00 37 34 30 2d 30 33 32 30 31 39 00 00
Address 0x20: 53 2f 4e 20 55 45 30 30 30 33 00 00 00 1d 0b 07

```

```

Address 0x30: da ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 30 33 32 30 32 32 58 58 58 58 50
Address 0x50: 57 52 2d 53 41 4e 2d 50 44 55 2d 44 43 00 00 00
Address 0x60: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x70: 00 00 00 a3 ff ff ff ff ff ff ff ff ff ff ff
PSM 0          Rev 04   740-032022   YG00065          DC 12V Power Supply
Module
Jedec Code:    0x7fb0          EEPROM Version:  0x02
P/N:           740-032022      S/N:             YG00065
Assembly ID:   0x0440          Assembly Version: 04.00
Date:          07-30-2010      Assembly Flags:  0x00
Version:       Rev 04          CLEI Code:       032022XXXX
ID: DC 12V Power Supply Module FRU Model Number: PWR-SAN-12-DC
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 04 40 04 00 52 65 76 20 30 34 00 00
Address 0x10: 00 00 00 00 37 34 30 2d 30 33 32 30 32 32 00 00
Address 0x20: 53 2f 4e 20 59 47 30 30 30 36 35 00 00 1e 07 07
Address 0x30: da ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 30 33 32 30 32 32 58 58 58 58 50
Address 0x50: 57 52 2d 53 41 4e 2d 31 32 2d 44 43 20 20 20 20
Address 0x60: 20 20 20 20 20 20 01 00 ff ff ff ff ff ff ff ff
Address 0x70: ff ff ff 0c ff ff ff ff ff ff ff ff ff ff ff ff

```

show chassis hardware extensive (PTX1000 Packet Transport Router)

```

user@host> show chassis hardware extensive
Hardware inventory:
Item          Version  Part number  Serial number  Description
Chassis                               UNDEFINED    PTX1000
Pseudo CB 0
Routing Engine 0
FPC 0         REV 06   750-053330   ACAM4850       PTX1000-FPC-P2-BUILTIN
CPU           BUILTIN   BUILTIN      FPC CPU
PIC 0         BUILTIN   BUILTIN      288X10GE/72X40GE/24X100GE

Xcvr 2        REV 01   740-046565   QE240845       QSFP+-40G-SR4
Xcvr 3        REV 01   740-046565   QE240962       QSFP+-40G-SR4
Xcvr 5        REV 01   740-032986   ES400LZ        QSFP+-40G-SR4
Xcvr 12       REV 01   740-054053   QE419452       QSFP+-4X10G-SR
Xcvr 18       REV 01   740-054053   QE419481       QSFP+-4X10G-SR
Xcvr 30       REV 01   740-046565   QE440485       QSFP+-40G-SR4
Xcvr 48       REV 01   740-032986   ES400K3        QSFP+-40G-SR4
Xcvr 68       REV 01   740-046565   QF2805J3       QSFP+-40G-SR4
Mezz          REV 05   711-053333   ACAM4282       Mezzanine Board
Power Supply 2 REV 01   740-054405   1EDN4470131    AC AFO 1600W PSU
Power Supply 3 REV 01   740-054405   1EDN4470112    AC AFO 1600W PSU
Fan Tray 0                               PTX1000 Fan Tray 0, Front
to Back Airflow - AFO
Fan Tray 1                               PTX1000 Fan Tray 1, Front
to Back Airflow - AFO
Fan Tray 2                               PTX1000 Fan Tray 2, Front
to Back Airflow - AFO

```

show chassis hardware extensive (PTX5000 with Control Board 2)

```

user@host> show chassis hardware grep CB
CB 0          REV 06   750-055537   ACLZ9541       Control Board 2
CB 1          REV 06   750-055537   ACLY5329       Control Board 2

```

show chassis hardware (MX Routers with Media Services Blade [MSB])

```

user@switch> show chassis hardware
Hardware inventory:

```

| Item | Version | Part number | Serial number | Description |
|------------------|---------|-------------|---------------|-----------------------|
| Chassis | | | JN1100FB1AFB | MX480 |
| Midplane | REV 05 | 710-017414 | TR3310 | MX480 Midplane |
| FPM Board | REV 02 | 710-017254 | KG1872 | Front Panel Display |
| PEM 2 | Rev 02 | 740-017343 | QCS0812A00N | DC Power Entry Module |
| PEM 3 | Rev 02 | 740-017343 | QCS0812A00U | DC Power Entry Module |
| Routing Engine 0 | REV 07 | 740-015113 | 1000740938 | RE-S-1300 |
| CB 0 | REV 03 | 710-021523 | KF4630 | MX SCB |
| FPC 1 | REV 11 | 750-037207 | ZW9726 | AS-MCC |
| CPU | REV 04 | 711-038173 | ZW4819 | AS-MCC PMB |
| MIC 0 | REV 06 | 750-037214 | ZW3574 | AS-MSC |
| PIC 0 | | BUILTIN | BUILTIN | AS-MSC |
| MIC 1 | REV 00 | 750-037211 | | AS-MXC |
| PIC 2 | | BUILTIN | BUILTIN | AS-MXC |

show chassis hardware extensive (MX Routers with Media Services Blade [MSB])

```

user@switch> show chassis hardware extensive
FPC 1          REV 11      750-037207      ZW9726          AS-MCC
Jedec Code:    0x7fb0      EEPROM Version:  0x02
P/N:           750-037207   S/N:             ZW9726
Assembly ID:   0x0b37      Assembly Version: 01.11
Date:          02-17-2012   Assembly Flags:   0x00
Version:       REV 11      CLEI Code:        PROTOXCLEI
ID: AS-MCC      FRU Model Number: 750-037207
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 0b 37 01 0b 52 45 56 20 31 31 00 00
Address 0x10: 00 00 00 00 37 35 30 2d 30 33 37 32 30 37 00 00
Address 0x20: 53 2f 4e 20 5a 57 39 37 32 36 00 00 00 11 02 07
Address 0x30: dc ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 01 50 52 4f 54 4f 58 43 4c 45 49 37
Address 0x50: 35 30 2d 30 33 37 32 30 37 00 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 31 31 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff 5e ff ff ff ff ff ff ff ff ff ff ff ff
CPU          REV 04      711-038173      ZW4819          AS-MCC-PMB
Jedec Code:    0x7fb0      EEPROM Version:  0x02
P/N:           711-038173   S/N:             ZW4819
Assembly ID:   0x0b38      Assembly Version: 01.04
Date:          12-30-2011   Assembly Flags:   0x00
Version:       REV 04
ID: AS-MCC PMB
Board Information Record:
Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 ff 0b 38 01 04 52 45 56 20 30 34 00 00
Address 0x10: 00 00 00 00 37 31 31 2d 30 33 38 31 37 33 00 00
Address 0x20: 53 2f 4e 20 5a 57 34 38 31 39 00 00 00 1e 0c 07
Address 0x30: db ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
Address 0x40: ff ff ff ff 00 50 52 4f 54 4f 58 43 4c 45 49 37
Address 0x50: 31 31 2d 30 33 38 31 37 33 00 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 30 34 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff 60 00 00 00 00 00 00 00 00 00 00 00 00
MIC 0          REV 06      750-037214      ZW3574          AS-MSC

```

```

Jedec Code: 0x7fb0          EEPROM Version: 0x02
P/N: 750-037214            S/N: ZW3574
Assembly ID: 0x0a44        Assembly Version: 01.06
Date: 02-19-2012          Assembly Flags: 0x00
Version: REV 06            CLEI Code: PROTOXCLEI
ID: AS-MSC                 FRU Model Number: 750-037214
Board Information Record:
  Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
  Address 0x00: 7f b0 02 ff 0a 44 01 06 52 45 56 20 30 36 00 00
  Address 0x10: 00 00 00 00 37 35 30 2d 30 33 37 32 31 34 00 00
  Address 0x20: 53 2f 4e 20 5a 57 33 35 37 34 00 00 00 13 02 07
  Address 0x30: dc ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
  Address 0x40: ff ff ff ff 01 50 52 4f 54 4f 58 43 4c 45 49 37
  Address 0x50: 35 30 2d 30 33 37 32 31 34 00 00 00 00 00 00 00
  Address 0x60: 00 00 00 00 00 00 30 36 00 ff ff ff ff ff ff ff
  Address 0x70: ff ff ff 60 c0 03 e5 f4 00 00 00 00 00 00 00 00
  PIC 0                BUILTIN          BUILTIN          AS-MSC
MIC 1                  REV 00          750-037211        AS-MXC
Jedec Code: 0x7fb0          EEPROM Version: 0x01
P/N: 750-037211
Assembly ID: 0x0a43        Assembly Version: 01.00
Date: 255-255-65535       Assembly Flags: 0x00
Version: REV 00
ID: AS-MXC
Board Information Record:
  Address 0x00: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
I2C Hex Data:
  Address 0x00: 7f b0 01 ff 0a 43 01 00 52 45 56 20 30 30 00 00
  Address 0x10: 00 00 00 00 37 35 30 2d 30 33 37 32 31 31 00 00
  Address 0x20: 00 00 00 00 00 00 00 00 00 00 00 00 00 ff ff ff
  Address 0x30: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
  Address 0x40: ff ff ff ff 00 ff ff ff ff ff ff ff ff ff ff ff
  Address 0x50: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
  Address 0x60: ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff
  Address 0x70: ff ff ff ff c0 02 e6 6c 7f b0 02 ff 0a 44 01 06
  PIC 2                BUILTIN          BUILTIN          AS-MXC

```

show chassis hardware (ACX5048 Router)

```

user@host> show chassis hardware
Hardware inventory:
Item          Version  Part number  Serial number  Description
Chassis                               VF3714170810  ACX5048
Pseudo CB 0
Routing Engine 0      BUILTIN    BUILTIN      ACX5K Routing Engine
FPC 0                REV 05     650-056267   VF3714170810  ACX5048
CPU                  BUILTIN    BUILTIN      FPC CPU
PIC 0                BUILTIN    BUILTIN      48x10G-6x40G
  Xcvr 0              REV 02     740-011613   NR2051S       SFP-SX
  Xcvr 33              REV 01     740-030589   SE5N290041    SFP+-10G-LPBK
  Xcvr 35              REV 01     740-030589   SE5N290926    SFP+-10G-LPBK
  Xcvr 37              REV 01     740-030589   SE5N290049    SFP+-10G-LPBK
  Xcvr 39              REV 01     740-030589   SE5N290046    SFP+-10G-LPBK
  Xcvr 48              NON-JNPR   409310098    UNKNOWN
Power Supply 1      REV 03     740-041741   1GA24081097   JPSU-650W-AC-AFO
Fan Tray 0                               ACX5K Fan Tray 0, Front
  to Back Airflow - AFO
Fan Tray 1                               ACX5K Fan Tray 1, Front
  to Back Airflow - AFO

```

```

Fan Tray 2                                ACX5K Fan Tray 2, Front
  to Back Airflow - AFO
Fan Tray 3                                ACX5K Fan Tray 3, Front
  to Back Airflow - AFO
Fan Tray 4                                ACX5K Fan Tray 4, Front
  to Back Airflow - AFO

```

show chassis hardware detail (ACX5048 Router)

```

user@host> show chassis hardware detail
Hardware inventory:
Item          Version  Part number  Serial number  Description
Chassis                                     VF3714170810  ACX5048
Pseudo CB 0
Routing Engine 0      BUILTIN    BUILTIN        ACX5K Routing Engine
  ad0      509 MB  QEMU HARDDISK  QM00001        Hard Disk
  ad1     4095 MB  QEMU HARDDISK  QM00002        Hard Disk
  ad2      511 MB  QEMU HARDDISK  QM00003        Hard Disk
  ad3     1023 MB  QEMU HARDDISK  QM00004        Hard Disk
  usb0 (addr 1) product 0x0000 0  vendor 0x0000  uhub1
  usb0 (addr 2) product 0x0020 32  vendor 0x8087  uhub2
FPC 0          REV 05   650-056267    VF3714170810  ACX5048
CPU           BUILTIN    BUILTIN        FPC CPU
PIC 0         BUILTIN    BUILTIN        48x10G-6x40G
  Xcvr 0      REV 02   740-011613    NR2051S       SFP-SX
  Xcvr 33     REV 01   740-030589    SE5N290041    SFP+-10G-LPBK
  Xcvr 35     REV 01   740-030589    SE5N290926    SFP+-10G-LPBK
  Xcvr 37     REV 01   740-030589    SE5N290049    SFP+-10G-LPBK
  Xcvr 39     REV 01   740-030589    SE5N290046    SFP+-10G-LPBK
  Xcvr 48     NON-JNPR  409310098     UNKNOWN
Power Supply 1  REV 03   740-041741    1GA24081097   JPSU-650W-AC-AFO
Fan Tray 0                                           ACX5K Fan Tray 0, Front
  to Back Airflow - AFO
Fan Tray 1                                           ACX5K Fan Tray 1, Front
  to Back Airflow - AFO
Fan Tray 2                                           ACX5K Fan Tray 2, Front
  to Back Airflow - AFO
Fan Tray 3                                           ACX5K Fan Tray 3, Front
  to Back Airflow - AFO
Fan Tray 4                                           ACX5K Fan Tray 4, Front
  to Back Airflow - AFO

```

show chassis hardware clei-models (ACX5048 Router)

```

user@host> show chassis hardware clei-models
Hardware inventory:
Item          Version  Part number  CLEI code  FRU model number
Routing Engine 0      BUILTIN    CMMRG00BRA  ACX5048
FPC 0          REV 05   650-056267    CMMRG00BRA  ACX5048
PIC 0         BUILTIN    CMMRG00BRA  ACX5048
Power Supply 1  REV 03   740-041741    CMUPABHBAA  JPSU-650W-AC-AFO
Fan Tray 0      ACX5K-FAN
Fan Tray 1      ACX5K-FAN
Fan Tray 2      ACX5K-FAN
Fan Tray 3      ACX5K-FAN
Fan Tray 4      ACX5K-FAN

```

show chassis hardware models (ACX5048 Router)

```

user@host> show chassis hardware models

```

```

Hardware inventory:
Item          Version  Part number  Serial number  FRU model number
Routing Engine 0
FPC 0          REV 05    650-056267  VF3714170810  ACX5048
  PIC 0          BUILTIN    BUILTIN      BUILTIN      ACX5048
Power Supply 1  REV 03    740-041741  1GA24081097  JPSU-650W-AC-AFO
Fan Tray 0
Fan Tray 1
Fan Tray 2
Fan Tray 3
Fan Tray 4
ACX5K-FAN
ACX5K-FAN
ACX5K-FAN
ACX5K-FAN
ACX5K-FAN

```

show chassis hardware (ACX5096 Router)

```

user@host> show chassis hardware
Hardware inventory:
Item          Version  Part number  Serial number  Description
Chassis
Pseudo CB 0
Routing Engine 0
FPC 0          REV 09    650-053391  VB3714510139  ACX5096
  CPU          BUILTIN    BUILTIN      BUILTIN      FPC CPU
  PIC 0          BUILTIN    BUILTIN      BUILTIN      96x10G-8x40G
    Xcvr 0      REV 01    740-021308  ARS186H      SFP+-10G-SR
    Xcvr 2      REV 01    740-031851  AM1045SUA1G  SFP-SX
    Xcvr 10     REV 02    740-011613  NS11KRP      SFP-SX
    Xcvr 14     REV 01    740-031980  AMCOLKL      SFP+-10G-SR
    Xcvr 20     REV 01    740-021308  ARS18A2      SFP+-10G-SR
    Xcvr 30     REV 02    740-011613  PJ21954      SFP-SX
    Xcvr 35     REV 01    740-031851  PN344LV      SFP-SX
    Xcvr 40     REV 01    740-031851  PLG028R      SFP-SX
    Xcvr 41     REV 01    740-021308  L12D01919    SFP+-10G-SR
    Xcvr 46     REV 01    740-011613  PD91F10      SFP-SX
    Xcvr 64     REV 01    740-031980  AMSOYSS      SFP+-10G-SR
    Xcvr 96     REV 01    740-032986  QE481421     QSFP+-40G-SR4
    Xcvr 99     REV 01    740-032986  QE494942     QSFP+-40G-SR4
    Xcvr 100    REV 01    740-032986  QE494756     QSFP+-40G-SR4
Power Supply 0  REV 01    740-053352  1GD14220106  JPSU-850W-AC-AFO
Power Supply 1  REV 01    740-053352  1GD14220102  JPSU-850W-AC-AFO
Fan Tray 0
  to Back Airflow - AFO
Fan Tray 1
  to Back Airflow - AFO
Fan Tray 2
  to Back Airflow - AFO
ACX5K Fan Tray 0, Front
ACX5K Fan Tray 1, Front
ACX5K Fan Tray 2, Front

```

show chassis hardware detail (ACX5096 Router)

```

user@host> show chassis hardware detail
Hardware inventory:
Item          Version  Part number  Serial number  Description
Chassis
Pseudo CB 0
Routing Engine 0
  ad0      509 MB  QEMU HARDDISK  QM00001  Hard Disk
  ad1      4095 MB  QEMU HARDDISK  QM00002  Hard Disk
  ad2       511 MB  QEMU HARDDISK  QM00003  Hard Disk
  ad3      1023 MB  QEMU HARDDISK  QM00004  Hard Disk
  usb0 (addr 1)  product 0x0000 0  vendor 0x0000  uhub1
  usb0 (addr 2)  product 0x0020 32  vendor 0x8087  uhub2

```

| | | | | |
|-----------------------|--------|------------|--------------|-------------------------|
| FPC 0 | REV 09 | 650-053391 | VB3714510139 | ACX5096 |
| CPU | | BUILTIN | BUILTIN | FPC CPU |
| PIC 0 | | BUILTIN | BUILTIN | 96x10G-8x40G |
| Xcvr 0 | REV 01 | 740-021308 | ARS186H | SFP+-10G-SR |
| Xcvr 10 | REV 02 | 740-011613 | NS11KRP | SFP-SX |
| Xcvr 14 | REV 01 | 740-031980 | AMCOLKL | SFP+-10G-SR |
| Xcvr 20 | REV 01 | 740-021308 | ARS18A2 | SFP+-10G-SR |
| Xcvr 30 | REV 02 | 740-011613 | PJ21954 | SFP-SX |
| Xcvr 41 | REV 01 | 740-021308 | L12D01919 | SFP+-10G-SR |
| Xcvr 46 | REV 01 | 740-011613 | PD91F10 | SFP-SX |
| Xcvr 64 | REV 01 | 740-031980 | AMSOYSS | SFP+-10G-SR |
| Xcvr 78 | REV 01 | 740-031851 | AM1045SUA1G | SFP-SX |
| Xcvr 96 | REV 01 | 740-032986 | QE481421 | QSFP+-40G-SR4 |
| Xcvr 99 | REV 01 | 740-032986 | QE494942 | QSFP+-40G-SR4 |
| Xcvr 100 | REV 01 | 740-032986 | QE494756 | QSFP+-40G-SR4 |
| Power Supply 0 | REV 01 | 740-053352 | 1GD14220106 | JPSU-850W-AC-AFO |
| Power Supply 1 | REV 01 | 740-053352 | 1GD14220102 | JPSU-850W-AC-AFO |
| Fan Tray 0 | | | | ACX5K Fan Tray 0, Front |
| to Back Airflow - AFO | | | | |
| Fan Tray 1 | | | | ACX5K Fan Tray 1, Front |
| to Back Airflow - AFO | | | | |
| Fan Tray 2 | | | | ACX5K Fan Tray 2, Front |
| to Back Airflow - AFO | | | | |

show chassis hardware clei-models (ACX5096 Router)

```
user@host> show chassis hardware clei-models
Hardware inventory:
Item          Version  Part number  CLEI code  FRU model number
Routing Engine 0
FPC 0         REV 09    650-053391  CMMNX10BRA ACX5096
PIC 0         BUILTIN  CMMNX10BRA  ACX5096
Power Supply 0 REV 01    740-053352  CMUPACSBAA JPSU-850W-AC-AFO
Power Supply 1 REV 01    740-053352  CMUPACSBAA JPSU-850W-AC-AFO
Fan Tray 0
Fan Tray 1
Fan Tray 2
ACX5K-FAN
ACX5K-FAN
ACX5K-FAN
```

show chassis hardware models (ACX5096 Router)

```
user@host> show chassis hardware models
Hardware inventory:
Item          Version  Part number  Serial number  FRU model number
Routing Engine 0
FPC 0         REV 09    650-053391  VB3714510139 ACX5096
PIC 0         BUILTIN  CMMNX10BRA  ACX5096
Power Supply 0 REV 01    740-053352  1GD14220106 JPSU-850W-AC-AFO
Power Supply 1 REV 01    740-053352  1GD14220102 JPSU-850W-AC-AFO
Fan Tray 0
Fan Tray 1
Fan Tray 2
ACX5K-FAN
ACX5K-FAN
ACX5K-FAN
```

show chassis hardware (ACX500 Router)

```
user@host> show chassis hardware
Hardware inventory:
Item          Version  Part number  Serial number  Description
Chassis
Midplane      REV 01    650-055932  VJ0214510035 ACX500-AC
Routing Engine BUILTIN  BUILTIN      Routing Engine
```

| | | | | | |
|-----------|--------|------------|---------|---------|-----------------------|
| FEB 0 | | | BUILTIN | BUILTIN | Forwarding Engine |
| Processor | | | | | |
| FPC 0 | | | BUILTIN | BUILTIN | FPC BUILTIN |
| MIC 0 | | | BUILTIN | BUILTIN | 2x 1GE(LAN) SFP |
| PIC 0 | | | BUILTIN | BUILTIN | 2x 1GE(LAN) SFP |
| Xcvr 0 | REV 01 | 740-031851 | PMF2Y3C | | SFP-SX |
| Xcvr 1 | REV 01 | 740-031851 | PN342QN | | SFP-SX |
| MIC 1 | | | BUILTIN | BUILTIN | 4x 1GE(LAN) SFP, RJ45 |
| PIC 1 | | | BUILTIN | BUILTIN | 4x 1GE(LAN) SFP, RJ45 |
| Xcvr 0 | REV 01 | 740-011613 | PF30K0L | | SFP-SX |
| MIC 2 | | | BUILTIN | BUILTIN | MS BUILTIN |
| PIC 2 | | | BUILTIN | BUILTIN | MS BUILTIN |

show chassis hardware detail (ACX500 Router)

```

user@host> show chassis hardware detail
Hardware inventory:
Item          Version  Part number  Serial number  Description
Chassis                               VJ0214510035  ACX500-AC
Midplane      REV 01   650-055932  VJ0214510035  ACX500-AC
Routing Engine BUILTIN  BUILTIN      Routing Engine
da0           3820 MB  USB DISK 2.0 Nand Flash 0
FEB 0                               BUILTIN      BUILTIN      Forwarding Engine
Processor
FPC 0                               BUILTIN      BUILTIN      FPC BUILTIN
MIC 0                               BUILTIN      BUILTIN      2x 1GE(LAN) SFP
PIC 0                               BUILTIN      BUILTIN      2x 1GE(LAN) SFP
Xcvr 0        REV 01   740-031851  PMF2Y3C       SFP-SX
Xcvr 1        REV 01   740-031851  PN342QN       SFP-SX
MIC 1                               BUILTIN      BUILTIN      4x 1GE(LAN) SFP, RJ45
PIC 1                               BUILTIN      BUILTIN      4x 1GE(LAN) SFP, RJ45
Xcvr 0        REV 01   740-011613  PF30K0L       SFP-SX
MIC 2                               BUILTIN      BUILTIN      MS BUILTIN
PIC 2                               BUILTIN      BUILTIN      MS BUILTIN

```

show chassis hardware extensive (ACX500 Router)

```

user@host> show chassis hardware extensive
Hardware inventory:
Item          Version  Part number  Serial number  Description
Chassis                               VJ0214510035  ACX500-AC
Jedec Code:   0x7fb0                      EEPROM Version: 0x02
S/N:          VJ0214510035
Assembly ID:  0x057c                      Assembly Version: 00.00
Date:         00-00-0000                  Assembly Flags:  0x00
ID: ACX500-AC
Board Information Record:
Address 0x00: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
I2C Hex Data:
Address 0x00: 7f b0 02 ff 05 7c 00 00 00 00 00 00 00 00 00 00
Address 0x10: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x20: 56 4a 30 32 31 34 35 31 30 30 33 35 00 00 00 00
Address 0x30: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x40: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x70: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Midplane      REV 01   650-055932  VJ0214510035  ACX500-AC
Jedec Code:   0x7fb0                      EEPROM Version: 0x02
P/N:         650-055932                  S/N:          VJ0214510035

```



```

Assembly ID: 0x057c      Assembly Version: 01.00
Date: 12-23-2014        Assembly Flags: 0x00
Version: REV 01         CLEI Code: PROTOXCLEI
ID: ACX500-AC           FRU Model Number: ACX500-AC

Board Information Record:
Address 0x00: ad 01 00 80 f0 1c 2d 1b 60 80 ff ff ff ff ff ff
I2C Hex Data:
Address 0x00: 7f b0 02 fe 05 7c 01 00 52 45 56 20 30 31 00 00
Address 0x10: 00 00 00 00 36 35 30 2d 30 35 35 39 33 32 00 00
Address 0x20: 56 4a 30 32 31 34 35 31 30 30 33 35 00 17 0c 07
Address 0x30: de ff ff ff ad 01 00 80 f0 1c 2d 1b 60 80 ff ff
Address 0x40: ff ff ff ff 01 50 52 4f 54 4f 58 43 4c 45 49 41
Address 0x50: 43 58 35 30 30 2d 41 43 00 00 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 30 41 00 ff ff ff ff ff ff ff
Address 0x70: ff ff ff 93 56 4a 30 32 31 34 35 31 30 30 33 35
Routing Engine          BUILTIN          BUILTIN          Routing Engine
da0      3820 MB  USB DISK 2.0              Nand Flash 0
FEB 0              BUILTIN          BUILTIN          Forwarding Engine
Processor
FPC 0              BUILTIN          BUILTIN          FPC BUILTIN
MIC 0              BUILTIN          BUILTIN          2x 1GE(LAN) SFP
Jedec Code: 0x0000          EEPROM Version: 0x00
P/N: BUILTIN          S/N: BUILTIN
Assembly ID: 0x0a40        Assembly Version: 00.00
Date: 00-00-0000          Assembly Flags: 0x00
ID: 2x 1GE(LAN) SFP
Board Information Record:
Address 0x00: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
I2C Hex Data:
Address 0x00: 00 00 00 00 0a 40 00 00 00 00 00 00 00 00 00 00
Address 0x10: 00 00 00 00 42 55 49 4c 54 49 4e 00 49 6e 76 61
Address 0x20: 42 55 49 4c 54 49 4e 00 49 6e 76 61 00 00 00 00
Address 0x30: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x40: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x70: 00 00 00 00 00 de ad be ef 64 20 22 a8 60 af 21 38
PIC 0              BUILTIN          BUILTIN          2x 1GE(LAN) SFP
Xcvr 0      REV 01  740-031851  PMF2Y3C          SFP-SX
Xcvr 1      REV 01  740-031851  PN342QN          SFP-SX
MIC 1              BUILTIN          BUILTIN          4x 1GE(LAN) SFP, RJ45
Jedec Code: 0x0000          EEPROM Version: 0x00
P/N: BUILTIN          S/N: BUILTIN
Assembly ID: 0x0aac        Assembly Version: 00.00
Date: 00-00-0000          Assembly Flags: 0x00
ID: 4x 1GE(LAN) SFP, RJ45
Board Information Record:
Address 0x00: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
I2C Hex Data:
Address 0x00: 00 00 00 00 0a ac 00 00 00 00 00 00 00 00 00 00
Address 0x10: 00 00 00 00 42 55 49 4c 54 49 4e 00 49 6e 76 61
Address 0x20: 42 55 49 4c 54 49 4e 00 49 6e 76 61 00 00 00 00
Address 0x30: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x40: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x70: 00 00 00 00 00 00 00 00 64 20 b5 c0 60 af 21 38
PIC 1              BUILTIN          BUILTIN          4x 1GE(LAN) SFP, RJ45
Xcvr 0      REV 01  740-011613  PF30K0L          SFP-SX
MIC 2              BUILTIN          BUILTIN          MS BUILTIN
Jedec Code: 0x0000          EEPROM Version: 0x00

```

```
P/N:          BUILTIN          S/N:          BUILTIN
Assembly ID:  0x0aaf          Assembly Version: 00.00
Date:         00-00-0000      Assembly Flags:  0x00
ID: MS BUILTIN
Board Information Record:
Address 0x00: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
I2C Hex Data:
Address 0x00: 00 00 00 00 0a af 00 00 00 00 00 00 00 00 00 00
Address 0x10: 00 00 00 00 42 55 49 4c 54 49 4e 00 49 6e 76 61
Address 0x20: 42 55 49 4c 54 49 4e 00 49 6e 76 61 00 00 00 00
Address 0x30: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x40: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x50: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x60: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Address 0x70: 00 00 00 00 de ad be ef 64 22 cd 48 60 af 21 38
          PIC 2          BUILTIN          BUILTIN          MS BUILTIN
```

show chassis hardware clei-models (ACX500 Router)

```
user@host> show chassis hardware clei-models
Hardware inventory:
Item          Version  Part number  CLEI code      FRU model number
Midplane      REV 01   650-055932  PROTOXCLEI     ACX500-AC
Routing Engine
FEB 0         BUILTIN
FPC 0         BUILTIN
```

show chassis hardware models (ACX500 Router)

```
user@host> show chassis hardware models
Hardware inventory:
Item          Version  Part number  Serial number   FRU model number
Midplane      REV 01   650-055932  VJ0214510035   ACX500-AC
Routing Engine
FEB 0         BUILTIN   BUILTIN
FPC 0         BUILTIN   BUILTIN
```

show chassis fpc

| | |
|---|--|
| List of Syntax | Syntax on page 363 Syntax (EX Series Switches) on page 363 Syntax (T4000 Routers) on page 363 Syntax (TX Matrix and TX Matrix Plus Routers) on page 363 Syntax (MX Series Routers and EX Series switches) on page 363 Syntax (MX104, MX204, MX2010, MX2020, MX10003, and MX2008 3D Universal Edge Routers) on page 363 Syntax (QFX Series) on page 363 Syntax (OCX Series) on page 364 Syntax (PTX Series Packet Transport Routers) on page 364 Syntax (ACX Series Universal Access Routers) on page 364 Syntax (ACX500 Routers) on page 364 |
| Syntax | <pre>show chassis fpc <detail <slot>> <pic-status <slot>></pre> |
| Syntax (EX Series Switches) | <pre>show chassis fpc <detail <fpc-slot>> <pic-status <fpc-slot>> <fpc-slot></pre> |
| Syntax (T4000 Routers) | <pre>show chassis fpc <detail <fpc-slot>> <pic-status <fpc-slot>></pre> |
| Syntax (TX Matrix and TX Matrix Plus Routers) | <pre>show chassis fpc <detail <fpc-slot>> <pic-status <fpc-slot>> <slot></pre> |
| Syntax (MX Series Routers and EX Series switches) | <pre>show chassis fpc <detail <slot>> <pic-status <slot>> <all-members> <local> <member member-id></pre> |
| Syntax (MX104, MX204, MX2010, MX2020, MX10003, and MX2008 3D Universal Edge Routers) | <pre>show chassis fpc <slot> detail <detail <slot>> <pic-status <slot>> <fpc-slot></pre> |
| Syntax (QFX Series) | <pre>show chassis fpc <detail> <interconnect-device name <fpc-slot fpc-slot>> <node-device name></pre> |

| | |
|---|---|
| Syntax (OCX Series) | <code>show chassis fpc</code> <code><detail></code> |
| Syntax (PTX Series Packet Transport Routers) | <code>show chassis fpc</code> <code><detail <fpc-slot>> <pic-status <fpc-slot>></code> <code><fpc-slot></code> |
| Syntax (ACX Series Universal Access Routers) | <code>show chassis fpc</code> <code><detail <fpc-slot>> <pic-status <fpc-slot>></code> <code><fpc-slot></code> |
| Syntax (ACX500 Routers) | <code>show chassis fpc</code> <code><fpc-slot></code> <code>detail <fpc-slot></code> <code>pic-status <fpc-slot></code> |
| Release Information | <p>Command introduced before Junos OS Release 7.4.</p> <p>Command introduced in Junos OS Release 9.0 for EX Series switches.</p> <p>Command introduced in Junos OS Release 11.1 for QFX Series.</p> <p>Command introduced in Junos OS Release 12.1x48 for PTX Series Packet Transport Routers.</p> <p>Command introduced in Junos OS Release 12.2 for ACX Series Universal Access Routers.</p> <p>Command introduced in Junos OS Release 12.3 for MX2020 3D Universal Edge Routers.</p> <p>Command introduced in Junos OS Release 12.3 for MX2010 3D Universal Edge Routers.</p> <p>Command introduced in Junos OS Release 13.2 for MX104 3D Universal Edge Routers.</p> <p>Command introduced in Junos OS Release 14.1X53-D20 for the OCX Series.</p> <p>Command introduced in Junos OS Release 17.2 for MX2008 3D Universal Edge Routers.</p> <p>Command introduced in Junos OS Release 17.2 for PTX10008 Routers.</p> <p>Command introduced in Junos OS Release 17.3 for MX10003 3D Universal Edge Routers.</p> <p>Command introduced in Junos OS Release 17.3 for MX150 Router Appliance.</p> <p>Command introduced in Junos OS Release 17.4 for MX204 3D Universal Edge Routers.</p> |
| Description | Display status information about the installed Flexible PIC Concentrators (FPCs) and PICs. |
| Options | none —Display status information for all FPCs. On a TX Matrix router, display status information for all FPCs on the attached T640 routers in the routing matrix. On a TX Matrix Plus router, display status information for all FPCs on the attached routers in the routing matrix. |



NOTE: In EX8200 switches, line cards initialize Packet Forwarding Engine during startup. If an error occurs during hardware initialization, the FPCs with bad hardware parts power down after transferring the debug information to the Routing Engine. The Routing Engine marks the FPC offline, logs the error in system log messages (/var/log/messages), and generates an alarm to inform the user.

See the following sample output:

```
user@host> show chassis fpc
```

| | Temp | CPU Utilization (%) | | Memory | |
|-----------------|------|---------------------|-----------|-----------|------|
| Utilization (%) | | | | | |
| Slot State | (C) | Total | Interrupt | DRAM (MB) | Heap |
| Buffer | | | | | |
| 0 Empty | | | | | |
| 1 Empty | | | | | |
| 2 Empty | | | | | |
| 3 Empty | | | | | |
| 4 Empty | | | | | |
| 5 Offline | | | | | |
| 6 Empty | | | | | |
| 7 Online | 26 | 4 | 0 | 1024 | 0 |
| 32 | | | | | |

---Hard FPC error---

The following sample output shows the alarm raised for the failed FPCs:

```
user@host> show chassis alarms
```

4 alarms currently active

| Alarm time | Class | Description |
|-------------------------|-------|--------------------------------------|
| 2011-03-24 00:52:51 UTC | Major | FPC 5 Hard errors |
| 2011-03-24 00:52:31 UTC | Major | Fan Tray Failure |
| 2011-03-24 00:52:31 UTC | Major | Fan Tray Failure |
| 2011-03-24 00:51:26 UTC | Minor | Loss of communication with Backup RE |



NOTE: On T4000 routers, when you include the enhanced-mode statement at the [edit chassis network-services] hierarchy level and reboot the system, only the T4000 Type 5 FPCs present on the router become online while the remaining FPCs are offline, and FPC misconfiguration alarms are generated. The show chassis alarm command output displays FPC misconfiguration (FPC *fpc-slot* misconfig) as the reason for the generation the alarms.

The following sample output shows the FPC status after the enhanced-mode statement is configured on the T4000 router. The T4000 Type 5 FPC present in slot 5 becomes online while the remaining FPCs are offline.

```
user@host> show chassis fpc
```

| | Temp | CPU Utilization (%) | Memory |
|-----------------|------|---------------------|----------------------------|
| Utilization (%) | | | |
| Slot State | (C) | Total | Interrupt |
| Buffer | | | |
| 0 offline | | | ---FPC misconfiguration--- |
| 1 offline | | | ---FPC misconfiguration--- |
| 2 offline | | | ---FPC misconfiguration--- |
| 3 Empty | | | |
| 4 Empty | | | |
| 5 Online | 66 | 50 | 0 |
| 27 | | | 2816 29 |

The following sample output shows FPC misconfiguration alarms:

```
user@host> show chassis alarms
```

3 alarms currently active

| Alarm time | Class | Description |
|-------------------------|-------|-----------------|
| 2011-03-24 00:52:51 PST | Major | FPC 1 misconfig |
| 2011-03-24 00:52:31 PST | Major | FPC 2 misconfig |
| 2011-03-24 00:52:31 PST | Major | FPC 3 misconfig |

detail—(Optional) Display detailed status information for all FPCs or for the FPC in the specified slot (see *fpc-slot* or *slot*).

all-members—(MX Series routers and EX Series switches only) (Optional) Display status information for all FPCs on all members of the Virtual Chassis configuration.

interconnect-device *name*—(QFabric systems only) (Optional) Display status information for all FPCs on the Interconnect device.

fpc-slot—(Optional) FPC slot number:

- (TX Matrix and TX Matrix Plus routers only)—On a TX Matrix router, if you specify the number of the T640 router (line-card chassis) by using the **lcc *number*** option (the recommended method), replace *fpc-slot* with a value from 0 through 7. Otherwise, replace *fpc-slot* with a value from 0 through 31. Likewise, on a TX Matrix

Plus router, if you specify the number of the specified router (line-card chassis) by using the **lcc number** option (the recommended method), replace **fpc-slot** with a value from 0 through 7. Otherwise, replace **fpc-slot** with a value from 0 through 31. For example, the following commands have the same result:

```
user@host> show chassis fpc detail 1 lcc 1
user@host> show chassis fpc detail 9
```

- M120 router—Replace **fpc-slot** with a value from 0 through 5.
- MX80 router—Replace **fpc-slot** with a value from 0 through 1.
- MX104 and MX104-40G routers—Replace **fpc-slot** with a value from 0 through 2.
- MX240 router—Replace **fpc-slot** with a value from 0 through 2.
- MX480 router—Replace **fpc-slot** with a value from 0 through 5.
- MX-960 router—Replace **fpc-slot** with a value from 0 through 11.
- MX2010 router—Replace **fpc-slot-number** with a value from 0 through 9.
- MX2008 router—Replace **fpc-slot-number** with a value from 0 through 9.
- MX2020 router—Replace **fpc-slot-number** with a value from 0 through 19.
- Other routers—Replace **fpc-slot** with a value from 0 through 7.
- EX Series switches:
 - EX3200 switches and EX4200 standalone switches—Replace **fpc-slot** with 0.
 - EX4200 switches in a Virtual Chassis configuration—Replace **fpc-slot** with a value from 0 through 9.
 - EX6210 switches—Replace **fpc-slot** with a value from 0 through 9.
 - EX8208 switches—Replace **fpc-slot** with a value from 0 through 7.
 - EX8216 switches—Replace **fpc-slot** with a value from 0 through 15.
 - EX9204 switches—Replace **fpc-slot** with a value from 0 through 2.
 - EX9208 switches—Replace **fpc-slot** with a value from 0 through 5.
 - EX9214 switches—Replace **fpc-slot** with a value from 0 through 11.
- QFX Series:
 - QFXSeries and OCX Series switches—Replace **fpc-slot** with 0.
 - QFabric systems—Replace **fpc-slot** with 0 through 31 on the Interconnect device.
- PTX Series Packet Transport Routers:
 - PTX5000 Packet Transport Router—Replace **fpc-slot** with a value from 0 through 7.
- ACX Series Universal Access Routers:

- ACX1000 and ACX2000 Universal Access Routers—Replace *fpc-slot* with **0**.

local—(MX Series routers and EX Series switches only) (Optional) Display status information for all FPCs on the local Virtual Chassis member.

member *member-id*—(MX Series routers and EX Series switches only) (Optional) Display status information for all FPCs on the specified member of the Virtual Chassis configuration. Replace *member-id* with a value of 0 or 1.

node-device *name*—(QFabric systems only) (Optional) Display status information for each Node device. Each Node device is equivalent to an FPC.

pic-status—(Optional) Display status information for all PICs or for the PIC in the specified slot (see *fpc-slot*).



NOTE: On T1600 routers, Type 4 FPCs with ASICs based on the SL2.0 chipset do not support the 10-Gigabit Ethernet LAN/WAN PIC with SFP+ (10x10GE [LAN/WAN] SFPP). If you issue the `show chassis fpc` command with the `pic-status` option, the CLI displays the string “Not Supported” for 10x10GE(LAN/WAN) SFPP PICs installed on such FPCs. The following is a sample output:

```
user@host> show chassis fpc pic-status
Slot 0  Online      E2-FPC Type 1
        PIC 0  Online      1x G/E SFP, 1000 BASE
        PIC 1  Online      Adaptive Services-II
        PIC 2  Online      1x G/E IQ, 1000 BASE
        PIC 3  Online      1x G/E IQ, 1000 BASE
Slot 1  Online      FPC Type 3-ES
        PIC 0  Present     UNUSED- Not Supported
Slot 2  Online      FPC Type 4-ES
        PIC 0  Offline     4x OC-192 SONET XFP
        PIC 1  Present     10x10GE(LAN/WAN) SFPP- Not Supported
<<<<<<
Slot 4  Offline     FPC Type 1-ES
Slot 5  Offline     FPC Type 2-ES
Slot 6  Online      E2-FPC Type 3
        PIC 0  Online      1x OC-192 SONET XFP
        PIC 1  Online      4x OC-48 SONET
        PIC 2  Online      4x OC-48 SONET
        PIC 3  Online      MultiServices 500
Slot 7  Online      FPC Type 4-ES
        PIC 0  Online      4x 10GE (LAN/WAN) XFP
        PIC 1  Online      4x 10GE (LAN/WAN) XFP
```

In addition, an entry is logged in the system log messages (`/var/log/messages`) that the PIC is not supported. The following is a sample message logged in the system log:

```
Apr  5 08:47:36 router1 chassisd[2770]: CHASSISD_UNSUPPORTED_PIC:
PIC 1 in FPC 2 (type 763, version 257) is not supported
```

If you see this issue, contact Juniper Networks Technical Assistance Center (JTAC) for a possible fix. For more information about this issue and a possible solution, see [PSN-2010-03-696](https://www.juniper.net/psn/2010-03-696).



NOTE: When there is a double-bit ECC error in a network processor's memory, the Channelized OC3/STM1 (Multi-Rate) Circuit Emulation MIC with SFP or Channelized E1/T1 Circuit Emulation MIC is switched to the offline state.

```
user@host> show chassis fpc pic-status
Slot 1  Online      MPC Type 2 3D Q
PIC 0  Offline     1xCOC12/4xCOC3 CH-CE- ECC error detected
```

lcc *number*—(TX Matrix router and TX Matrix Plus router only) (Optional) Line-card chassis number.

Replace *number* with the following values depending on the LCC configuration:

- 0 through 3, when T640 routers are connected to a TX Matrix router in a routing matrix.
- 0 through 3, when T1600 routers are connected to a TX Matrix Plus router in a routing matrix.
- 0 through 7, when T1600 routers are connected to a TX Matrix Plus router with 3D SIBs in a routing matrix.
- 0, 2, 4, or 6, when T4000 routers are connected to a TX Matrix Plus router with 3D SIBs in a routing matrix.

Required Privilege Level

view

Related Documentation

- *request chassis fpc*
- *show chassis fpc-feb-connectivity*
- *show chassis fabric fpcs*
- *Configuring the Junos OS to Resynchronize FPC Sequence Numbers with Active FPCs when an FPC Comes Online*
- *MX960 Flexible PIC Concentrator Description*
- *ACX2000 and ACX2100 Routers Hardware and CLI Terminology Mapping*
- *enhanced-mode*

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Output Fields [Table 9 on page 373](#) lists the output fields for the **show chassis fpc** command. Output fields are listed in the approximate order in which they appear.

Table 9: show chassis fpc Output Fields

| Field Name | Field Description | Level of Output |
|--------------------------------------|---|--------------------------|
| Slot or Slot State | Slot number and state. The state can be one of the following conditions: <ul style="list-style-type: none"> • Dead—Held in reset because of errors. • Diag—Slot is being ignored while the FPC is running diagnostics. • Dormant—Held in reset. • Empty—No FPC is present. • Offline—(PTX Series Packet Transport Routers only) One of the following two states is displayed: <ul style="list-style-type: none"> • FPC offlined due to unreachable destinations • FPC Offlined due to degraded FPC action • Online—FPC is online and running. • Present—FPC is detected by the chassis daemon but either is not supported by the current version of Junos OS or is inserted in the wrong slot. The output also states either Hardware Not Supported or Hardware Not In Right Slot. The FPC is coming up but not yet online. • Probed—Probe is complete; awaiting restart of the Packet Forwarding Engine. • Probe-wait—Waiting to be probed. | all levels |
| Logical slot | Slot number. | all levels |
| Temp (C) or Temperature | Temperature of the air passing by the FPC, in degrees Celsius or in both Celsius and Fahrenheit. | all levels all levels |
| Temperature (PTX Series) | On PTX Series Packet Transport Routers, temperature details are provided in degrees Celsius and Fahrenheit. Output includes: <ul style="list-style-type: none"> • Temperature (PMB)—Temperature of the air passing by the Processor Mezzanine Board (PMB) at the bottom of the FPC. • Temperature (Intake)—Temperature of the air flowing into the chassis. • Temperature (Exhaust)—Exhaust temperatures for multiple zones (Exhaust A and Exhaust B). • Temperature (TLn)—Temperature of the specified Lookup ASIC (TL) of the packet forwarding engine on the FPC. • Temperature (TQn)—Temperature of the specified Queuing and Memory Interface ASIC (TQ) of the packet forwarding engine on the FPC. | detail |
| Total CPU Utilization (%) | Total percentage of CPU being used by the FPC's processor. | all levels |
| Interrupt CPU Utilization (%) | Of the total CPU being used by the FPC's processor, the percentage being used for interrupts. | none specified |

Table 9: show chassis fpc Output Fields (*continued*)

| Field Name | Field Description | Level of Output |
|--|--|-----------------|
| 1 min CPU utilization (%) NOTE: Supported only on MX240, MX480, MX960, MX2010, MX2020, and MX2008. | Information about the Routing Engine's CPU utilization in the past 1 minute. | none specified |
| 5 min CPU utilization (%) NOTE: Supported only on MX240, MX480, MX960, MX2010, MX2020, and MX2008. | Information about the Routing Engine's CPU utilization in the past 5 minutes. | none specified |
| 15 min CPU utilization (%) NOTE: Supported only on MX240, MX480, MX960, MX2010, MX2020, and MX2008. | Information about the Routing Engine's CPU utilization in the past 15 minutes. | none specified |
| Memory DRAM (MB) | Total DRAM, in megabytes, available to the FPC's processor. | none specified |
| Heap Utilization (%) | Percentage of heap space (dynamic memory) being used by the FPC's processor. If this number exceeds 80 percent, there may be a software problem (memory leak). NOTE: On MX Series routers and EX Series switches in a broadband edge environment, heap utilization levels higher than 70 percent can affect unified ISSU, router stability, or scaling capability. | none specified |
| Buffer Utilization (%) | Percentage of buffer space being used by the FPC's processor for buffering internal messages. | none specified |
| Total CPU DRAM | Amount of DRAM available to the FPC's CPU. | detail |
| Total RLDRAM | Amount of reduced latency dynamic random access memory (RLDRAM) available to the FPC CPU. | detail |
| Total DDR DRAM | Amount of double data rate dynamic random access memory (DDR DRAM) available to the FPC CPU. | detail |
| Total SRAM | Amount of static RAM (SRAM) used by the FPC's CPU. | detail |
| Total SDRAM | Total amount of memory used for storing packets and notifications. | detail |

Table 9: show chassis fpc Output Fields (*continued*)

| Field Name | Field Description | Level of Output |
|-------------------------------|---|-----------------|
| I/O Manager ASICs information | I/O Manager version number, manufacturer, and part number. | detail |
| Start time | Time when the Routing Engine detected that the FPC was running. | detail |
| Uptime | How long the Routing Engine has been connected to the FPC and, therefore, how long the FPC has been up and running. | detail |
| PIC type | (pic-status output only) Type of PIC. | none specified |
| GNF (Node slicing) | GNF identifier associated with each line card. (pic-status output only) GNF identifier associated with each PIC. | all levels |

Sample Output

show chassis fpc (EX6210 Switch)

```

user@switch> show chassis fpc

```

| Slot | State | Temp (C) | CPU Utilization (%) Total Interrupt | Memory DRAM (MB) | Utilization (%) Heap Buffer |
|------|--------|-------------|--|---------------------|--------------------------------|
| 0 | Empty | | | | |
| 1 | Online | 7 | 5 0 | 1024 | 0 32 |
| 2 | Empty | | | | |
| 3 | Empty | | | | |
| 4 | Online | 25 | 17 2 | 2048 | 0 30 |
| 5 | Online | 25 | 3 0 | 2048 | 0 24 |
| 6 | Online | 6 | 5 0 | 1024 | 0 32 |
| 7 | Empty | | | | |
| 8 | Empty | | | | |
| 9 | Online | 8 | 7 0 | 1024 | 0 32 |

show chassis fpc (M10 Router)

```

user@host> show chassis fpc
FPC status:

```

| Slot | State | Temp (C) |
|------|--------|-------------|
| 0 | Online | 27 |
| 1 | Online | 28 |

show chassis fpc (M20 Router)

```

user@host> show chassis fpc
FPC status:

```

| Slot | State | Temp (C) | CPU Utilization (%) Total Interrupt | Memory DRAM (MB) | Utilization (%) Heap Buffer |
|------|--------|-------------|--|---------------------|--------------------------------|
| 0 | Empty | 0 | 0 0 | 0 | 0 0 |
| 1 | Online | 38 | 0 0 | 8 | 0 4 |
| 2 | Online | 35 | 0 0 | 8 | 0 3 |
| 3 | Empty | 0 | 0 0 | 0 | 0 0 |

show chassis fpc detail (M Series Routers)

```
user@host> show chassis fpc detail 1
Slot 1 information:
  State                               Online
  Temperature                         48 degrees C
  Total CPU DRAM                      32 MB
  Total SRAM                          4 MB
  Total SDRAM                         256 MB
  I/O Manager ASICs information       Version 2.0, Foundry IBM, Part number 0
  I/O Manager ASICs information       Version 2.0, Foundry IBM, Part number 0
  Start time                         2000-02-08 02:18:49 UTC
  Uptime                             14 hours, 41 minutes, 41 seconds
```

show chassis fpc detail (MX150)

```
user@host> show chassis fpc detail
Slot 0 information:
  State                               Online
  Temperature                         42 degrees C / 107 degrees F
  Total CPU DRAM                      2048 MB
  Total RLDRAM                        10 MB
  Total DDR DRAM                      0 MB
  Start time                         2017-04-04 04:44:04 PDT
  Uptime                             7 days, 19 hours, 45 minutes, 50 seconds
```

show chassis fpc detail (MX80 Router)

```
user@host> show chassis fpc detail
Slot 0 information:
  State                               Online
  Temperature                         47 degrees C / 116 degrees F
  Total CPU DRAM                      1024 MB
  Total SRAM                          331 MB
  Total SDRAM                         1280 MB
  Start time                         2010-02-08 12:25:33 PST
  Uptime                             2 hours, 13 minutes, 19 seconds
Slot 1 information:
  State                               Online
  Temperature                         47 degrees C / 116 degrees F
  Total CPU DRAM                      1024 MB
  Total SRAM                          331 MB
  Total SDRAM                         1280 MB
  Start time                         2010-02-08 12:25:33 PST
  Uptime                             2 hours, 13 minutes, 19 seconds
```

show chassis fpc (MX104 Router)

```
user@host> show chassis fpc
Temp CPU Utilization (%)
Slot State      (C)  Total  Memory  Utilization (%)
                                Interrupt  DRAM (MB)  Heap    Buffer
0 Online        32    15     5        2048      22      13
1 Online        32    15     5        2048      22      13
2 Online        32    15     5        2048      22      13
```

show chassis fpc detail (MX104 Router)

```
user@host> show chassis fpc detail
```



```

Slot 0 information:
  State                Online
  Temperature           32 (C)
  Total CPU DRAM        2048 MB
  Total SRAM            403 MB
  Total SDRAM           1316 MB
  Start time            2013-05-23 14:39:18 IST
  Uptime                1 hour, 20 minutes, 22 seconds
Slot 1 information:
  State                Online
  Temperature           32 (C)
  Total CPU DRAM        2048 MB
  Total SRAM            403 MB
  Total SDRAM           1316 MB
  Start time            2013-05-23 14:39:18 IST
  Uptime                1 hour, 20 minutes, 22 seconds
Slot 2 information:
  State                Online
  Temperature           32 (C)
  Total CPU DRAM        2048 MB
  Total SRAM            403 MB
  Total SDRAM           1316 MB
  Start time            2013-05-23 14:39:18 IST
  Uptime                1 hour, 20 minutes, 22 seconds

```

show chassis fpc pic-status (MX104 Router)

```

user@host> show chassis fpc pic-status
Slot 0  Online
Slot 1  Online
  PIC 0  Online      10x 1GE(LAN) -E  SFP
  PIC 1  Online      10x 1GE(LAN) -E  SFP
Slot 2  Online
  PIC 0  Online      4x 10GE(LAN) SFP+

```

show chassis fpc (MX240 Router)

```

user@host> show chassis fpc

```

| Slot | State | Temp (C) | CPU Utilization (%) | Memory DRAM (MB) | Utilization (%) |
|------|--------|----------|---------------------|------------------|-----------------|
| | | | Total | Interrupt | Heap Buffer |
| 0 | Empty | | | | |
| 1 | Online | 34 | 6 | 0 | 1024 18 30 |
| 2 | Online | 33 | 9 | 0 | 1024 24 30 |

show chassis fpc (MX480 Router)

```

user@host> show chassis fpc

```

| Slot | State | Temp (C) | CPU Utilization (%) | Memory DRAM (MB) | Utilization (%) |
|------|--------|----------|---------------------|------------------|-----------------|
| | | | Total | Interrupt | Heap Buffer |
| 0 | Empty | | | | |
| 1 | Online | 36 | 9 | 0 | 1024 17 57 |
| 2 | Empty | | | | |
| 3 | Empty | | | | |
| 4 | Empty | | | | |
| 5 | Empty | | | | |

show chassis fpc detail (EX9200 Switch)

```

user@switch> show chassis fpc detail

```

```

Slot 2 information:
  State                               Online
  Temperature                         37
  Total CPU DRAM                     2048 MB
  Total RLDRAM                       331 MB
  Total DDR DRAM                     1536 MB
  Start time:                        2014-03-12 15:35:28 UTC
  Uptime:                            1 hour, 4 minutes, 29 seconds
  Max Power Consumption               239 Watts

Slot 3 information:
  State                               Online
  Temperature                         39
  Total CPU DRAM                     2048 MB
  Total RLDRAM                       1036 MB
  Total DDR DRAM                     6656 MB
  Start time:                        2014-03-12 15:00:18 UTC
  Uptime:                            1 hour, 39 minutes, 39 seconds
  Max Power Consumption               520 Watts

```

show chassis fpc (MX480 Router)

```

user@host> show chassis fpc

```

| Slot | State | Temp (C) | CPU Utilization (%) | CPU Utilization (%) | Memory |
|------|--------|----------|---------------------|---------------------|-----------|
| | | | Total | Interrupt | DRAM (MB) |
| 0 | Online | | 1 | 0 | 1024 |
| 4 | | 56 | | | |
| 1 | Online | | 1 | 0 | 1024 |
| 4 | | 56 | | | |

show chassis fpc (MX480 Router with 100-Gigabit Ethernet CFP)

```

user@host> show chassis fpc

```

| Slot | State | Temp (C) | CPU Utilization (%) | Memory | Utilization (%) |
|------|--------|----------|---------------------|-----------|-----------------|
| | | | Total | Interrupt | DRAM (MB) |
| 0 | Online | 33 | 4 | 0 | 2048 |
| 1 | Online | 36 | 7 | 0 | 2048 |
| 2 | Online | 29 | 6 | 0 | 1024 |
| 3 | Online | 33 | 0 | 0 | 0 |
| 4 | Online | 36 | 7 | 0 | 2048 |
| 5 | Online | 34 | 31 | 11 | 2048 |

show chassis fpc pic-status (MX480 Router with 100-Gigabit Ethernet CFP)

```

user@host> show chassis fpc pic-status

```

| Slot | State | PIC | Type |
|------|--------|---------|--------------|
| 1 | Online | MPC | Type 3 |
| 2 | Online | 1X100GE | CFP |
| 2 | Online | DPCE | 40x 1GE R EQ |
| 0 | Online | 10x | 1GE(LAN) EQ |
| 1 | Online | 10x | 1GE(LAN) EQ |
| 2 | Online | 10x | 1GE(LAN) EQ |
| 3 | Online | 10x | 1GE(LAN) EQ |
| 3 | Online | MPC | Type 3 |
| 0 | Online | 1X100GE | CFP |
| 2 | Online | 1X100GE | CFP |
| 4 | Online | MPC | Type 3 |
| 0 | Online | 1X100GE | CFP |
| 2 | Online | 1X100GE | CFP |
| 5 | Online | MPC | Type 2 3D EQ |

```

PIC 0 Online      2x 10GE XFP
PIC 1 Online      2x 10GE XFP
PIC 2 Online      10x 1GE(LAN) SFP
PIC 3 Online      10x 1GE(LAN) SFP

```

show chassis fpc pic-status (EX Series Switch)

```

user@host> show chassis fpc pic-status
Slot 1 Online      EX9200 32x10G SFP
      PIC 0 Online      8X10GE SFPP
      PIC 1 Online      8X10GE SFPP
      PIC 2 Online      8X10GE SFPP
      PIC 3 Online      8X10GE SFPP
Slot 2 Online      EX9200 32x10G SFP
      PIC 0 Online      8X10GE SFPP
      PIC 1 Online      8X10GE SFPP
      PIC 2 Online      8X10GE SFPP
      PIC 3 Online      8X10GE SFPP

```

show chassis fpc (MX480 Router with MPC4E)

```

user@host> show chassis fpc
      Temp CPU Utilization (%) Memory Utilization (%)
Slot State      (C) Total Interrupt      DRAM (MB) Heap      Buffer
0 Empty
1 Empty
2 Online        38      7           0       2048      19       14
3 Online        39      8           0       2048      18       14
4 Online        39      7           0       2048      17       14
5 Empty

```

show chassis fpc detail (MX480 Router with MPC4E)

```

user@host> show chassis fpc detail
Slot 2 information:
State Online
Temperature 38
Total CPU DRAM 2048 MB
Total RDRAM 1036 MB
Total DDR DRAM 11264 MB
Start time: 2013-02-18 05:06:57 PST
Uptime: 17 hours, 41 minutes, 9 seconds
Max Power Consumption 610 Watts
Slot 3 information:
State Online
Temperature 38
Total CPU DRAM 2048 MB
Total RDRAM 1036 MB
Total DDR DRAM 11264 MB
Start time: 2013-02-18 05:07:00 PST
Uptime: 17 hours, 41 minutes, 6 seconds
Max Power Consumption 610 Watts
Slot 4 information:
State Diagnostics
Temperature 37
Total CPU DRAM 0 MB
Total RDRAM 0 MB
Total DDR DRAM 0 MB
Max Power Consumption 520 Watts

```

show chassis fpc (MX480 Router with MPC4E)

```

user@host> show chassis fpc

```

| Slot | State | Temp (C) | CPU Utilization (%) Total | Interrupt | Memory DRAM (MB) | Utilization (%) Heap | Buffer |
|------|--------|-------------|------------------------------|-----------|---------------------|-------------------------|--------|
| 0 | Empty | | | | | | |
| 1 | Empty | | | | | | |
| 2 | Online | 38 | 7 | 0 | 2048 | 19 | 14 |
| 3 | Online | 39 | 8 | 0 | 2048 | 18 | 14 |
| 4 | Online | 39 | 7 | 0 | 2048 | 17 | 14 |
| 5 | Empty | | | | | | |

show chassis fpc detail (MX480 Router with MPC4E)

```

user@host> show chassis fpc detail

```

Slot 2 information:

| | |
|-----------------------|---------------------------------|
| State | Online |
| Temperature | 38 |
| Total CPU DRAM | 2048 MB |
| Total RLDRAM | 1036 MB |
| Total DDR DRAM | 11264 MB |
| Start time: | 2013-02-18 05:06:57 PST |
| Uptime: | 17 hours, 41 minutes, 9 seconds |
| Max Power Consumption | 610 Watts |

Slot 3 information:

| | |
|-----------------------|---------------------------------|
| State | Online |
| Temperature | 38 |
| Total CPU DRAM | 2048 MB |
| Total RLDRAM | 1036 MB |
| Total DDR DRAM | 11264 MB |
| Start time: | 2013-02-18 05:07:00 PST |
| Uptime: | 17 hours, 41 minutes, 6 seconds |
| Max Power Consumption | 610 Watts |

Slot 4 information:

| | |
|-----------------------|-------------|
| State | Diagnostics |
| Temperature | 37 |
| Total CPU DRAM | 0 MB |
| Total RLDRAM | 0 MB |
| Total DDR DRAM | 0 MB |
| Max Power Consumption | 520 Watts |

show chassis fpc (MX960 Router)

```

user@host> show chassis fpc

```

| Slot | State | Temp (C) | CPU Utilization (%) Total | Interrupt | Memory DRAM (MB) | Utilization (%) Heap | Buffer |
|------|--------|-------------|------------------------------|-----------|---------------------|-------------------------|--------|
| 0 | Empty | | | | | | |
| 1 | Empty | | | | | | |
| 2 | Empty | | | | | | |
| 3 | Online | 25 | 19 | 0 | 1024 | 15 | 57 |
| 4 | Empty | | | | | | |
| 5 | Online | 26 | 27 | 0 | 1024 | 15 | 57 |
| 6 | Empty | | | | | | |
| 7 | Empty | | | | | | |
| 8 | Empty | | | | | | |
| 9 | Empty | | | | | | |
| 10 | Empty | | | | | | |
| 11 | Empty | | | | | | |

show chassis fpc (MX960 Router with MPC5EQ)

```

user@host> show chassis fpc

```

| Slot | State | Temp (C) | CPU Utilization (%) Total Interrupt | Memory DRAM (MB) | Utilization (%) Heap Buffer |
|------|--------|-------------|--|---------------------|--------------------------------|
| 0 | Online | 38 | 16 0 | 3584 | 7 13 |
| 1 | Online | 31 | 15 0 | 2048 | 17 13 |
| 2 | Empty | | | | |
| 3 | Online | 31 | 14 0 | 2048 | 20 13 |
| 4 | Online | 34 | 16 0 | 3584 | 7 13 |
| 5 | Online | 34 | 16 0 | 3584 | 7 13 |
| 6 | Empty | | | | |
| 7 | Online | 32 | 9 0 | 2048 | 18 14 |
| 8 | Online | 36 | 19 0 | 3584 | 7 13 |
| 9 | Online | 31 | 9 0 | 2048 | 13 13 |
| 10 | Online | 35 | 14 0 | 3584 | 7 13 |
| 11 | Online | 33 | 11 0 | 2048 | 18 14 |

show chassis fpc detail (MX960 Router with MPC5EQ)

```

user@host> show chassis fpc detail

```

Slot 0 information:

| | |
|-----------------------|--------------------------------|
| State | Online |
| Temperature | 38 |
| Total CPU DRAM | 3584 MB |
| Total XR2 | 291 MB |
| Total DDR DRAM | 24960 MB |
| Start time: | 2014-04-22 10:01:46 PDT |
| Uptime: | 1 hour, 23 minutes, 40 seconds |
| Max Power Consumption | 607 Watts |

Slot 1 information:

| | |
|-----------------------|--------------------------------|
| State | Online |
| Temperature | 31 |
| Total CPU DRAM | 2048 MB |
| Total RLD RAM | 1036 MB |
| Total DDR DRAM | 6656 MB |
| Start time: | 2014-04-22 10:01:50 PDT |
| Uptime: | 1 hour, 23 minutes, 36 seconds |
| Max Power Consumption | 520 Watts |

Slot 3 information:

| | |
|-----------------------|--------------------------------|
| State | Online |
| Temperature | 31 |
| Total CPU DRAM | 2048 MB |
| Total RLD RAM | 1324 MB |
| Total DDR DRAM | 5120 MB |
| Start time: | 2014-04-22 10:01:50 PDT |
| Uptime: | 1 hour, 23 minutes, 36 seconds |
| Max Power Consumption | 440 Watts |

Slot 4 information:

| | |
|-----------------------|--------------------------------|
| State | Online |
| Temperature | 34 |
| Total CPU DRAM | 3584 MB |
| Total XR2 | 291 MB |
| Total DDR DRAM | 24960 MB |
| Start time: | 2014-04-22 10:01:54 PDT |
| Uptime: | 1 hour, 23 minutes, 32 seconds |
| Max Power Consumption | 607 Watts |

Slot 5 information:

| | |
|-------------|--------|
| State | Online |
| Temperature | 34 |

```

Total CPU DRAM          3584 MB
Total XR2               291 MB
Total DDR DRAM          24960 MB
Start time:             2014-04-22 10:01:56 PDT
Uptime:                 1 hour, 23 minutes, 30 seconds
Max Power Consumption    607 Watts
Slot 7 information:
State                   Online
Temperature             32
Total CPU DRAM          2048 MB
Total RLDRAM            1036 MB
Total DDR DRAM          11264 MB
Start time:             2014-04-22 10:02:02 PDT
Uptime:                 1 hour, 23 minutes, 24 seconds
Max Power Consumption    608 Watts
Slot 8 information:
State                   Online
Temperature             36
Total CPU DRAM          3584 MB
Total XR2               291 MB
Total DDR DRAM          24960 MB
Start time:             2014-04-22 10:02:07 PDT
Uptime:                 1 hour, 23 minutes, 19 seconds
Max Power Consumption    607 Watts
Slot 9 information:
State                   Online
Temperature             31
Total CPU DRAM          2048 MB
Total RLDRAM            734 MB
Total DDR DRAM          3108 MB
Start time:             2014-04-22 10:02:05 PDT
Uptime:                 1 hour, 23 minutes, 21 seconds
Max Power Consumption    368 Watts
Slot 10 information:
State                   Online
Temperature             35
Total CPU DRAM          3584 MB
Total XR2               291 MB
Total DDR DRAM          24960 MB
Start time:             2014-04-22 10:02:11 PDT
Uptime:                 1 hour, 23 minutes, 15 seconds
Max Power Consumption    607 Watts
Slot 11 information:
State                   Online
Temperature             33
Total CPU DRAM          2048 MB
Total RLDRAM            1036 MB
Total DDR DRAM          11264 MB
Start time:             2014-04-22 10:02:16 PDT
Uptime:                 1 hour, 23 minutes, 10 seconds
Max Power Consumption    608 Watts

```

show chassis fpc pic-status(MX960 Router with MPC5EQ)

```

user@host> show chassis fpc pic-status
Slot 0  Online      MPC5E 3D Q 2CGE+4XGE
PIC 0   Online      2X10GE SFPP OTN
PIC 1   Online      1X100GE CFP2 OTN
PIC 2   Online      2X10GE SFPP OTN
PIC 3   Online      1X100GE CFP2 OTN

```

```

Slot 1  Online      MPCE Type 3 3D
        PIC 0 Online  10X10GE SFPP
        PIC 2 Online  1X100GE CXP
Slot 3  Online      MPC 3D 16x 10GE
        PIC 0 Online  4x 10GE(LAN) SFP+
        PIC 1 Online  4x 10GE(LAN) SFP+
        PIC 2 Online  4x 10GE(LAN) SFP+
        PIC 3 Online  4x 10GE(LAN) SFP+
Slot 4  Online      MPC5E 3D Q 2CGE+4XGE
        PIC 0 Online  2X10GE SFPP OTN
        PIC 1 Online  1X100GE CFP2 OTN
        PIC 2 Online  2X10GE SFPP OTN
        PIC 3 Online  1X100GE CFP2 OTN
Slot 5  Online      MPC5E 3D Q 2CGE+4XGE
        PIC 0 Online  2X10GE SFPP OTN
        PIC 1 Online  1X100GE CFP2 OTN
        PIC 2 Online  2X10GE SFPP OTN
        PIC 3 Online  1X100GE CFP2 OTN
Slot 7  Online      MPC4E 3D 2CGE+8XGE
        PIC 0 Online  4x10GE SFPP
        PIC 1 Online  1X100GE CFP
        PIC 2 Online  4x10GE SFPP
        PIC 3 Online  1X100GE CFP
Slot 8  Online      MPC5E 3D Q 24XGE+6XLGE
        PIC 0 Offline 12X10GE SFPP OTN
        PIC 1 Offline 12X10GE SFPP OTN
        PIC 2 Online  3X40GE QSFPP
        PIC 3 Online  3X40GE QSFPP
Slot 9  Online      MPCE Type 2 3D P
        PIC 0 Online  2x 10GE XFP
        PIC 1 Online  2x 10GE XFP
Slot 10 Online      MPC5E 3D Q 24XGE+6XLGE
        PIC 0 Online  12X10GE SFPP
        PIC 1 Online  12X10GE SFPP
        PIC 2 Offline 3X40GE QSFPP
        PIC 3 Offline 3X40GE QSFPP
Slot 11 Online      MPC4E 3D 2CGE+8XGE
        PIC 0 Online  4x10GE SFPP
        PIC 1 Online  1X100GE CFP
        PIC 2 Online  4x10GE SFPP
        PIC 3 Online  1X100GE CFP

```

show chassis fpc (MX240, MX480, MX960 Routers with Application Services Modular Line Card)

```

user@host> show chassis fpc 1
      Temp CPU Utilization (%)  Memory  Utilization (%)
Slot State      (C) Total  Interrupt  DRAM (MB) Heap  Buffer
  1  Online      34    5      0      3072    5     13

```

show chassis fpc (MX240, MX480, MX960 with Application Services Modular Line Card)

```

user@host> show chassis fpc 1 detail
Slot 1 information:
  State                               Online
  Temperature                         34
  Total CPU DRAM                      3072 MB
  Total RLDRAM                       259 MB
  Total DDR DRAM                     4864 MB
  Start time:                        2012-06-19 10:51:43 PDT

```

```

Uptime:                               16 minutes, 48 seconds
Max Power Consumption                   550 Watts

```

show chassis fpc (MX240, MX480, MX960, MX2010, MX2020, and MX2008 3D Universal Edge Routers with Dynamic Power Management)

```
user@host> show chassis fpc 2 detail
```

```

Slot 2 information:
State                               Online
Temperature                         37
Total CPU DRAM                     3584 MB
Total XR2                          275 MB
Total DDR DRAM                     20352 MB
Start time:                        2014-07-18 02:51:23 PDT
Uptime:                            5 minutes, 19 seconds
Max MPC Base Power Consumption      485 Watts
Max MICO Power Consumption          50 Watts
Max MIC1 Power Consumption          50 Watts
Max MPC Total Power Consumption     585 Watts

```

show chassis fpc (MX2010 Routers)

```
user@host> show chassis fpc
```

| Slot | Temp | CPU Utilization (%) | Memory | Utilization (%) | DRAM (MB) | Heap | Buffer |
|----------|------|---------------------|-----------|-----------------|-----------|------|--------|
| State | (C) | Total | Interrupt | | | | |
| 0 Online | 34 | 9 | 0 | 2048 | 18 | 13 | |
| 1 Online | 32 | 9 | 0 | 2048 | 15 | 13 | |
| 2 Empty | | | | | | | |
| 3 Empty | | | | | | | |
| 4 Empty | | | | | | | |
| 5 Empty | | | | | | | |
| 6 Empty | | | | | | | |
| 7 Empty | | | | | | | |
| 8 Online | 31 | 13 | 0 | 2048 | 11 | 13 | |
| 9 Online | 33 | 10 | 0 | 2048 | 18 | 13 | |

show chassis fpc (MX2010 Router with Fabric Grant Bypass Enabled)

Following is the output of the **show chassis fpc** command on an MX2010 router with Switch Fabric Board (SFB), where fabric grant bypass is enabled by default. All MPCs power on.

```
user@host> show chassis fpc
```

| Slot | Temp | CPU Utilization (%) | Memory | Utilization (%) | DRAM (MB) | Heap | Buffer |
|-----------|------|---------------------|-----------|-----------------|-----------|------|--------|
| State | (C) | Total | Interrupt | | | | |
| 0 Online | 34 | 20 | 0 | 2048 | 9 | 14 | |
| 1 Offline | 33 | 22 | 0 | 2048 | 9 | 14 | |
| 2 Online | 33 | 17 | 0 | 2048 | 9 | 14 | |
| 3 Offline | 34 | 25 | 0 | 2048 | 9 | 14 | |
| 4 Online | 32 | 27 | 0 | 2048 | 9 | 14 | |
| 5 Offline | 32 | 26 | 0 | 2048 | 9 | 14 | |
| 6 Empty | | | | | | | |
| 7 Empty | | | | | | | |
| 8 Empty | | | | | | | |
| 9 Empty | | | | | | | |

show chassis fpc (MX2010 Router with Fabric Grant Bypass Disabled)

Following is the output of the **show chassis fpc** command on an MX2010 router with Switch Fabric Board (SFB), where fabric grant bypass has been disabled. MPC1 (MX-MPC1-3D), MPC2 (MX-MPC2-3D), and the 16-port 10-Gigabit Ethernet MPC (MPC-3D-16XGE-SFP) do not power on after you disable fabric grant bypass and reboot the router. Also, FPC misconfiguration alarms are generated.

```
user@host> show chassis fpc
Temp  CPU Utilization (%)  Memory  Utilization (%)
Slot State              (C) Total Interrupt    DRAM (MB) Heap    Buffer
0  Online                34    20          0    2048      9     14
1  Offline              ---FPC misconfiguration---
2  Online                33    17          0    2048      9     14
3  Offline              ---FPC misconfiguration---
4  Online                32    27          0    2048      9     14
5  Offline              ---FPC misconfiguration---
6  Empty
7  Empty
8  Empty
9  Empty
```

show chassis fpc pic-status (MX2010 Router with Fabric Grant Bypass Enabled)

Following is the output of the **show chassis fpc pic-status** command on an MX2010 router with Switch Fabric Board (SFB), where fabric grant bypass has been enabled by default. All MPCs power on.

```
user@host> show chassis fpc pic-status
Slot 0  Present      MPCE Type 3 3D
Slot 1  Present      MPC Type 2 3D EQ
Slot 2  Present      MPCE Type 3 3D
Slot 3  Present      MPC 3D 16x 10GE
Slot 4  Present      MPCE Type 3 3D
Slot 5  Present      MPCE Type 1 3D Q
```

show chassis fpc pic-status (MX2010 Router with Fabric Grant Bypass Disabled)

Following is the output of the **show chassis fpc pic-status** command on an MX2010 router with Switch Fabric Board (SFB), where fabric grant bypass has been disabled. MPC1 (MX-MPC1-3D), MPC2 (MX-MPC2-3D), and the 16-port 10-Gigabit Ethernet MPC (MPC-3D-16XGE-SFP) do not power on after you disable fabric grant bypass mode and reboot the router.

```
user@host> show chassis fpc pic-status
Slot 0  Present      MPCE Type 3 3D
Slot 1  Offline      MPC Type 2 3D EQ
Slot 2  Present      MPCE Type 3 3D
Slot 3  Offline      MPC 3D 16x 10GE
Slot 4  Present      MPCE Type 3 3D
Slot 5  Offline      MPCE Type 1 3D Q
```

show chassis fpc (MX2020 Routers)

```
user@host> show chassis fpc
Temp  CPU Utilization (%)  Memory  Utilization (%)
Slot State              (C) Total Interrupt    DRAM (MB) Heap    Buffer
```

| | | | | | | | |
|----|--------|----|----|---|------|----|----|
| 0 | Online | 10 | 12 | 0 | 2048 | 18 | 13 |
| 1 | Online | 8 | 9 | 0 | 2048 | 18 | 13 |
| 2 | Online | 7 | 9 | 0 | 2048 | 18 | 13 |
| 3 | Online | 8 | 10 | 0 | 2048 | 18 | 13 |
| 4 | Online | 9 | 10 | 0 | 2048 | 18 | 13 |
| 5 | Online | 8 | 9 | 0 | 2048 | 18 | 13 |
| 6 | Online | 8 | 10 | 0 | 2048 | 18 | 13 |
| 7 | Online | 9 | 9 | 0 | 2048 | 18 | 13 |
| 8 | Online | 9 | 10 | 0 | 2048 | 18 | 13 |
| 9 | Online | 10 | 9 | 0 | 2048 | 18 | 13 |
| 10 | Online | 16 | 8 | 0 | 2048 | 18 | 13 |
| 11 | Online | 11 | 10 | 0 | 2048 | 18 | 13 |
| 12 | Online | 10 | 10 | 0 | 2048 | 18 | 13 |
| 13 | Online | 11 | 9 | 0 | 2048 | 18 | 13 |
| 14 | Online | 12 | 10 | 0 | 2048 | 18 | 13 |
| 15 | Online | 13 | 9 | 0 | 2048 | 18 | 13 |
| 16 | Online | 13 | 9 | 0 | 2048 | 18 | 13 |
| 17 | Online | 12 | 9 | 0 | 2048 | 18 | 13 |
| 18 | Online | 12 | 8 | 0 | 2048 | 18 | 13 |
| 19 | Online | 14 | 10 | 0 | 2048 | 18 | 13 |

show chassis fpc (MX2020 Router with MPC4E)

```
user@host> show chassis fpc
```

| Slot | Temp | CPU Utilization (%) | Memory | Utilization (%) | DRAM (MB) | Heap | Buffer |
|-------|--------|---------------------|-----------|-----------------|-----------|------|--------|
| State | (C) | Total | Interrupt | | | | |
| 0 | Online | 33 | 12 | 2 | 2048 | 11 | 13 |
| 1 | Empty | | | | | | |
| 2 | Empty | | | | | | |
| 3 | Empty | | | | | | |
| 4 | Empty | | | | | | |
| 5 | Empty | | | | | | |
| 6 | Empty | | | | | | |
| 7 | Empty | | | | | | |
| 8 | Empty | | | | | | |
| 9 | Online | 31 | 10 | 0 | 2048 | 11 | 13 |
| 10 | Online | 32 | 7 | 0 | 2048 | 14 | 13 |
| 11 | Empty | | | | | | |
| 12 | Empty | | | | | | |
| 13 | Empty | | | | | | |
| 14 | Online | 28 | 12 | 0 | 2048 | 15 | 14 |
| 15 | Empty | | | | | | |
| 16 | Empty | | | | | | |
| 17 | Empty | | | | | | |
| 18 | Empty | | | | | | |
| 19 | Online | 38 | 8 | 0 | 2048 | 18 | 13 |

show chassis fpc (MX10003 Router)

```
user@host> show chassis fpc
```

| | | Temp | CPU Utilization (%) | | CPU Utilization (%) | | | Memory |
|-----------------|--------|------|---------------------|-----------|---------------------|------|-------|-----------|
| Utilization (%) | | | | | | | | |
| Slot | State | (C) | Total | Interrupt | 1min | 5min | 15min | DRAM (MB) |
| Heap | Buffer | | | | | | | |
| 0 | Online | 59 | 25 | 0 | 25 | 24 | 23 | 3136 |
| 12 | 11 | | | | | | | |
| 1 | Online | 62 | 29 | 0 | 26 | 24 | 23 | 3136 |
| 12 | 11 | | | | | | | |

show chassis fpc detail (MX10003 Router)

```

user@host> show chassis fpc detail

Slot 0 information:
  State                               Online
  Total CPU DRAM                      3136 MB
  Total RLDRAM                        771 MB
  Total DDR DRAM                      18432 MB
  Temperature                         60 degrees C / 140 degrees F
  Start time                         2017-07-19 20:49:58 PDT
  Uptime                             2 hours, 29 minutes, 22 seconds
  Max MPC base power consumption      910 Watts
  Max MIC1 power consumption          95 Watts
  Max MPC total power consumption     1005 Watts
Slot 1 information:
  State                               Online
  Total CPU DRAM                      3136 MB
  Total RLDRAM                        771 MB
  Total DDR DRAM                      18432 MB
  Temperature                         63 degrees C / 145 degrees F
  Start time                         2017-07-19 20:48:01 PDT
  Uptime                             2 hours, 31 minutes, 19 seconds
  Max MPC base power consumption      910 Watts
  Max MIC1 power consumption          155 Watts
  Max MPC total power consumption     1065 Watts

```

show chassis fpc <fpc-slot> (MX10003 Router)

```

user@host> show chassis fpc 0

```

| Utilization (%) | | Temp | CPU Utilization (%) | | CPU Utilization (%) | | | Memory |
|-----------------|--------|------|---------------------|-----------|---------------------|------|-------|-----------|
| Slot | State | (C) | Total | Interrupt | 1min | 5min | 15min | DRAM (MB) |
| 0 | Online | 49 | 26 | 0 | 22 | 22 | 23 | 3136 |
| 12 | 11 | | | | | | | |

show chassis fpc (MX204 Router)

```

user@host> show chassis fpc

```

| Utilization (%) | | Temp | CPU Utilization (%) | | CPU Utilization (%) | | | Memory |
|-----------------|--------|--------|---------------------|-----------|---------------------|------|-------|-----------|
| Slot | State | (C) | Total | Interrupt | 1min | 5min | 15min | DRAM (MB) |
| 0 | Online | Absent | 8 | 0 | 8 | 8 | 8 | 3136 |
| 8 | 8 | | | | | | | |

show chassis fpc detail (MX204 Router)

```

user@host> show chassis fpc detail
Slot 0 information:
  State                               Online
  Total CPU DRAM                      3136 MB
  Total RLDRAM                        257 MB
  Total DDR DRAM                      4096 MB
  Temperature                         Absent
  Start time                         2017-11-05 22:14:01 PST
  Uptime                             2 days, 8 hours, 5 minutes, 55 seconds

```

show chassis fpc <fpc-slot> (MX204 Router)

```
user@host> show chassis fpc 0
```

| Utilization (%) | | Temp | CPU Utilization (%) | | CPU Utilization (%) | | | Memory |
|-----------------|--------|--------|---------------------|-----------|---------------------|------|-------|-----------|
| Slot | State | (C) | Total | Interrupt | 1min | 5min | 15min | DRAM (MB) |
| Heap | Buffer | | | | | | | |
| 0 | Online | Absent | 8 | 0 | 8 | 8 | 8 | 3136 |
| 8 | 8 | | | | | | | |

show chassis fpc detail (MX2020 Router with MPC4E)

```
user@host> show chassis fpc detail
```

```
Slot 0 information:
```

```

State                               Online
Temperature                         34
Total CPU DRAM                      2048 MB
Total RLDRAM                        806 MB
Total DDR DRAM                      2632 MB
Start time:                        2013-02-17 08:17:35 PST
Uptime:                             1 day, 14 hours, 50 minutes, 39 seconds
Max Power Consumption               368 Watts

```

```
Slot 9 information:
```

```

State                               Online
Temperature                         32
Total CPU DRAM                      2048 MB
Total RLDRAM                        806 MB
Total DDR DRAM                      2632 MB
Start time:                        2013-02-17 08:17:43 PST
Uptime:                             1 day, 14 hours, 50 minutes, 31 seconds
Max Power Consumption               368 Watts

```

```
Slot 10 information:
```

```

State                               Online
Temperature                         37
Total CPU DRAM                      2048 MB
Total RLDRAM                       1036 MB
Total DDR DRAM                     6656 MB
Start time:                        2013-02-17 08:17:54 PST
Uptime:                             1 day, 14 hours, 50 minutes, 20 seconds
Max Power Consumption               520 Watts

```

```
Slot 14 information:
```

```

State                               Online
Temperature                         32
Total CPU DRAM                      2048 MB
Total RLDRAM                       1036 MB
Total DDR DRAM                     11264 MB
Start time:                        2013-02-17 08:18:01 PST
Uptime:                             1 day, 14 hours, 50 minutes, 13 seconds
Max Power Consumption               610 Watts

```

```
Slot 19 information:
```

```

State                               Online
Temperature                         38
Total CPU DRAM                      2048 MB
Total RLDRAM                       1324 MB
Total DDR DRAM                     5120 MB
Start time:                        2013-02-17 08:18:08 PST
Uptime:                             1 day, 14 hours, 50 minutes, 6 seconds
Max Power Consumption               440 Watts

```

show chassis fpc (MX2020 Router with MPC5EQ and MPC6E)

```

user@host> show chassis fpc

```

| Slot | State | Temp (C) | CPU Total | Utilization (%) Interrupt | Memory DRAM (MB) | Utilization (%) Heap | Buffer |
|------|--------|-------------|-----------|------------------------------|---------------------|-------------------------|--------|
| 0 | Online | 31 | 20 | 0 | 3584 | 7 | 13 |
| 1 | Online | 28 | 19 | 0 | 2048 | 17 | 13 |
| 2 | Online | 27 | 10 | 0 | 2048 | 18 | 14 |
| 3 | Online | 26 | 10 | 0 | 2048 | 13 | 13 |
| 4 | Online | 29 | 19 | 0 | 3584 | 7 | 13 |
| 5 | Online | 28 | 68 | 0 | 2048 | 20 | 13 |
| 6 | Empty | | | | | | |
| 7 | Empty | | | | | | |
| 8 | Empty | | | | | | |
| 9 | Online | 36 | 19 | 0 | 3584 | 10 | 13 |
| 10 | Online | 37 | 26 | 0 | 3584 | 10 | 13 |
| 11 | Empty | | | | | | |
| 12 | Empty | | | | | | |
| 13 | Empty | | | | | | |
| 14 | Empty | | | | | | |
| 15 | Empty | | | | | | |
| 16 | Empty | | | | | | |
| 17 | Online | 28 | 43 | 0 | 3584 | 10 | 13 |
| 18 | Online | 29 | 19 | 0 | 3584 | 7 | 13 |
| 19 | Online | 31 | 19 | 0 | 3584 | 7 | 13 |

show chassis fpc detail (MX2020 Router with MPC5EQ and MPC6E)

```

user@host> show chassis fpc detail

```

Slot 0 information:

| | |
|-----------------------|-------------------------|
| State | Online |
| Temperature | 31 |
| Total CPU DRAM | 3584 MB |
| Total XR2 | 291 MB |
| Total DDR DRAM | 24960 MB |
| Start time: | 2014-04-22 23:33:19 PDT |
| Uptime: | 6 minutes, 24 seconds |
| Max Power Consumption | 607 Watts |

Slot 1 information:

| | |
|-----------------------|-------------------------|
| State | Online |
| Temperature | 28 |
| Total CPU DRAM | 2048 MB |
| Total RLDRAM | 1036 MB |
| Total DDR DRAM | 6656 MB |
| Start time: | 2014-04-22 23:33:24 PDT |
| Uptime: | 6 minutes, 19 seconds |
| Max Power Consumption | 520 Watts |

Slot 2 information:

| | |
|-----------------------|-------------------------|
| State | Online |
| Temperature | 27 |
| Total CPU DRAM | 2048 MB |
| Total RLDRAM | 1036 MB |
| Total DDR DRAM | 11264 MB |
| Start time: | 2014-04-22 23:33:34 PDT |
| Uptime: | 6 minutes, 9 seconds |
| Max Power Consumption | 608 Watts |

Slot 3 information:

| | |
|-------------|--------|
| State | Online |
| Temperature | 26 |

| | |
|-----------------------|-------------------------|
| Total CPU DRAM | 2048 MB |
| Total RLDRAM | 734 MB |
| Total DDR DRAM | 3108 MB |
| Start time: | 2014-04-22 23:33:39 PDT |
| Uptime: | 6 minutes, 4 seconds |
| Max Power Consumption | 368 Watts |
| Slot 4 information: | |
| State | Online |
| Temperature | 29 |
| Total CPU DRAM | 3584 MB |
| Total XR2 | 291 MB |
| Total DDR DRAM | 24960 MB |
| Start time: | 2014-04-22 23:33:51 PDT |
| Uptime: | 5 minutes, 52 seconds |
| Max Power Consumption | 607 Watts |
| Slot 5 information: | |
| State | Online |
| Temperature | 28 |
| Total CPU DRAM | 2048 MB |
| Total RLDRAM | 1324 MB |
| Total DDR DRAM | 5120 MB |
| Start time: | 2014-04-22 23:33:57 PDT |
| Uptime: | 5 minutes, 46 seconds |
| Max Power Consumption | 440 Watts |
| Slot 9 information: | |
| State | Online |
| Temperature | 25 |
| Total CPU DRAM | 3584 MB |
| Total XR2 | 518 MB |
| Total DDR DRAM | 49920 MB |
| Start time: | 2014-04-22 23:31:20 PDT |
| Uptime: | 8 minutes, 23 seconds |
| Max Power Consumption | 1130 Watts |
| Slot 10 information: | |
| State | Online |
| Temperature | 32 |
| Total CPU DRAM | 3584 MB |
| Total XR2 | 518 MB |
| Total DDR DRAM | 49920 MB |
| Start time: | 2014-04-22 23:31:25 PDT |
| Uptime: | 8 minutes, 18 seconds |
| Max Power Consumption | 1130 Watts |
| Slot 17 information: | |
| State | Online |
| Temperature | 25 |
| Total CPU DRAM | 3584 MB |
| Total XR2 | 518 MB |
| Total DDR DRAM | 49920 MB |
| Start time: | 2014-04-22 23:31:29 PDT |
| Uptime: | 8 minutes, 14 seconds |
| Max Power Consumption | 1130 Watts |
| Slot 18 information: | |
| State | Online |
| Temperature | 29 |
| Total CPU DRAM | 3584 MB |
| Total XR2 | 291 MB |
| Total DDR DRAM | 24960 MB |
| Start time: | 2014-04-22 23:34:11 PDT |
| Uptime: | 5 minutes, 32 seconds |
| Max Power Consumption | 607 Watts |
| Slot 19 information: | |

```

State                               Online
Temperature                         32
Total CPU DRAM                     3584 MB
Total XR2                          291 MB
Total DDR DRAM                     24960 MB
Start time:                        2014-04-22 23:34:20 PDT
Uptime:                            5 minutes, 23 seconds
Max Power Consumption              607 Watts

```

show chassis fpc detail (MX2008 Router)

```

user@host>show chassis fpc detail
Slot 0 information:
State                               Online
Temperature                         33 degrees C / 91 degrees F
Total CPU DRAM                     2048 MB
Total RLD RAM                      734 MB
Total DDR DRAM                     2596 MB
Start time                        2017-04-14 07:14:26 PDT
Uptime                            15 hours, 29 minutes, 20 seconds
Max power consumption              347 Watts
Slot 3 information:
State                               Online
Temperature                         31 degrees C / 87 degrees F
Total CPU DRAM                     3584 MB
Total RLD RAM                      259 MB
Total DDR DRAM                     20352 MB
Start time                        2017-04-14 07:14:38 PDT
Uptime                            15 hours, 29 minutes, 8 seconds
Max MPC base power consumption     376 Watts
Max MICO power consumption         0 Watts
Max MIC1 power consumption         0 Watts
Max MPC total power consumption     376 Watts
Slot 5 information:
State                               Online
Temperature                         32 degrees C / 89 degrees F
Total CPU DRAM                     3584 MB
Total RLD RAM                      275 MB
Total DDR DRAM                     20352 MB
Start time                        2017-04-14 07:14:46 PDT
Uptime                            15 hours, 29 minutes
Max MPC base power consumption     422 Watts
Max MICO power consumption         18 Watts
Max MIC1 power consumption         0 Watts
Max MPC total power consumption     440 Watts
Slot 7 information:
State                               Online
Temperature                         28 degrees C / 82 degrees F
Total CPU DRAM                     2048 MB
Total RLD RAM                      403 MB
Total DDR DRAM                     1572 MB
Start time                        2017-04-14 07:14:50 PDT
Uptime                            15 hours, 28 minutes, 56 seconds
Max power consumption              347 Watts
Slot 9 information:
State                               Online
Temperature                         29
Total CPU DRAM                     3584 MB
Total XR2                          518 MB
Total DDR DRAM                     49920 MB
Start time                        2017-04-14 07:13:16 PDT

```

```

Uptime                               15 hours, 30 minutes, 30 seconds
Max MPC base power consumption       834 Watts
Max MICO power consumption           56 Watts
Max MIC1 power consumption           0 Watts
Max MPC total power consumption      890 Watts

```

show chassis fpc pic-status (MX2020 Router with MPC5EQ and MPC6E)

```

user@host> show chassis fpc pic-status
Slot 0  Online      MPC5E 3D Q 24XGE+6XLGE
  PIC 0  Online      12X10GE SFPP OTN
  PIC 1  Online      12X10GE SFPP OTN
  PIC 2  Offline     3X40GE QSFPP
  PIC 3  Offline     3X40GE QSFPP
Slot 1  Online      MPCE Type 3 3D
  PIC 0  Online      10X10GE SFPP
  PIC 2  Online      1X100GE CXP
Slot 2  Online      MPC4E 3D 2CGE+8XGE
  PIC 0  Online      4x10GE SFPP
  PIC 1  Online      1X100GE CFP
  PIC 2  Online      4x10GE SFPP
  PIC 3  Online      1X100GE CFP
Slot 3  Online      MPCE Type 2 3D P
  PIC 0  Online      2x 10GE XFP
  PIC 1  Online      2x 10GE XFP
Slot 4  Online      MPC5E 3D Q 2CGE+4XGE
  PIC 0  Online      2X10GE SFPP OTN
  PIC 1  Online      1X100GE CFP2 OTN
  PIC 2  Online      2X10GE SFPP OTN
  PIC 3  Online      1X100GE CFP2 OTN
Slot 5  Online      MPC 3D 16x 10GE
  PIC 0  Online      4x 10GE(LAN) SFP+
  PIC 1  Online      4x 10GE(LAN) SFP+
  PIC 2  Online      4x 10GE(LAN) SFP+
  PIC 3  Online      4x 10GE(LAN) SFP+
Slot 9  Online      MPC6E 3D
  PIC 0  Online      2X100GE CFP2 OTN
  PIC 1  Online      2X100GE CFP2 OTN
Slot 10 Online      MPC6E 3D
  PIC 0  Online      24X10GE SFPP OTN
  PIC 1  Online      4X100GE CXP
Slot 17 Online      MPC6E 3D
  PIC 0  Online      24X10GE SFPP
  PIC 1  Online      4X100GE CXP
Slot 18 Online      MPC5E 3D Q 24XGE+6XLGE
  PIC 0  Offline     12X10GE SFPP OTN
  PIC 1  Offline     12X10GE SFPP OTN
  PIC 2  Online      3X40GE QSFPP
  PIC 3  Online      3X40GE QSFPP
Slot 19 Online      MPC5E 3D Q 24XGE+6XLGE
  PIC 0  Online      12X10GE SFPP OTN
  PIC 1  Offline     12X10GE SFPP OTN
  PIC 2  Offline     3X40GE QSFPP
  PIC 3  Online      3X40GE QSFPP

```

show chassis fpc detail (MX Series Routers)

```

user@host> show chassis fpc detail 2
Slot 0 information:
  State                               Online

```



```

Temperature                36 degrees C / 96 degrees F
Total CPU DRAM              1024 MB
Total RDRAM                 256 MB
Total DDR DRAM              4096 MB
Start time:                 2009-08-11 21:20:30 PDT
Uptime:                     2 hours, 8 minutes, 50 seconds
Max Power Consumption       335 Watts

```

show chassis fpc detail (EX Series Switches)

```

user@host> show chassis fpc detail 2
Slot 1 information:
State                Online
Temperature          41
Total CPU DRAM       2048 MB
Total RDRAM          1036 MB
Total DDR DRAM       11264 MB
Start time:          2013-04-02 00:04:52 PDT
Uptime:              7 days, 9 hours, 47 minutes, 46 seconds
Max Power Consumption 610 Watts

Slot 2 information:
State                Online
Temperature          41
Total CPU DRAM       2048 MB
Total RDRAM          1036 MB
Total DDR DRAM       11264 MB
Start time:          2013-04-02 00:04:56 PDT
Uptime:              7 days, 9 hours, 47 minutes, 42 seconds
Max Power Consumption 610 Watts

```

show chassis fpc (Hardware Not Supported)

```

user@host> show chassis fpc
show chassis fpc

```

| Slot | State | Temp (C) | CPU Utilization (%) | Memory Utilization (%) |
|------|---------|----------|----------------------------|------------------------|
| | | | Total Interrupt | DRAM (MB) Heap Buffer |
| 0 | Online | | | CPU less FPC |
| 1 | Present | | Hardware Not In Right Slot | |
| 2 | Online | 0 | 0 | 0 0 0 |
| 3 | Present | | Hardware Not Supported | |
| 4 | Empty | | | |
| 5 | Empty | | | |
| 6 | Online | 0 | 0 | 0 0 0 |

show chassis fpc detail (Hardware Not Supported)

```

user@host> show chassis fpc detail
Slot 0 information:
State                Online
Total CPU DRAM       ---- CPU less FPC ----
Start time           2006-07-07 03:21:00 UTC
Uptime               27 minutes, 51 seconds

Slot 1 information:
State                Present
Reason              --- Hardware Not In Right Slot ---

Slot 2 information:
State                Online
Total CPU DRAM       32 MB
Start time           2006-07-07 03:20:59 UTC
Uptime               27 minutes, 52 seconds

```

```
Slot 3 information:
State                Present
Reason              --- Hardware Not Supported ---
Total CPU DRAM      0 MB
Slot 6 information:
State                Online
Total CPU DRAM      32 MB
Start time           2006-07-07 03:21:01 UTC
Uptime               27 minutes, 50 seconds
```

show chassis fpc pic-status

```
user@host> show chassis fpc pic-status
Slot 0 Online
  PIC 1    1x OC-12 ATM, MM
  PIC 2    1x OC-12 ATM, MM
  PIC 3    1x OC-12 ATM, MM
Slot 1 Online
  PIC 0    1x OC-48 SONET, SMIR
Slot 2 Online
  PIC 0    1x OC-192 SONET, SMSR
```

show chassis fpc pic-status (M Series Routers)

```
user@host> show chassis fpc pic-status
Slot 1  Online      FPC Type 1
  PIC 0  Present    2x OC-3 ATM, MM- Hardware Error
  PIC 1  Online     4x OC-3 SONET, SMIR
Slot 2  Online      E-FPC Type 2
  PIC 0  Online     4x G/E, 1000 BASE-SX
  PIC 1  Online     2x G/E SFP, 1000 BASE
  PIC 3  Online     1x Tunnel
Slot 3  Online      E-FPC Type 1
  PIC 0  Online     1x G/E IQ, 1000 BASE
  PIC 2  Online     1x G/E SFP, 1000 BASE
Slot 4  Online      E-FPC Type 2
  PIC 0  Online     4x G/E SFP, 1000 BASE
  PIC 1  Online     4x G/E SFP, 1000 BASE
  PIC 2  Online     4x G/E SFP, 1000 BASE
  PIC 3  Online     4x G/E SFP, 1000 BASE
Slot 5  Online      FPC Type 2
...
```

show chassis fpc pic-status (M120 Router)

```
user@host> show chassis fpc pic-status
Slot 1  Online      M120 CFPC 10GE
  PIC 0  Online     1x 10GE(LAN/WAN) XFP
Slot 3  Online      M120 FPC Type 2 (proto)
  PIC 0  Online     2x G/E IQ, 1000 BASE
  PIC 1  Online     4x OC-3 SONET, SMIR
  PIC 2  Online     2x G/E IQ, 1000 BASE
  PIC 3  Online     8x 1GE(LAN), IQ2
Slot 4  Online      M120 FPC Type 3 (proto)
  PIC 0  Online     10x 1GE(LAN), 1000 BASE
Slot 5  Online      M120 FPC Type 1 (proto)
  PIC 0  Present    1x G/E, 1000 BASE-LX- Not Supported
  PIC 1  Online     1x CHOC3 IQ SONET, SMLR
```

```
PIC 2 Online      4x CHDS3 IQ
PIC 3 Online      1x G/E SFP, 1000 BASE
```

show chassis fpc pic-status (MX240, MX480, and MX960 Routers with Application Services Modular Line Card)

In the following output **Slot 1 and Slot 5** are the Application Services Modular Carrier Cards (AS MCC), **PIC 0** is the Application Services Modular Storage Card (AS MSC), and **PIC 2** is the Application Services Modular Processing Card (AS MXC).

```
user@host>show chassis fpc pic-status
Slot 2 Online      MPC Type 1 3D Q
Slot 1 Online      AS-MCC
PIC 0 Online       AS-MSC
PIC 2 Online       AS-MXC
Slot 4 Offline     MPC 3D 16x 10GE
Slot 5 Offline     AS-MCC
```

show chassis fpc lcc (TX Matrix Router)

```
user@host> show chassis fpc lcc 0
lcc0-re0:
-----
Slot State      Temp CPU      Utilization (%) Memory Utilization (%)
      (C) Total Interrupt    DRAM (MB)      Heap      Buffer
0 Empty
1 Online        27      2          0      256          8        44
2 Online        27      3          0      256         15        44
3 Empty
4 Empty
5 Empty
6 Empty
7 Empty
```

show chassis fpc pic-status (TX Matrix Router)

```
user@host> show chassis fpc pic-status
lcc0-re0:
-----
Slot 0 Online    FPC Type 3
PIC 0 Online     1x OC-192 SM SR1
PIC 1 Online     1x OC-192 SM SR2
PIC 2 Online     1x OC-192 SM SR1
PIC 3 Online     1x Tunnel
Slot 1 Online    FPC Type 2
PIC 0 Online     1x OC-48 SONET, SMSR
PIC 1 Online     1x OC-48 SONET, SMSR
```

```
lcc1-re0:
-----
```

```
lcc2-re0:
-----
```

```
Slot 1 Online    FPC Type 3
PIC 0 Online     1x OC-192 SM SR1
Slot 5 Online    FPC Type 2
PIC 0 Online     1x OC-48 SONET, SMSR
PIC 1 Online     2x G/E, 1000 BASE-LX
PIC 2 Online     2x G/E, 1000 BASE-LX
PIC 3 Online     1x OC-48 SONET, SMSR
```

```
lcc3-re0:
```

show chassis fpc pic-status lcc (TX Matrix Router)

```
user@host> show chassis fpc pic-status lcc 0
lcc0-re0:
```

```
-----
Slot 0  Online      FPC Type 3
  PIC 0  Online      1x OC-192 SM SR2
Slot 1  Online      FPC Type 2
  PIC 0  Online      2x OC-12 ATM2 IQ, MM
  PIC 1  Online      1x OC-48 SONET, SMSR
  PIC 2  Online      1x OC-48 SONET, SMSR
  PIC 3  Online      4x G/E, 1000 BASE-SX
```

show chassis fpc (TX Matrix Plus Router)

```
user@host> show chassis fpc
lcc0-re0:
```

```
-----
Slot State      Temp  CPU Utilization (%)  Memory  Utilization (%)
      (C)    Total  Interrupt      DRAM (MB) Heap      Buffer
0  Empty
1  Online        38      4          0      2048      3      24
2  Online        43      8          0      2048      6      24
3  Empty
4  Online        43      6          0      2048      6      24
5  Empty
6  Online        42     13          0      2048      6      24
7  Online        45      7          0      2048      3      24
```

```
lcc2-re0:
```

```
-----
Slot State      Temp  CPU Utilization (%)  Memory  Utilization (%)
      (C)    Total  Interrupt      DRAM (MB) Heap      Buffer
0  Online        42     10          0      2048      6      24
1  Empty
2  Online        42     11          0      2048      6      24
3  Online        40      5          0      2048      3      24
4  Online        33     26          0      1024      8      49
5  Empty
6  Online        43      8          0      2048      6      24
7  Online        46      6          0      2048      3      24
```

```
lcc3-re0:
```

```
-----
Slot State      Temp  CPU Utilization (%)  Memory  Utilization (%)
      (C)    Total  Interrupt      DRAM (MB) Heap      Buffer
0  Empty
1  Empty
2  Online        39     30          0      2048      7      24
3  Empty
4  Online        41      8          0      2048      6      24
5  Online        41     12          0      2048      6      24
6  Online        40      8          0      2048      6      24
7  Online        42      4          0      2048      3      24
```

show chassis fpc lcc (TX Matrix Plus Router)

```
user@host> show chassis fpc lcc 0
lcc0-re0:
```

| Slot | State | Temp (C) | CPU Utilization (%) Total Interrupt | Memory DRAM (MB) | Utilization (%) Heap Buffer |
|------|--------|-------------|--|---------------------|--------------------------------|
| 0 | Empty | | | | |
| 1 | Online | 38 | 4 0 | 2048 | 3 24 |
| 2 | Online | 43 | 8 0 | 2048 | 6 24 |
| 3 | Empty | | | | |
| 4 | Online | 43 | 6 0 | 2048 | 6 24 |
| 5 | Empty | | | | |
| 6 | Online | 42 | 14 0 | 2048 | 6 24 |
| 7 | Online | 45 | 6 0 | 2048 | 3 24 |

show chassis fpc detail (TX Matrix Plus Router)

```
user@host> show chassis fpc details
```

```
lcc0-re0:
```

Slot 1 information:

```
State Online
Temperature 38 degrees C / 100 degrees F
Total CPU DRAM 2048 MB
Total SRAM 64 MB
Total SDRAM 1280 MB
Start time 2010-10-04 20:06:22 PDT
Uptime 1 hour, 32 minutes, 51 seconds
```

Slot 2 information:

```
State Online
Temperature 43 degrees C / 109 degrees F
Total CPU DRAM 2048 MB
Total SRAM 128 MB
Total SDRAM 2560 MB
Start time 2010-10-04 20:06:37 PDT
Uptime 1 hour, 32 minutes, 36 seconds
```

Slot 4 information:

```
State Online
Temperature 43 degrees C / 109 degrees F
Total CPU DRAM 2048 MB
Total SRAM 128 MB
Total SDRAM 2560 MB
Start time 2010-10-04 20:06:40 PDT
Uptime 1 hour, 32 minutes, 33 seconds
```

Slot 6 information:

```
State Online
Temperature 42 degrees C / 107 degrees F
Total CPU DRAM 2048 MB
Total SRAM 128 MB
Total SDRAM 2560 MB
Start time 2010-10-04 20:06:42 PDT
Uptime 1 hour, 32 minutes, 31 seconds
```

Slot 7 information:

```
State Online
Temperature 45 degrees C / 113 degrees F
Total CPU DRAM 2048 MB
Total SRAM 64 MB
Total SDRAM 1280 MB
```

```

Start time          2010-10-04 20:06:43 PDT
Uptime              1 hour, 32 minutes, 30 seconds

```

```
lcc2-re0:
```

```
-----
Slot 0 information:
```

```

State              Online
Temperature         42 degrees C / 107 degrees F
Total CPU DRAM      2048 MB
Total SRAM          128 MB
Total SDRAM         2560 MB
Start time          2010-10-04 20:06:35 PDT
Uptime              1 hour, 32 minutes, 38 seconds

```

```
Slot 2 information:
```

```

State              Online
Temperature         42 degrees C / 107 degrees F
Total CPU DRAM      2048 MB
Total SRAM          128 MB
Total SDRAM         2560 MB
Start time          2010-10-04 20:06:37 PDT
Uptime              1 hour, 32 minutes, 36 seconds

```

```
Slot 3 information:
```

```

State              Online
Temperature         40 degrees C / 104 degrees F
Total CPU DRAM      2048 MB
Total SRAM          64 MB
Total SDRAM         1280 MB
Start time          2010-10-04 20:06:28 PDT
Uptime              1 hour, 32 minutes, 45 seconds

```

```
Slot 4 information:
```

```

State              Online
Temperature         33 degrees C / 91 degrees F
Total CPU DRAM      1024 MB
Total SRAM          64 MB
Total SDRAM         1280 MB
Start time          2010-10-04 20:08:03 PDT
Uptime              1 hour, 31 minutes, 10 seconds

```

```
Slot 6 information:
```

```

State              Online
Temperature         43 degrees C / 109 degrees F
Total CPU DRAM      2048 MB
Total SRAM          128 MB
Total SDRAM         2560 MB
Start time          2010-10-04 20:06:44 PDT
Uptime              1 hour, 32 minutes, 29 seconds

```

```
Slot 7 information:
```

```

State              Online
Temperature         46 degrees C / 114 degrees F
Total CPU DRAM      2048 MB
Total SRAM          64 MB
Total SDRAM         1280 MB
Start time          2010-10-04 20:06:46 PDT
Uptime              1 hour, 32 minutes, 27 seconds

```

```
lcc3-re0:
```

```
-----
Slot 2 information:
```

```

State              Online
Temperature         38 degrees C / 100 degrees F
Total CPU DRAM      2048 MB
Total SRAM          128 MB

```

```

Total SDRAM                2560 MB
Start time                 2010-10-04 20:17:31 PDT
Uptime                     1 hour, 21 minutes, 42 seconds
Slot 4 information:
State                      Online
Temperature                41 degrees C / 105 degrees F
Total CPU DRAM             2048 MB
Total SRAM                 128 MB
Total SDRAM                2560 MB
Start time                 2010-10-04 20:17:34 PDT
Uptime                     1 hour, 21 minutes, 39 seconds
Slot 5 information:
State                      Online
Temperature                41 degrees C / 105 degrees F
Total CPU DRAM             2048 MB
Total SRAM                 128 MB
Total SDRAM                2560 MB
Start time                 2010-10-04 20:17:36 PDT
Uptime                     1 hour, 21 minutes, 37 seconds
Slot 6 information:
State                      Online
Temperature                40 degrees C / 104 degrees F
Total CPU DRAM             2048 MB
Total SRAM                 128 MB
Total SDRAM                2560 MB
Start time                 2010-10-04 20:17:39 PDT
Uptime                     1 hour, 21 minutes, 34 seconds
Slot 7 information:
State                      Online
Temperature                42 degrees C / 107 degrees F
Total CPU DRAM             2048 MB
Total SRAM                 64 MB
Total SDRAM                1280 MB
Start time                 2010-10-04 20:17:41 PDT
Uptime                     1 hour, 21 minutes, 32 seconds

```

show chassis fpc pic-status (TX Matrix Plus Router)

```
user@host> show chassis fpc pic-status
```

```
1cc0-re0:
```

```

-----
Slot 1  Online      FPC Type 2-ES
PIC 0   Online      8x 1GE(LAN), IQ2
Slot 2  Online      FPC Type 4-ES
PIC 0   Online      4x 10GE (LAN/WAN) XFP
Slot 4  Online      FPC Type 4-ES
PIC 0   Online      4x 10GE (LAN/WAN) XFP
Slot 6  Online      FPC Type 4-ES
PIC 0   Online      4x 10GE (LAN/WAN) XFP
PIC 1   Online      4x 10GE (LAN/WAN) XFP
Slot 7  Online      FPC Type 3-ES
PIC 0   Online      10x 1GE(LAN), 1000 BASE
PIC 2   Online      1x OC-192 SM SR2
PIC 3   Online      10x 1GE(LAN), 1000 BASE

```

```
1cc2-re0:
```

```

-----
Slot 0  Online      FPC Type 4-ES
PIC 0   Online      4x 10GE (LAN/WAN) XFP
Slot 2  Online      FPC Type 4-ES

```

```

PIC 0 Online      4x 10GE (LAN/WAN) XFP
PIC 1 Online      4x 10GE (LAN/WAN) XFP
Slot 3 Online     FPC Type 2-ES
PIC 0 Online      8x 1GE(LAN), IQ2
Slot 4 Online     FPC Type 4
PIC 0 Online      10x10GE(LAN/WAN) SFPP
Slot 6 Online     FPC Type 4-ES
PIC 0 Online      4x OC-192 SONET XFP
Slot 7 Online     FPC Type 3-ES
PIC 0 Online      10x 1GE(LAN), 1000 BASE
PIC 1 Offline     1x 10GE(LAN/WAN) IQ2E
PIC 2 Online      1x OC-192 SM SR2
PIC 3 Online      1x Tunnel

```

lcc3-re0:

```

-----
Slot 2 Online     FPC Type 4-ES
PIC 0 Online      10x10GE(LAN/WAN) SFPP
Slot 4 Online     FPC Type 4-ES
PIC 0 Online      4x OC-192 SONET XFP
Slot 5 Online     FPC Type 4-ES
PIC 0 Online      4x OC-192 SONET XFP
PIC 1 Online      4x 10GE (LAN/WAN) XFP
Slot 6 Online     FPC Type 4-ES
PIC 1 Online      4x 10GE (LAN/WAN) XFP
Slot 7 Online     FPC Type 3-ES
PIC 0 Online      10x 1GE(LAN), 1000 BASE
PIC 1 Online      8x 1GE(TYPE3), IQ2E
PIC 2 Online      4x OC-48 SONET

```

show chassis fpc (TI600 Router)

```

user@host> show chassis fpc

```

| Slot | State | Temp (C) | CPU Utilization (%) | | Memory DRAM (MB) | Utilization (%) | |
|------|--------|-------------|---------------------|-----------|---------------------|-----------------|--------|
| | | | Total | Interrupt | | Heap | Buffer |
| 0 | Empty | | | | | | |
| 1 | Empty | | | | | | |
| 2 | Online | 49 | 3 | 0 | 2048 | 3 | 24 |
| 3 | Online | 46 | 6 | 0 | 2048 | 6 | 24 |
| 4 | Empty | | | | | | |
| 5 | Online | 46 | 5 | 0 | 2048 | 3 | 24 |
| 6 | Empty | | | | | | |
| 7 | Online | 44 | 8 | 0 | 1024 | 7 | 49 |

show chassis fpc detail (TI600 Router)

```

user@host> show chassis fpc detail

show chassis fpc detail
Slot 2 information:
  State Online
  Temperature 49 degrees C / 120 degrees F
  Total CPU DRAM 2048 MB
  Total SRAM 64 MB
  Total SDRAM 1280 MB
  Start time 2010-10-04 21:12:52 PDT
  Uptime 32 minutes, 9 seconds
Slot 3 information:
  State Online
  Temperature 47 degrees C / 116 degrees F

```



```

Total CPU DRAM          2048 MB
Total SRAM              128 MB
Total SDRAM             2560 MB
Start time              2010-10-04 21:13:06 PDT
Uptime                  31 minutes, 55 seconds
Slot 5 information:
State                   Online
Temperature             46 degrees C / 114 degrees F
Total CPU DRAM          2048 MB
Total SRAM              64 MB
Total SDRAM             1280 MB
Start time              2010-10-04 21:12:56 PDT
Uptime                  32 minutes, 5 seconds
Slot 7 information:
State                   Online
Temperature             44 degrees C / 111 degrees F
Total CPU DRAM          1024 MB
Total SRAM              64 MB
Total SDRAM             1280 MB
Start time              2010-10-04 21:14:34 PDT
Uptime                  30 minutes, 27 seconds

```

show chassis fpc <fpc-slot> (EX Series Switch)

```
user@host> show chassis fpc 2
```

| Slot | State | Temp (C) | CPU Utilization (%) Total Interrupt | Memory DRAM (MB) | Utilization (%) Heap Buffer |
|------|--------|-------------|--|---------------------|--------------------------------|
| 2 | Online | 40 | 12 0 | 2048 | 19 14 |

show chassis fpc slot (T1600 Router)

```
user@host> show chassis fpc slot 2
```

| Slot | State | Temp (C) | CPU Utilization (%) Total Interrupt | Memory DRAM (MB) | Utilization (%) Heap Buffer |
|------|--------|-------------|--|---------------------|--------------------------------|
| 2 | Online | 49 | 3 0 | 2048 | 3 24 |

show chassis fpc pic-status (T1600 Router)

```
user@host> show chassis fpc pic-status
```

```

Slot 2  Online      FPC Type 1-ES
PIC 0   Online      Load Type 1
PIC 1   Online      4x 1GE(LAN), IQ2E
PIC 3   Online      1x OC-12-3 SFP
Slot 3  Online      FPC Type 4-ES
PIC 0   Online      4x 10GE (LAN/WAN) XFP
PIC 1   Online      4x OC-192 SONET XFP
Slot 5  Online      FPC Type 2-ES
PIC 0   Online      Load Type 2
PIC 1   Online      8x 1GE(LAN), IQ2E
PIC 2   Online      8x 1GE(LAN), IQ2E
PIC 3   Online      1x OC-48-12-3 SFP
Slot 7  Online      FPC Type 4
PIC 0   Online      4x 10GE (LAN/WAN) XFP

```

show chassis fpc (T4000 Router)

```
user@host> show chassis fpc
```

| Slot | State | Temp (C) | CPU Utilization (%) | Memory DRAM (MB) | Utilization (%) |
|------|--------|----------|---------------------|------------------|-----------------|
| | | | Total Interrupt | Heap | Buffer |
| 0 | Online | 48 | 15 0 | 2816 21 | 27 |
| 1 | Empty | | | | |
| 2 | Empty | | | | |
| 3 | Online | 51 | 15 0 | 2816 21 | 27 |
| 4 | Empty | | | | |
| 5 | Online | 39 | 8 0 | 2048 6 | 23 |
| 6 | Online | 49 | 15 0 | 2816 21 | 27 |
| 7 | Empty | | | | |

show chassis fpc detail (T4000 Router)

```
user@host> show chassis fpc detail
```

```
Slot 0 information:
```

```
State Online
Temperature 48 degrees C / 118 degrees F
Total CPU DRAM 2816 MB
Total SRAM 1554 MB
Total SDRAM 10752 MB
Start time 2012-02-09 22:56:25 PST
Uptime 2 hours, 40 minutes, 52 seconds
```

```
Slot 3 information:
```

```
State Online
Temperature 51 degrees C / 123 degrees F
Total CPU DRAM 2816 MB
Total SRAM 1554 MB
Total SDRAM 10752 MB
Start time 2012-02-09 22:56:22 PST
Uptime 2 hours, 40 minutes, 55 seconds
```

```
Slot 5 information:
```

```
State Online
Temperature 39 degrees C / 102 degrees F
Total CPU DRAM 2048 MB
Total SRAM 128 MB
Total SDRAM 2560 MB
Start time 2012-02-09 22:51:27 PST
Uptime 2 hours, 45 minutes, 50 seconds
```

```
Slot 6 information:
```

```
State Online
Temperature 49 degrees C / 120 degrees F
Total CPU DRAM 2816 MB
Total SRAM 1554 MB
Total SDRAM 10752 MB
Start time 2012-02-09 22:56:29 PST
Uptime 2 hours, 40 minutes, 48 seconds
```

show chassis fpc pic-status (T4000 Router)

```
user@host> show chassis fpc pic-status
```

```
Slot 0 Online FPC Type 5-3D
PIC 0 Online 12x10GE (LAN/WAN) SFPP
PIC 1 Online 12x10GE (LAN/WAN) SFPP
Slot 3 Online FPC Type 5-3D
PIC 0 Online 1x100GE
PIC 1 Online 12x10GE (LAN/WAN) SFPP
```

```

Slot 5  Online      FPC Type 4-ES
        PIC 0  Online      100GE
        PIC 1  Online      100GE CFP
Slot 6  Online      FPC Type 5-3D
        PIC 0  Online      12x10GE (LAN/WAN) SFPP
        PIC 1  Online      12x10GE (LAN/WAN) SFPP

```

show chassis fpc (QFX Series and OCX Series)

```

user@switch> show chassis fpc
Temp CPU Utilization (%) Memory      Utilization (%)
Slot State      (C) Total Interrupt  DRAM (MB) Heap      Buffer
0  Online        26      2          0      2820      0      49

```

show chassis fpc detail (QFX3500 Switches)

```

user@switch> show chassis fpc detail
Slot 0 information:
State                               Online
Temperature                         28 degrees C / 82 degrees F
Total CPU DRAM                      2820 MB
Total SRAM                          0 MB
Total SDRAM                         0 MB
Start time                          2010-09-20 01:34:13 PDT
Uptime                              3 days, 3 hours, 31 minutes, 48 seconds

```

show chassis fpc pic-status (QFX3500 Switches)

```

user@switch> show chassis fpc pic-status
Slot 0  Online      QFX 48x10G 4x40G Switch
        PIC 0  Online      48x 10G-SFP+
        PIC 1  Online      15x 10G-SFP+

```

show chassis fpc interconnect-device (QFabric System)

```

user@switch> show chassis fpc interconnect-device interconnect1
FPC status:
Slot State      Temp
              (C)
0  Online        0
1  Online        0
2  Online        0
3  Online        0
4  Online        0
5  Online        0
6  Online        0
7  Online        0
8  Online        0
9  Online        0
10 Online        0
11 Online        0
12 Online        0
13 Online        0
14 Online        0
15 Online        0

```

show chassis fpc interconnect-device (QFabric System)

```

user@switch> show chassis fpc interconnect-device interconnect1 3

```

```
FPC status:
Slot State      Temp
              (C)
  3  Online      0
```

show chassis fpc interconnect-device detail (QFabric System)

```
user@switch> show chassis fpc interconnect-device interconnect1 3 detail
Slot 3 information:
State                               Online
Temperature                         0 degrees C / 32 degrees F
Start time                         2011-08-18 10:45:04 PDT
Uptime                             1 minute, 49 seconds
```

show chassis fpc pic-status interconnect-device (QFabric System)

```
user@switch> show chassis fpc pic-status interconnect-device interconnect1
Slot 0  Online      QFX 16-port QSFP+ Front Card
  PIC 0  Online      16x 40G-QSFP+
  PIC 1  Online      16x 40G-GE
Slot 1  Online      QFX 16-port QSFP+ Front Card
  PIC 0  Online      16x 40G-QSFP+
  PIC 1  Online      16x 40G-GE
Slot 2  Online      QFX 16-port QSFP+ Front Card
  PIC 0  Online      16x 40G-QSFP+
  PIC 1  Online      16x 40G-GE
Slot 3  Online      QFX 16-port QSFP+ Front Card
  PIC 0  Online      16x 40G-QSFP+
  PIC 1  Online      16x 40G-GE
Slot 4  Online      QFX 16-port QSFP+ Front Card
  PIC 0  Online      16x 40G-QSFP+
  PIC 1  Online      16x 40G-GE
Slot 5  Online      QFX 16-port QSFP+ Front Card
  PIC 0  Online      16x 40G-QSFP+
  PIC 1  Online      16x 40G-GE
Slot 6  Online      QFX 16-port QSFP+ Front Card
  PIC 0  Online      16x 40G-QSFP+
  PIC 1  Online      16x 40G-GE
Slot 7  Online      QFX 16-port QSFP+ Front Card
  PIC 0  Online      16x 40G-QSFP+
  PIC 1  Online      16x 40G-GE
Slot 8  Online      QFX Fabric Rear Card
  PIC 0  Online      16x 40G-GE
Slot 9  Online      QFX Fabric Rear Card
  PIC 0  Online      16x 40G-GE
Slot 10 Online      QFX Fabric Rear Card
  PIC 0  Online      16x 40G-GE
Slot 11 Online      QFX Fabric Rear Card
  PIC 0  Online      16x 40G-GE
Slot 12 Online      QFX Fabric Rear Card
  PIC 0  Online      16x 40G-GE
Slot 13 Online      QFX Fabric Rear Card
  PIC 0  Online      16x 40G-GE
Slot 14 Online      QFX Fabric Rear Card
  PIC 0  Online      16x 40G-GE
Slot 15 Online      QFX Fabric Rear Card
  PIC 0  Online      16x 40G-GE
```

show chassis fpc pic-status node-device (QFabric System)

```

user@switch> show chassis fpc pic-status node-device node1
Slot node1 Online      QFX 48x10G 4x40G Switch
  PIC 0  Online      48x 10G-SFP+
  PIC 1  Online      4x 40G-QSFP+

```

show chassis fpc (PTX5000 Packet Transport Router)

```

user@host> show chassis fpc

```

| Slot | State | Temp (C) | CPU Utilization (%) | | Memory DRAM (MB) | Utilization (%) | |
|------|--------|-------------|---------------------|-----------|---------------------|-----------------|--------|
| | | | Total | Interrupt | | Heap | Buffer |
| 0 | Empty | | | | | | |
| 1 | Empty | | | | | | |
| 2 | Online | 50 | 6 | 0 | 2816 | 5 | 27 |
| 3 | Empty | | | | | | |
| 4 | Empty | | | | | | |
| 5 | Online | 48 | 9 | 0 | 2816 | 5 | 27 |
| 6 | Empty | | | | | | |
| 7 | Online | 49 | 8 | 0 | 2816 | 5 | 27 |

show chassis fpc detail (PTX5000 Packet Transport Router)

```

user@host> show chassis fpc detail
Slot 2 information:
  State Online
  Temperature 35 degrees C / 95 degrees F (PMB)
  Temperature 35 degrees C / 95 degrees F (Intake)
  Temperature 50 degrees C / 122 degrees F (Exhaust A)
  Temperature 54 degrees C / 129 degrees F (Exhaust B)
  Temperature 54 degrees C / 129 degrees F (TL0)
  Temperature 52 degrees C / 125 degrees F (TQ0)
  Temperature 61 degrees C / 141 degrees F (TL1)
  Temperature 58 degrees C / 136 degrees F (TQ1)
  Temperature 57 degrees C / 134 degrees F (TL2)
  Temperature 58 degrees C / 136 degrees F (TQ2)
  Temperature 62 degrees C / 143 degrees F (TL3)
  Temperature 61 degrees C / 141 degrees F (TQ3)
  Total CPU DRAM 2816 MB
  Total SRAM 0 MB
  Total SDRAM 0 MB
  Start time 2012-01-12 12:05:42 PST
  Uptime 3 hours, 14 minutes, 7 seconds
Slot 5 information:
  State Online
  Temperature 35 degrees C / 95 degrees F (PMB)
  Temperature 34 degrees C / 93 degrees F (Intake)
  Temperature 48 degrees C / 118 degrees F (Exhaust A)
  Temperature 53 degrees C / 127 degrees F (Exhaust B)
  Temperature 54 degrees C / 129 degrees F (TL0)
  Temperature 52 degrees C / 125 degrees F (TQ0)
  Temperature 69 degrees C / 156 degrees F (TL1)
  Temperature 56 degrees C / 132 degrees F (TQ1)
  Temperature 54 degrees C / 129 degrees F (TL2)
  Temperature 56 degrees C / 132 degrees F (TQ2)
  Temperature 59 degrees C / 138 degrees F (TL3)
  Temperature 60 degrees C / 140 degrees F (TQ3)
  Total CPU DRAM 2816 MB
  Total SRAM 0 MB

```

```

Total SDRAM                0 MB
Start time                 2012-01-12 12:05:43 PST
Uptime                    3 hours, 14 minutes, 6 seconds
Slot 7 information:
State                     Online
Temperature               35 degrees C / 95 degrees F (PMB)
Temperature               33 degrees C / 91 degrees F (Intake)
Temperature               50 degrees C / 122 degrees F (Exhaust A)
Temperature               55 degrees C / 131 degrees F (Exhaust B)
Temperature               56 degrees C / 132 degrees F (TL0)
Temperature               56 degrees C / 132 degrees F (TQ0)
Temperature               61 degrees C / 141 degrees F (TL1)
Temperature               57 degrees C / 134 degrees F (TQ1)
Temperature               55 degrees C / 131 degrees F (TL2)
Temperature               59 degrees C / 138 degrees F (TQ2)
Temperature               62 degrees C / 143 degrees F (TL3)
Temperature               62 degrees C / 143 degrees F (TQ3)
Total CPU DRAM            2816 MB
Total SRAM                 0 MB
Total SDRAM                0 MB
Start time                 2012-01-12 12:05:44 PST
Uptime                    3 hours, 14 minutes, 5 seconds

```

show chassis fpc pic-status (PTX5000 Packet Transport Router)

```

user@host> show chassis fpc pic-status
Slot 2  Online      FPC
  PIC 0  Online      24x 10GE(LAN) SFP+
  PIC 1  Online      24x 10GE(LAN) SFP+
Slot 5  Online      FPC
  PIC 0  Online      24x 10GE(LAN) SFP+
  PIC 1  Online      2x 40GE CFP
Slot 7  Online      FPC
  PIC 0  Online      24x 10GE(LAN) SFP+
  PIC 1  Online      2x 40GE CFP

```

show chassis fpc (PTX10008 Router)

```

user@host> show chassis fpc

```

| Utilization (%) | Temp | CPU Utilization (%) | | CPU Utilization (%) | | | Memory |
|-----------------|------|---------------------|-----------|---------------------|------|-------|-----------|
| Slot State | (C) | Total | Interrupt | 1min | 5min | 15min | DRAM (MB) |
| Heap Buffer | | | | | | | |
| 0 Online | 38 | 26 | 2 | 26 | 26 | 26 | 1953 |
| 20 32 | | | | | | | |
| 1 Empty | | | | | | | |
| 2 Empty | | | | | | | |
| 3 Empty | | | | | | | |
| 4 Empty | | | | | | | |
| 5 Online | 67 | 26 | 2 | 26 | 26 | 26 | 1953 |
| 25 32 | | | | | | | |
| 6 Online | 52 | 26 | 2 | 26 | 26 | 26 | 1953 |
| 25 32 | | | | | | | |
| 7 Empty | | | | | | | |

show chassis fpc (PTX10016 Router)

```

user@host> show chassis fpc

```

| Temp | CPU Utilization (%) | CPU Utilization (%) | Memory |
|------|---------------------|---------------------|--------|
|------|---------------------|---------------------|--------|

| Utilization (%) | | (C) | Total | Interrupt | 1min | 5min | 15min | DRAM (MB) |
|-----------------|--------|-----|-------|-----------|------|------|-------|-----------|
| Slot | State | | | | | | | |
| Heap | Buffer | | | | | | | |
| 0 | Empty | | | | | | | |
| 1 | Online | 36 | 27 | 2 | 27 | 27 | 27 | 1953 |
| 22 | 32 | | | | | | | |
| 2 | Empty | | | | | | | |
| 3 | Online | 36 | 27 | 2 | 27 | 27 | 27 | 1953 |
| 22 | 32 | | | | | | | |
| 4 | Empty | | | | | | | |
| 5 | Empty | | | | | | | |
| 6 | Online | 35 | 27 | 2 | 27 | 27 | 27 | 1953 |
| 22 | 32 | | | | | | | |
| 7 | Empty | | | | | | | |
| 8 | Online | 34 | 27 | 2 | 27 | 27 | 27 | 1953 |
| 22 | 32 | | | | | | | |
| 9 | Online | 46 | 24 | 2 | 24 | 24 | 24 | 1953 |
| 26 | 32 | | | | | | | |
| 10 | Empty | | | | | | | |
| 11 | Empty | | | | | | | |
| 12 | Empty | | | | | | | |
| 13 | Empty | | | | | | | |
| 14 | Empty | | | | | | | |
| 15 | Empty | | | | | | | |

show chassis fpc (ACX2000 Universal Access Router)

```
user@host> show chassis fpc
```

| Slot | State | Temp (C) | CPU Total | Utilization (%) Interrupt | Memory DRAM (MB) | Utilization (%) Heap | Buffer |
|------|--------|----------|-----------|---------------------------|------------------|----------------------|--------|
| 0 | Online | 61 | 17 | 6 | 512 | 21 | 37 |

show chassis fpc 0 (ACX2000 Universal Access Router)

```
user@host> show chassis fpc 0
```

| Slot | State | Temp (C) | CPU Total | Utilization (%) Interrupt | Memory DRAM (MB) | Utilization (%) Heap | Buffer |
|------|--------|----------|-----------|---------------------------|------------------|----------------------|--------|
| 0 | Online | 61 | 17 | 6 | 512 | 21 | 37 |

show chassis fpc detail (ACX2000 Universal Access Router)

```
user@host> show chassis fpc detail
```

Slot 0 information:

| | |
|----------------|------------------------------|
| State | Online |
| Temperature | 61 degrees C / 141 degrees F |
| Total CPU DRAM | 512 MB |
| Start time | 2012-05-29 02:52:06 PDT |
| Uptime | 27 minutes, 17 seconds |

show chassis fpc pic-status (ACX2000 Universal Access Router)

```
user@host> show chassis fpc pic-status
```

| | | |
|--------|--------|-------------------|
| Slot 0 | Online | |
| PIC 0 | Online | 16x CHE1T1, RJ48 |
| PIC 1 | Online | 8x 1GE(LAN) RJ45 |
| PIC 2 | Online | 2x 1GE(LAN) SFP |
| PIC 3 | Online | 2x 10GE(LAN) SFP+ |

show chassis FPC 1 (MX Routers with Media Services Blade [MSB])

```
user@switch> show chassis fpc 1
```

| Slot | State | Temp (C) | CPU Utilization (%) | Memory DRAM (MB) | Utilization (%) | Heap | Buffer |
|------|--------|----------|---------------------|------------------|-----------------|------|--------|
| 1 | Online | 34 | 5 | 0 | 3072 | 5 | 13 |

show chassis FPC 1 detail (MX Routers with Media Services Blade [MSB])

```
user@switch> show chassis fpc 1 detail
```

Slot 1 information:

| | |
|-----------------------|-------------------------|
| State | Online |
| Temperature | 34 |
| Total CPU DRAM | 3072 MB |
| Total RLD RAM | 259 MB |
| Total DDR DRAM | 4864 MB |
| Start time: | 2012-06-19 10:51:43 PDT |
| Uptime: | 16 minutes, 48 seconds |
| Max Power Consumption | 550 Watts |

Sample Output

show chassis fpc (Node Slicing)

```
user@router> show chassis fpc
```

| Slot | State | Temp (C) | CPU Utilization (%) | CPU Utilization (%) | Memory | | | |
|------|--------|----------|---------------------|---------------------|--------|------|-------|-----------|
| Heap | Buffer | GNF | Total | Interrupt | 1min | 5min | 15min | DRAM (MB) |
| 0 | Online | 45 | 12 | 0 | 12 | 12 | 12 | 3584 |
| 6 | | 3 | | | | | | |
| 1 | Online | 57 | 22 | 0 | 20 | 20 | 20 | 3136 |
| 16 | | 2 | | | | | | |
| 2 | Online | 50 | 19 | 0 | 17 | 17 | 16 | 3584 |
| 6 | | 3 | | | | | | |
| 3 | Online | 28 | 10 | 0 | 11 | 11 | 11 | 2048 |
| 10 | | 6 | | | | | | |
| 4 | Online | 42 | 20 | 0 | 20 | 19 | 19 | 3584 |
| 8 | | 6 | | | | | | |
| 5 | Online | 58 | 22 | 0 | 21 | 20 | 20 | 3136 |
| 16 | | 4 | | | | | | |
| 6 | Online | 49 | 17 | 0 | 15 | 16 | 16 | 3136 |
| 13 | | 1 | | | | | | |
| 7 | Online | 44 | 11 | 0 | 10 | 10 | 10 | 3584 |
| 6 | | 5 | | | | | | |
| 8 | Online | 40 | 19 | 0 | 18 | 18 | 18 | 3584 |
| 8 | | 5 | | | | | | |
| 9 | Online | 44 | 19 | 0 | 20 | 20 | 20 | 3584 |
| 8 | | 5 | | | | | | |

Sample Output

show chassis fpc pic-status (Node Slicing)

```
user@router> show chassis fpc pic-status
```


| | | | |
|--------|---------|--------------------------------------|-------|
| Slot 0 | Online | MPC5E 3D 24XGE+6XLGE | GNF 3 |
| PIC 0 | Online | 12X10GE SFPP OTN | |
| PIC 1 | Offline | 12X10GE SFPP OTN | |
| PIC 2 | Offline | 3X40GE QSFPP | |
| PIC 3 | Online | 3X40GE QSFPP | |
| Slot 1 | Online | MPC9E 3D | GNF 2 |
| PIC 1 | Online | MRATE-12xQSFPP-XGE-XLGE-CGE | |
| Slot 2 | Online | MPC5E 3D Q 2CGE+4XGE | GNF 3 |
| PIC 0 | Online | 2X10GE SFPP OTN | |
| PIC 1 | Online | 1X100GE CFP2 OTN | |
| PIC 2 | Online | 2X10GE SFPP OTN | |
| PIC 3 | Online | 1X100GE CFP2 OTN | |
| Slot 3 | Online | MPCE Type 2 3D EQ | GNF 6 |
| Slot 4 | Online | MPC6E 3D | GNF 6 |
| PIC 0 | Online | 24X10GE SFPP | |
| PIC 1 | Online | 2X100GE CFP2 OTN | |
| Slot 5 | Online | MPC9E 3D | GNF 4 |
| PIC 0 | Online | MRATE-12xQSFPP-XGE-XLGE-CGE | |
| Slot 6 | Online | MPC7E 3D MRATE-12xQSFPP-XGE-XLGE-CGE | GNF 1 |
| PIC 0 | Online | MRATE-6xQSFPP-XGE-XLGE-CGE | |
| PIC 1 | Online | MRATE-6xQSFPP-XGE-XLGE-CGE | |
| Slot 7 | Online | MPC5E 3D 2CGE+4XGE | GNF 5 |
| PIC 0 | Online | 2X10GE SFPP OTN | |
| PIC 1 | Online | 1X100GE CFP2 OTN | |
| PIC 2 | Online | 2X10GE SFPP OTN | |
| PIC 3 | Online | 1X100GE CFP2 OTN | |
| Slot 8 | Online | MPC6E 3D | GNF 5 |
| PIC 0 | Online | 24X10GE SFPP OTN | |
| Slot 9 | Online | MPC6E 3D | GNF 5 |
| PIC 0 | Online | 24X10GE SFPP | |
| PIC 1 | Online | 4X100GE CXP | |

show chassis lccs

| | |
|---------------------------------|---|
| Syntax | show chassis lccs |
| Release Information | Command introduced before Junos OS Release 7.4. |
| Description | (TX Matrix and TX Matrix Plus routers only) On a TX Matrix router, display the status of all T640 LCC connected to the TX Matrix router. On a TX Matrix Plus router, display the status of all LCC connected to the TX Matrix Plus router. |
| Options | This command has no options. |
| Required Privilege Level | view |
| Related Documentation | <ul style="list-style-type: none"> • <i>request chassis lcc</i> • <i>Configuring Line-Card Upgrade Groups for Nonstop Software Upgrade (CLI Procedure)</i> • <i>fpc</i> |
| List of Sample Output | show chassis lccs on page 410 show chassis lccs (TX Matrix Plus router with 3D SIBs) on page 411 |
| Output Fields | Table 10 on page 410 lists the output fields for the show chassis lccs command. Output fields are listed in the approximate order in which they appear. |

Table 10: show chassis lccs Output Fields

| Field Name | Field Description |
|------------|--|
| Slot | LCC slot number. |
| State | LCC status: <ul style="list-style-type: none"> • Online—LCC is online and running. • Offline—LCC is powered down. • Empty—No LCC is present. |
| Uptime | How long the LCC has been up and running. |

Sample Output

show chassis lccs

```

user@host> show chassis lccs
Slot  State          Uptime
 0    Online          3 minutes, 17 seconds
 1    Empty

```

| | | |
|---|--------|-----------------------|
| 2 | Online | 3 minutes, 23 seconds |
| 3 | Empty | |

show chassis lccs (TX Matrix Plus router with 3D SIBs)

```
user@host> show chassis lccs
```

| Slot | State | Uptime |
|------|---------|--|
| 0 | Offline | |
| 1 | Empty | |
| 2 | Online | 1 day, 4 hours, 57 minutes, 7 seconds |
| 3 | Empty | |
| 4 | Online | 1 day, 4 hours, 56 minutes, 58 seconds |
| 5 | Empty | |
| 6 | Empty | |
| 7 | Online | 3 hours, 45 minutes, 41 seconds |

show chassis location

| | |
|---------------------------------------|--|
| List of Syntax | Syntax on page 412 Syntax (TX Matrix Router) on page 412 Syntax (TX Matrix Plus Router) on page 412 Syntax (MX Series Router) on page 412 Syntax (QFX Series) on page 412 Syntax (OCX Series) on page 412 |
| Syntax | show chassis location |
| Syntax (TX Matrix Router) | show chassis location <fpc interface (by-name <i>name</i> by-slot fpc number lcc number) lcc number scc> |
| Syntax (TX Matrix Plus Router) | show chassis location <fpc interface (by-name <i>name</i> by-slot fpc number lcc number) lcc number sfc number> |
| Syntax (MX Series Router) | show chassis location <all-members> <local> <member <i>member-id</i> > |
| Syntax (QFX Series) | show chassis location <interconnect-device <i>name</i> > <node-device <i>name</i> > |
| Syntax (OCX Series) | show chassis location |
| Release Information | Command introduced before Junos OS Release 7.4. Command introduced in Junos OS Release 9.0 for EX Series switches. sfc option introduced for the TX Matrix Plus router in Junos OS Release 9.6. Command introduced in Junos OS Release 11.1 for the QFX Series. Command introduced in Junos OS Release 14.1X53-D20 for the OCX Series. |
| Description | Display the physical location of the chassis. This command can only be used on the master Routing Engine. |
| Options | none —Display all information about the physical location of the chassis. On a TX Matrix router, display all information about the physical location of the TX Matrix router and its attached T640 routers. On a TX Matrix Plus router, display all information about the physical location of the TX Matrix Plus router and its attached routers. all-members —(MX Series routers only) (Optional) Display the physical location of the chassis for all the member routers in the Virtual Chassis configuration. fpc —(TX Matrix router and TX Matrix Plus router only) (Optional) Display the physical location of all Flexible PIC Concentrators (FPCs). |

interconnect-device *name*—(QFabric systems only) (Optional) Display the physical location of the Interconnect device.

interface by-name *name*—(TX Matrix and TX Matrix Plus routers only) (Optional) Display the physical location of a specified interface name. On a TX Matrix router, this option displays the FPC number and T640 router (line-card chassis) number associated with the specified interface. On a TX Matrix Plus router, this option displays the FPC number and router (line-card chassis) number associated with the specified interface.

interface by-slot fpc *number* lcc *number*—(TX Matrix and TX Matrix Plus router only) (Optional) On a TX Matrix router, display the global FPC number of an interface by specifying its local FPC number and T640 router (line-card chassis) number. On a TX Matrix Plus router, display the global FPC number of an interface by specifying its local FPC number and router (line-card chassis) number.

- The global FPC number is the FPC slot number when all the FPC slots in the routing matrix are considered: **0** through **31**. On TX Matrix Plus router with 3D SIBs, the value is **0** through **63**. The local FPC number is the FPC slot number on a particular T640 router.
- For **fpc**, replace *number* with a value from **0** through **7**.
- For **lcc**, replace *number* with a value from **0** through **7**.

lcc *number*—(TX Matrix and TX Matrix Plus routers only) (Optional) On a TX Matrix router, display the physical location of a specified T640 router (line-card chassis) that is connected to a TX Matrix router. On a TX Matrix Plus router, display the physical location of a specified router (line-card chassis) that is connected to a TX Matrix Plus router.

Replace *number* with the following values depending on the LCC configuration:

- 0 through 3, when T640 routers are connected to a TX Matrix router in a routing matrix.
- 0 through 3, when T1600 routers are connected to a TX Matrix Plus router in a routing matrix.
- 0 through 7, when T1600 routers are connected to a TX Matrix Plus router with 3D SIBs in a routing matrix.
- 0, 2, 4, or 6, when T4000 routers are connected to a TX Matrix Plus router with 3D SIBs in a routing matrix.

local—(MX Series routers only) (Optional) Display the physical location of the chassis for the local Virtual Chassis member.

member *member-id*—(MX Series routers only) (Optional) Display the physical location of the chassis for the specified member of the Virtual Chassis configuration. Replace *member-id* with a value of 0 or 1.

node-device name—(QFabric systems only) (Optional) Display the physical location of the Node device.

scc—(TX Matrix routers only) (Optional) Display the physical location of the TX Matrix router (switch-card chassis).

sfc—(TX Matrix Plus routers only) (Optional) Display the physical location of the TX Matrix Plus router (or switch-fabric chassis).

Required Privilege Level view

Related Documentation • [Displaying Chassis Physical Locations for a Routing Matrix with a TX Matrix Plus Router](#)

List of Sample Output [show chassis location on page 415](#)
[show chassis location fpc \(TX Matrix Router\) on page 415](#)
[show chassis location interface by-slot \(TX Matrix Router\) on page 415](#)
[show chassis location fpc \(TX Matrix Plus Router\) on page 415](#)
[show chassis location interface by-slot \(TX Matrix Plus Router\) on page 415](#)
[show chassis location \(QFX Series and OCX Series\) on page 415](#)
[show chassis location \(QFabric Systems\) on page 415](#)

Output Fields [Table 11 on page 414](#) lists the output fields for the **show chassis location** command. Output fields are listed in the approximate order in which they appear.

Table 11: show chassis location Output Fields

| Field Name | Field Description |
|--------------|--|
| country-code | Country code information. |
| postal-code | Postal code information. |
| Building | Building information. |
| Floor | Floor information. |
| Global FPC | Global FPC number. The FPC slot number, when all FPC slots in the routing matrix are considered. The range of values is 0 through 31. On TX Matrix Plus router with 3D SIBs the value is 0 through 63. |
| LATA | Local access transport area information. |
| LCC | Line-card chassis number. On a TX Matrix router, the number of a particular T640 router connected to the TX Matrix router. On a TX Matrix Plus router, the number of a particular router connected to the TX Matrix Plus router. |

Table 11: show chassis location Output Fields (*continued*)

| Field Name | Field Description |
|------------------|---|
| Local FPC | Local FPC number. On a TX Matrix router, the FPC slot number on a particular T640 router. On a TX Matrix Plus router, the FPC slot number on a particular router. |

Sample Output

show chassis location

```
user@host> show chassis location
country-code: US
postal-code: 94404
Building: Building 2, Floor: 2
```

show chassis location fpc (TX Matrix Router)

```
user@host> show chassis location fpc
Global FPC    LCC    Local FPC
    17         2         1
    21         2         5
```

show chassis location interface by-slot (TX Matrix Router)

```
user@host> show chassis location interface by-slot fpc 1 lcc 1
Global FPC: 9
```

show chassis location fpc (TX Matrix Plus Router)

```
user@host> show chassis location fpc
Global FPC    LCC    Local FPC
    0         0         0
    1         0         1
```

show chassis location interface by-slot (TX Matrix Plus Router)

```
user@host> show chassis location interface by-slot fpc 2 lcc 1
Global FPC: 10
```

show chassis location (QFX Series and OCX Series)

```
user@switch> show chassis location
country-code: US
postal-code: 94404
Building: Building 2, Floor: 2
```

show chassis location (QFabric Systems)

```
user@switch> show chassis location interconnect-device interconnect1
country-code: US
postal-code: 94404
Building: Building 2, Floor: 2
```

show chassis routing-engine

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 [Syntax \(ACX Series Universal Access Routers\) on page 416](#)
 [Syntax \(EX Series Switches\) on page 416](#)
 [Syntax \(QFX Series\) on page 416](#)
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 [Syntax \(MX2010 3D Universal Edge Routers\) on page 416](#)
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 [Syntax \(MX104 3D Universal Edge Routers\) on page 417](#)
 [Syntax \(MX204, and MX10003 3D Universal Edge Routers\) on page 417](#)
 [Syntax \(PTX Series Packet Transport Routers\) on page 417](#)
 [Syntax \(T Series Routers\) on page 417](#)
 [Syntax \(TX Matrix Routers\) on page 417](#)
 [Syntax \(TX Matrix Plus Routers\) on page 417](#)

Syntax show chassis routing-engine
 <bios | *slot*>

Syntax (ACX Series Universal Access Routers) show chassis routing-engine

Syntax (EX Series Switches) show chassis routing-engine
 <*slot*>
 <satellite [slot-id *slot-id* |device-alias *alias-name*]>

Syntax (QFX Series) show chassis routing-engine
 <interconnect-device *name*>
 <node-device *name*>
 <*slot*>
 <*bios*>
 <*errors*>

Syntax (MX Series Routers) show chassis routing-engine
 <all-members>
 <bios | *slot*>
 <local>
 <member *member-id*>
 <satellite [slot-id *slot-id* |device-alias *alias-name*]>

Syntax (MX2010 3D Universal Edge Routers) show chassis routing-engine
 <bios | *slot*>

Syntax (MX2020 3D Universal Edge Routers) show chassis routing-engine
 <bios | *slot*>

| | |
|---|--|
| Syntax (MX104 3D Universal Edge Routers) | show chassis routing-engine |
| Syntax (MX204, and MX10003 3D Universal Edge Routers) | show chassis routing-engine <slot> <bios> <errors> |
| Syntax (PTX Series Packet Transport Routers) | show chassis routing-engine |
| Syntax (T Series Routers) | show chassis routing-engine <bios slot> |
| Syntax (TX Matrix Routers) | show chassis routing-engine <bios slot> <lcc number scc> |
| Syntax (TX Matrix Plus Routers) | show chassis routing-engine <bios slot> <lcc number sfc number> |
| Release Information | <p>Command introduced before Junos OS Release 7.4.</p> <p>Command introduced in Junos OS Release 9.0 for EX Series switches.</p> <p>sfc option introduced in Junos OS Release in 9.6 for the TX Matrix Plus router.</p> <p>Command introduced in Junos OS Release 11.1 for QFX Series.</p> <p>Command introduced in Junos OS Release 12.2 for ACX Series Universal Access Routers.</p> <p>Command introduced in Junos OS Release 12.3 for MX2010 and MX2020 3D Universal Edge Routers.</p> <p>Command introduced in Junos OS Release 13.2 for MX104 3D Universal Edge Routers.</p> <p>Command introduced in Junos OS Release 14.1X53-D20 for the OCX Series.</p> <p>satellite option introduced in Junos OS Release 14.2R3.</p> <p>Command introduced in Junos OS Release 17.2 for PTX10008 Routers.</p> <p>Command introduced in Junos OS Release 17.3 for MX10003 3D Universal Edge Routers.</p> <p>Command introduced in Junos OS Release 17.4 for MX204 3D Universal Edge Routers.</p> |
| Description | Display the status of the Routing Engine. |
| Options | <p>none—Display information about one or more Routing Engines. On a TX Matrix router, display information about all Routing Engines on the TX Matrix router and its attached T640 routers. On a TX Matrix Plus router, display information about all Routing Engines on the TX Matrix Plus router and its attached routers.</p> <p>all-members—(MX Series routers only) (Optional) Display Routing Engine information for all members of the Virtual Chassis configuration.</p> <p>bios—(Optional) Display the (BIOS) firmware version.</p> |

errors—(Optional) Display routing engine errors.

interconnect-device *number*—(QFabric systems only) (Optional) Display Routing Engine information for a specified Interconnect device.

lcc *number*—(TX Matrix and TX Matrix Plus routers only) (Optional) On a TX Matrix router, display Routing Engine information for a specified T640 router (line-card chassis) that is connected to the TX Matrix router. On a TX Matrix Plus router, display Routing Engine information for a specified router (line-card chassis) that is connected to the TX Matrix Plus router.

Replace *number* with the following values depending on the LCC configuration:

- 0 through 3, when T640 routers are connected to a TX Matrix router in a routing matrix.
- 0 through 3, when T1600 routers are connected to a TX Matrix Plus router in a routing matrix.
- 0 through 7, when T1600 routers are connected to a TX Matrix Plus router with 3D SIBs in a routing matrix.
- 0, 2, 4, or 6, when T4000 routers are connected to a TX Matrix Plus router with 3D SIBs in a routing matrix.

local—(MX Series routers only) (Optional) Display Routing Engine information for the local Virtual Chassis member.

member *member-id*—(MX Series routers only) (Optional) Display Routing Engine information for the specified member of the Virtual Chassis configuration. For an MX Series Virtual Chassis, replace *member-id* with a value of 0 or 1.

node-device *number*—(QFabric systems only) (Optional) Display Routing Engine information for a specified Node device.

satellite [*slot-id slot-id* | *device-alias alias-name*]—(Junos Fusion only) (Optional) Display Routing Engine information for the specified satellite device in a Junos Fusion, or for all satellite devices in the Junos Fusion if no satellite devices are specified.

scc—(TX Matrix routers only) (Optional) Display Routing Engine information for the TX Matrix router (switch-card chassis).

sfc *number*—(TX Matrix Plus routers only) (Optional) Display Routing Engine information for the TX Matrix Plus router (or switch-fabric chassis). Replace *number* with 0.

slot—(Systems with multiple Routing Engines) (Optional) Display information for an individual Routing Engine. Replace *slot* with 0 or 1. For QFX3500 switches, there is only one Routing Engine, so you do not need to specify the slot number.

Required Privilege Level view

- Related Documentation**
- [request chassis routing-engine master](#)
 - [Configuring Routing Engine Redundancy](#)
 - [Switching the Global Master and Backup Roles in a Virtual Chassis Configuration](#)

- List of Sample Output**
- [show chassis routing-engine \(M5 Router\) on page 422](#)
 - [show chassis routing-engine \(M10 Router\) on page 423](#)
 - [show chassis routing-engine \(M20 Router\) on page 423](#)
 - [show chassis routing-engine \(M40 Router\) on page 424](#)
 - [show chassis routing-engine \(M120 Router\) on page 424](#)
 - [show chassis routing-engine \(M160 Router\) on page 425](#)
 - [show chassis routing-engine \(MX104 Router\) on page 426](#)
 - [show chassis routing-engine \(MX240 Router\) on page 426](#)
 - [show chassis routing-engine \(MX480 Router\) on page 427](#)
 - [show chassis routing-engine \(MX960 Router\) on page 428](#)
 - [show chassis routing-engine \(MX2010 Router\) on page 430](#)
 - [show chassis routing-engine \(MX2020 Router\) on page 431](#)
 - [show chassis routing-engine \(MX10003 Router\) on page 431](#)
 - [show chassis routing-engine \(MX204 Router\) on page 432](#)
 - [show chassis routing-engine \(T320 Router\) on page 433](#)
 - [show chassis routing-engine \(T640 Router\) on page 434](#)
 - [show chassis routing-engine \(T1600 Router\) on page 434](#)
 - [show chassis routing-engine \(T4000 Router\) on page 435](#)
 - [show chassis routing-engine \(TX Matrix Router\) on page 436](#)
 - [show chassis routing-engine lcc \(TX Matrix Router\) on page 437](#)
 - [show chassis routing-engine bios \(TX Matrix Router\) on page 438](#)
 - [show chassis routing-engine \(TX Matrix Plus Router\) on page 438](#)
 - [show chassis routing-engine lcc \(TX Matrix Plus Router\) on page 439](#)
 - [show chassis routing-engine bios \(TX Matrix Plus Router\) on page 440](#)
 - [show chassis routing-engine \(QFX Series\) on page 440](#)
 - [show chassis routing-engine \(OCX Series\) on page 441](#)
 - [show chassis routing-engine interconnect-device \(QFabric Systems\) on page 441](#)
 - [show chassis routing-engine \(PTX Series Packet Transport Router\) on page 442](#)
 - [show chassis routing-engine \(EX9200 Switch\) on page 442](#)
 - [show chassis routing-engine \(ACX2000 Universal Access Router\) on page 443](#)
 - [show chassis routing-engine \(ACX1000 Universal Access Router\) on page 443](#)
 - [show chassis routing-engine \(Displaying the guest reboot reason on PTX5000, MX240, MX480, MX960< MX2010, and MX2020\) on page 444](#)

- Output Fields** [Table 12 on page 419](#) lists the output fields for the **show chassis routing-engine** command. Output fields are listed in the approximate order in which they appear.

Table 12: show chassis routing-engine Output Fields

| Field Name | Field Description |
|------------|---|
| Slot | (Systems with single and multiple Routing Engines) Slot number. |

Table 12: show chassis routing-engine Output Fields (*continued*)

| Field Name | Field Description |
|---|--|
| Current state | (Systems with multiple Routing Engines) Current state of the Routing Engine: Master , Backup , or Disabled . |
| Election priority | (Systems with multiple Routing Engines) Election priority for the Routing Engine: Master or Backup . |
| Temperature | Temperature of the air flowing past the Routing Engine. |
| CPU Temperature | Temperature of the CPU. |
| DRAM | Total DRAM available to the Routing Engine's processor. Starting with Junos OS Release 12.3R1, the DRAM field displays both available memory and installed memory. |
| Memory utilization | Percentage of Routing Engine memory being used. NOTE: For platforms running Junos OS with upgraded FreeBSD, the way memory utilization is calculated has changed. Starting in Junos OS Release 15.1R1, inactive memory is no longer included in the calculation for memory utilization. Inactive memory is now considered as free. That is, the value for used memory decreases and results in more memory to be available for other processes. For platforms that run Junos OS with upgraded FreeBSD, see <i>Release Information for Junos OS with Upgraded FreeBSD</i> . |
| CPU utilization | Information about the Routing Engine's CPU utilization: <ul style="list-style-type: none"> • User—Percentage of CPU time being used by user processes. • Background—Percentage of CPU time being used by background processes. • Kernel—Percentage of CPU time being used by kernel processes. • Interrupt—Percentage of CPU time being used by interrupts. • Idle—Percentage of CPU time that is idle. |
| 5 sec CPU Utilization | Information about the Routing Engine's CPU utilization in the past 5 seconds: <ul style="list-style-type: none"> • User—Percentage of CPU time being used by user processes. • Background—Percentage of CPU time being used by background processes. • Kernel—Percentage of CPU time being used by kernel processes. • Interrupt—Percentage of CPU time being used by interrupts. • Idle—Percentage of CPU time that is idle. |
| NOTE: Supported only on MX240, MX480, MX204, MX960, MX2010, MX10003, and MX2020. | |
| 1 min CPU Utilization | Information about the Routing Engine's CPU utilization in the past 1 minute: <ul style="list-style-type: none"> • User—Percentage of CPU time being used by user processes. • Background—Percentage of CPU time being used by background processes. • Kernel—Percentage of CPU time being used by kernel processes. • Interrupt—Percentage of CPU time being used by interrupts. • Idle—Percentage of CPU time that is idle. |
| NOTE: Supported only on MX240, MX480, MX204, MX960, MX2010, MX10003, and MX2020. | |

Table 12: show chassis routing-engine Output Fields (*continued*)

| Field Name | Field Description |
|---|--|
| 5 min CPU Utilization NOTE: Supported only on MX240, MX480, MX204, MX960, MX2010, MX10003, and MX2020. | Information about the Routing Engine's CPU utilization in the past 5 minutes: <ul style="list-style-type: none"> • User—Percentage of CPU time being used by user processes. • Background—Percentage of CPU time being used by background processes. • Kernel—Percentage of CPU time being used by kernel processes. • Interrupt—Percentage of CPU time being used by interrupts. • Idle—Percentage of CPU time that is idle. |
| 15 min CPU Utilization NOTE: Supported only on MX240, MX480, MX960, MX2010, and MX2020. | Information about the Routing Engine's CPU utilization in the past 15 minutes: <ul style="list-style-type: none"> • User—Percentage of CPU time being used by user processes. • Background—Percentage of CPU time being used by background processes. • Kernel—Percentage of CPU time being used by kernel processes. • Interrupt—Percentage of CPU time being used by interrupts. • Idle—Percentage of CPU time that is idle. |
| Model | Routing Engine model number. |
| Serial ID | (Systems with multiple Routing Engines) Identification number of the Routing Engine in this slot. |
| Start time | Time at which the Routing Engine started running. |
| Uptime | How long the Routing Engine has been running. |
| Routing Engine BIOS Version | BIOS version being run by the Routing Engine. |

Table 12: show chassis routing-engine Output Fields (*continued*)

| Field Name | Field Description |
|--------------------|--|
| Last reboot reason | <p>Reason for last reboot, including:</p> <ul style="list-style-type: none"> power cycle/failure—Halt of the Routing Engine using the halt command, powering down using the power button on the chassis or any other method (such as removal of the control board or Routing Engine), and then powering back the Routing Engine. A halt of the operating system also occurs if you enter the request system halt command. You can enter this command to halt the system operations on the chassis or specific Routing Engines. To restart the software, press any key on the keyboard. watchdog—Reboot due to a hardware watchdog. A watchdog is a hardware monitoring process that examines the health and performance of the router to enable the device to recover from failures. A watchdog checks for problems at certain intervals, and reboots the routing engine if a problem is encountered. reset-button reset—(Not available on the EX Series switch) Reboot due to pressing of the reset button on the Routing Engine. power-button hard power off—Reboot due to pressing of the power button on the chassis. A powering down of the software also occurs if you enter the request system power-off command. You can enter this command to power down the chassis or specific Routing Engines; you can then restart the software. misc hardware reason—Reboot due to miscellaneous hardware reasons. thermal shutdown—Reboot due to the router or switch reaching a critical temperature at which point it is unsafe to continue operations. hard disk failure—Reboot due to a hard disk or solid-state drive (SSD) failure. reset from debugger—Reboot due to reset from the debugger. chassis control reset—Restart the chassis process that manages PICs, FPCs, and other hardware components. The chassis control module that runs the Routing Engine performs management and monitoring functions, and it provides a single access point for operational and maintenance functions. A reset of the chassis management process occurs when you enter the restart chassis-control command. bios auto recovery reset—Reboot due to a BIOS auto-recovery reset. could not be determined—Reboot due to an undetermined reason. Router rebooted after a normal shutdown—Reboot due to a normal shutdown. This reason is displayed if the Routing Engine is powered down by pushing and holding the online/offline button on the Routing Engine faceplate for 30 seconds, and then powered back. A reboot of the software also occurs if you enter the request system reboot command. You can enter this command to reboot the chassis or specific Routing Engines. Hypervisor reboot—When both Linux host and Junos OS is rebooted using the request vmhost reboot command. VJUNOS Reboot—When Junos OS is rebooted using the request system reboot command. |
| Load averages | Routing Engine load averages for the last 1, 5, and 15 minutes. |

Sample Output

show chassis routing-engine (M5 Router)

```

user@host> show chassis routing-engine
Routing Engine status:
  Temperature           25 degrees C / 77 degrees F
  DRAM                  768 MB
  Memory utilization     21 percent
  CPU utilization:

```

```

User                0 percent
Background          0 percent
Kernel              0 percent
Interrupt            0 percent
Idle                100 percent
Model               RE-2.0
Serial ID            31000007349bf701
Start time           2003-12-04 09:42:17 PST
Uptime               26 days, 1 hour, 12 minutes, 27 seconds
Last reboot reason   Router rebooted after a normal shutdown
Load averages:       1 minute   5 minute   15 minute
                     0.00        0.01        0.00

```

show chassis routing-engine (M10 Router)

```

user@host> show chassis routing-engine
Routing Engine status:
  Temperature        25 degrees C / 77 degrees F
  DRAM                768 MB
  Memory utilization  21 percent
  CPU utilization:
    User              0 percent
    Background        0 percent
    Kernel             0 percent
    Interrupt          0 percent
    Idle              100 percent
  Model              RE-2.0
  Serial ID           31000007349bf701
  Start time           2003-12-04 09:42:17 PST
  Uptime               26 days, 1 hour, 12 minutes, 27 seconds
  Last reboot reason   Router rebooted after a normal shutdown
  Load averages:     1 minute   5 minute   15 minute
                     0.00        0.01        0.00

```

show chassis routing-engine (M20 Router)

```

user@host> show chassis routing-engine
Routing Engine status:
  Slot 0:
    Current state      Master
    Election priority   Master (default)
    Temperature        29 degrees C / 84 degrees F
    DRAM                768 MB
    Memory utilization  20 percent
    CPU utilization:
      User              1 percent
      Background        0 percent
      Kernel             2 percent
      Interrupt          0 percent
      Idle              97 percent
    Model              RE-2.0
    Serial ID           58000007348d9a01
    Start time           2003-12-30 07:05:47 PST
    Uptime               3 hours, 41 minutes, 14 seconds
    Last reboot reason   Router rebooted after a normal shutdown
    Load averages:     1 minute   5 minute   15 minute
                     0.00        0.02        0.00
  Routing Engine status:
    Slot 1:
      Current state      Backup

```

| | |
|--------------------|---|
| Election priority | Backup (default) |
| Temperature | 29 degrees C / 84 degrees F |
| DRAM | 768 MB |
| Memory utilization | 0 percent |
| CPU utilization: | |
| User | 0 percent |
| Background | 0 percent |
| Kernel | 1 percent |
| Interrupt | 0 percent |
| Idle | 99 percent |
| Model | RE-2.0 |
| Serial ID | d800000734745701 |
| Start time | 2003-06-17 16:37:33 PDT |
| Uptime | 195 days, 18 hours, 47 minutes, 9 seconds |
| Last reboot reason | Router rebooted after a normal shutdown |

show chassis routing-engine (M40 Router)

```
user@host> show chassis routing-engine
Routing Engine status:
  Temperature          25 degrees C / 77 degrees F
  DRAM                 768 MB
  Memory utilization   21 percent
  CPU utilization:
    User               0 percent
    Background         0 percent
    Kernel             0 percent
    Interrupt          0 percent
    Idle               100 percent
  Model                RE-2.0
  Serial ID            31000007349bf701
  Start time           2003-12-04 09:42:17 PST
  Uptime               26 days, 1 hour, 12 minutes, 27 seconds
  Last reboot reason   Router rebooted after a normal shutdown
  Load averages:      1 minute   5 minute   15 minute
                      0.00       0.01      0.00
```

show chassis routing-engine (M120 Router)

```
user@host> show chassis routing-engine
Routing Engine status:
Slot 0:
  Current state        Master
  Election priority    Master (default)
  Temperature          46 degrees C / 114 degrees F
  CPU temperature      44 degrees C / 111 degrees F
  DRAM                 2048 MB
  Memory utilization   18 percent
  CPU utilization:
    User               0 percent
    Background         0 percent
    Kernel             5 percent
    Interrupt          0 percent
    Idle               95 percent
  Model                RE-A-1000
  Serial ID            1000621154
  Start time           2006-10-31 17:10:05 PST
  Uptime               14 minutes, 31 seconds
  Last reboot reason   Router rebooted after a normal shutdown
  Load averages:      1 minute   5 minute   15 minute
```



```

                                0.02      0.07      0.07
Routing Engine status:
Slot 1:
  Current state                Backup
  Election priority            Backup (default)
  Temperature                  45 degrees C / 113 degrees F
  CPU temperature              42 degrees C / 107 degrees F
  DRAM                        2048 MB
  Memory utilization           15 percent
  CPU utilization:
    User                      0 percent
    Background                0 percent
    Kernel                    0 percent
    Interrupt                  0 percent
    Idle                      100 percent
  Model                       RE-A-1000
  Serial ID                   1000621151
  Start time                   2006-10-31 17:10:04 PST
  Uptime                       14 minutes, 30 seconds
  Last reboot reason           Router rebooted after a normal shutdown

```

show chassis routing-engine (M160 Router)

```

user@host> show chassis routing-engine
Routing Engine status:
Slot 0:
  Current state                Master
  Election priority            Master (default)
  Temperature                  43 degrees C / 109 degrees F
  DRAM                        2048 MB
  Memory utilization           11 percent
  CPU utilization:
    User                      1 percent
    Background                0 percent
    Kernel                    2 percent
    Interrupt                  0 percent
    Idle                      97 percent
  Model                       RE-3.0
  Serial ID                   210865700403
  Start time                   2003-12-23 12:25:55 PST
  Uptime                       6 days, 22 hours, 33 minutes, 24 seconds
  Last reboot reason           Router rebooted after a normal shutdown
  Load averages:              1 minute   5 minute   15 minute
                                0.24      0.13      0.04

Routing Engine status:
Slot 1:
  Current state                Backup
  Election priority            Backup (default)
  Temperature                  40 degrees C / 104 degrees F
  DRAM                        2048 MB
  Memory utilization           9 percent
  CPU utilization:
    User                      0 percent
    Background                0 percent
    Kernel                    0 percent
    Interrupt                  0 percent
    Idle                      100 percent
  Model                       RE-3.0
  Serial ID                   210865700332
  Start time                   2003-12-23 12:25:55 PST

```

| | |
|--------------------|--|
| Uptime | 6 days, 22 hours, 33 minutes, 21 seconds |
| Last reboot reason | Router rebooted after a normal shutdown |

show chassis routing-engine (MX104 Router)

```
user@host> show chassis routing-engine
Routing Engine status:
Slot 0:
  Current state           Master
  Election priority       Master (default)
  Temperature             32 degrees C / 89 degrees F
  CPU temperature         42 degrees C / 107 degrees F
  DRAM                    3840 MB (3840 MB installed)
  Memory utilization      18 percent
  CPU utilization:
    User                  0 percent
    Background            0 percent
    Kernel                3 percent
    Interrupt             2 percent
    Idle                  94 percent
  Model                  RE-MX-104
  Serial ID              CAAR5925
  Start time             2013-06-05 13:17:08 IST
  Uptime                 1 hour, 15 minutes, 8 seconds
  Last reboot reason      0x200:normal shutdown
  Load averages:         1 minute  5 minute  15 minute
                        0.87      0.90      0.41

Routing Engine status:
Slot 1:
  Current state           Backup
  Election priority       Backup (default)
  Temperature             32 degrees C / 89 degrees F
  CPU temperature         38 degrees C / 100 degrees F
  DRAM                    3840 MB (3840 MB installed)
  Memory utilization      13 percent
  CPU utilization:
    User                  0 percent
    Background            0 percent
    Kernel                1 percent
    Interrupt             2 percent
    Idle                  97 percent
  Model                  RE-MX-104
  Serial ID              CAAM6369
  Start time             2013-06-05 13:07:37 IST
  Uptime                 1 hour, 24 minutes, 34 seconds
  Last reboot reason      0x200:normal shutdown
  Load averages:         1 minute  5 minute  15 minute
                        0.19      0.15      0.06
```

show chassis routing-engine (MX240 Router)

```
user@host> show chassis routing-engine
Routing Engine status:
Slot 0:
  Current state           Master
  Election priority       Master (default)
  Temperature             36 degrees C / 96 degrees F
  CPU temperature         35 degrees C / 95 degrees F
  DRAM                    3314 MB (8192 MB installed)
  Memory utilization      37 percent
```

```

5 sec CPU utilization:
  User          0 percent
  Background    0 percent
  Kernel        1 percent
  Interrupt     0 percent
  Idle          99 percent
1 min CPU utilization:
  User          0 percent
  Background    0 percent
  Kernel        1 percent
  Interrupt     0 percent
  Idle          99 percent
5 min CPU utilization:
  User          0 percent
  Background    0 percent
  Kernel        1 percent
  Interrupt     0 percent
  Idle          99 percent
15 min CPU utilization:
  User          0 percent
  Background    0 percent
  Kernel        1 percent
  Interrupt     0 percent
  Idle          99 percent
Model          RE-S-1800x4
Serial ID      9009074155
Start time     2014-10-13 00:35:41 PDT
Uptime         98 days, 2 hours, 6 minutes, 35 seconds
Last reboot reason Router rebooted after a normal shutdown.
Load averages: 1 minute 5 minute 15 minute
                  0.12      0.12      0.13

Routing Engine status:
Slot 1:
  Current state      Present

```

show chassis routing-engine (MX480 Router)

```

user@host> show chassis routing-engine
Routing Engine status:
Slot 0:
  Current state      Backup
  Election priority  Master (default)
  Temperature        30 degrees C / 86 degrees F
  CPU temperature    32 degrees C / 89 degrees F
  DRAM               3314 MB (8192 MB installed)
  Memory utilization  51 percent
  5 sec CPU utilization:
    User          0 percent
    Background    0 percent
    Kernel        0 percent
    Interrupt     0 percent
    Idle          100 percent
  1 min CPU utilization:
    User          0 percent
    Background    0 percent
    Kernel        0 percent
    Interrupt     0 percent
    Idle          0 percent
  5 min CPU utilization:
    User          0 percent
    Background    0 percent

```

```

Kernel                                0 percent
Interrupt                             0 percent
Idle                                  0 percent
15 min CPU utilization:
  User                                0 percent
  Background                           0 percent
  Kernel                               0 percent
  Interrupt                             0 percent
  Idle                                  0 percent
Model                                  RE-S-1800x4
Serial ID                              9009079817
Start time                             2015-01-19 01:45:58 PST
Uptime                                 7 minutes, 23 seconds
Last reboot reason                      Router rebooted after a normal shutdown.
Load averages:                         1 minute   5 minute  15 minute
                                         0.16      0.16    0.09

Routing Engine status:
Slot 1:
  Current state                         Master
  Election priority                     Backup (default)
  Temperature                           31 degrees C / 87 degrees F
  CPU temperature                       32 degrees C / 89 degrees F
  DRAM                                  8144 MB (8192 MB installed)
  Memory utilization                     23 percent
  5 sec CPU utilization:
    User                                0 percent
    Background                           0 percent
    Kernel                               1 percent
    Interrupt                             0 percent
    Idle                                  99 percent
  1 min CPU utilization:
    User                                0 percent
    Background                           0 percent
    Kernel                               1 percent
    Interrupt                             0 percent
    Idle                                  98 percent
  5 min CPU utilization:
    User                                0 percent
    Background                           0 percent
    Kernel                               1 percent
    Interrupt                             0 percent
    Idle                                  98 percent
  15 min CPU utilization:
    User                                0 percent
    Background                           0 percent
    Kernel                               1 percent
    Interrupt                             0 percent
    Idle                                  98 percent
Model                                  RE-S-1800x4
Serial ID                              9009079838
Start time                             2015-01-09 10:52:20 PST
Uptime                                 9 days, 15 hours, 1 minute, 4 seconds
Last reboot reason                      Router rebooted after a normal shutdown.
Load averages:                         1 minute   5 minute  15 minute
                                         0.10      0.16    0.16

```

show chassis routing-engine (MX960 Router)

```

user@host> show chassis routing-engine
Routing Engine status:
Slot 0:

```

```

Current state                Master
Election priority            Master (default)
Temperature                  37 degrees C / 98 degrees F
CPU temperature              34 degrees C / 93 degrees F
DRAM                        3313 MB (16384 MB installed)
Memory utilization           31 percent
5 sec CPU utilization:
  User                       0 percent
  Background                 0 percent
  Kernel                     3 percent
  Interrupt                  1 percent
  Idle                       96 percent
1 min CPU utilization:
  User                       0 percent
  Background                 0 percent
  Kernel                     4 percent
  Interrupt                  1 percent
  Idle                       96 percent
5 min CPU utilization:
  User                       0 percent
  Background                 0 percent
  Kernel                     4 percent
  Interrupt                  1 percent
  Idle                       95 percent
15 min CPU utilization:
  User                       0 percent
  Background                 0 percent
  Kernel                     4 percent
  Interrupt                  1 percent
  Idle                       95 percent
Model                       RE-S-1800x4
Serial ID                   9013043785
Start time                  2015-01-12 23:37:53 PST
Uptime                      6 days, 2 hours, 17 minutes, 3 seconds
Last reboot reason          Router rebooted after a normal shutdown.
Load averages:              1 minute  5 minute  15 minute
                             0.00      0.02      0.00

Routing Engine status:
Slot 1:
  Current state              Backup
  Election priority          Backup (default)
  Temperature                 37 degrees C / 98 degrees F
  CPU temperature             34 degrees C / 93 degrees F
  DRAM                       3313 MB (16384 MB installed)
  Memory utilization          26 percent
  5 sec CPU utilization:
    User                     0 percent
    Background               0 percent
    Kernel                   0 percent
    Interrupt                0 percent
    Idle                     99 percent
  1 min CPU utilization:
    User                     0 percent
    Background               0 percent
    Kernel                   0 percent
    Interrupt                0 percent
    Idle                     0 percent
  5 min CPU utilization:
    User                     0 percent
    Background               0 percent
    Kernel                   0 percent

```

```

Interrupt          0 percent
Idle               0 percent
15 min CPU utilization:
User              0 percent
Background        0 percent
Kernel            0 percent
Interrupt         0 percent
Idle              0 percent
Model             RE-S-1800x4
Serial ID         9013037303
Start time        2015-01-12 23:25:29 PST
Uptime            6 days, 2 hours, 29 minutes, 21 seconds
Last reboot reason Router rebooted after a normal shutdown.
Load averages:    1 minute   5 minute   15 minute
                  0.00      0.00      0.00

```

show chassis routing-engine (MX2010 Router)

```

user@host> show chassis routing-engine
Routing Engine status:
Slot 0:
  Current state          Master
  Election priority      Master (default)
  Temperature            41 degrees C / 105 degrees F
  CPU temperature        38 degrees C / 100 degrees F
  DRAM                   3313 MB (16384 MB installed)
  Memory utilization      37 percent
  5 sec CPU utilization:
    User                 0 percent
    Background           0 percent
    Kernel                2 percent
    Interrupt            2 percent
    Idle                 96 percent
  1 min CPU utilization:
    User                 0 percent
    Background           0 percent
    Kernel                2 percent
    Interrupt            2 percent
    Idle                 97 percent
  5 min CPU utilization:
    User                 0 percent
    Background           0 percent
    Kernel                2 percent
    Interrupt            2 percent
    Idle                 97 percent
  15 min CPU utilization:
    User                 0 percent
    Background           0 percent
    Kernel                2 percent
    Interrupt            2 percent
    Idle                 97 percent
  Model                 RE-S-1800x4
  Serial ID             9009146890
  Start time            2015-01-18 21:35:12 PST
  Uptime                4 hours, 21 minutes, 34 seconds
  Last reboot reason    Router rebooted after a normal shutdown.
  Load averages:       1 minute   5 minute   15 minute
                      0.11      0.14      0.14

```

show chassis routing-engine (MX2020 Router)

```

user@host> show chassis routing-engine
Routing Engine status:
Slot 0:
  Current state           Master
  Election priority       Master (default)
  Temperature             2 degrees C / 35 degrees F
  CPU temperature         32 degrees C / 89 degrees F
  DRAM                    32735 MB (32768 MB installed)
  Memory utilization      10 percent
  5 sec CPU utilization:
    User                  0 percent
    Background            0 percent
    Kernel                1 percent
    Interrupt             1 percent
    Idle                  98 percent
  1 min CPU utilization:
    User                  0 percent
    Background            0 percent
    Kernel                1 percent
    Interrupt             1 percent
    Idle                  99 percent
  5 min CPU utilization:
    User                  0 percent
    Background            0 percent
    Kernel                1 percent
    Interrupt             1 percent
    Idle                  99 percent
  15 min CPU utilization:
    User                  0 percent
    Background            0 percent
    Kernel                1 percent
    Interrupt             1 percent
    Idle                  99 percent
  Model                   RE-S-2X00x8
  Serial ID               CADN0309
  Start time              2015-01-08 16:31:15 PST
  Uptime                  4 days, 22 hours, 59 minutes, 3 seconds
  Last reboot reason      Router rebooted after a normal shutdown.
  Load averages:         1 minute   5 minute   15 minute
                        0.39       0.41       0.34

```

show chassis routing-engine (MX10003 Router)

```

user@host> show chassis routing-engine
Routing Engine status:
Slot 0:
  Current state           Master
  Election priority       Master (default)
  Temperature             43 degrees C / 109 degrees F
  CPU temperature         40 degrees C / 104 degrees F
  DRAM                    49112 MB (49152 MB installed)
  Memory utilization      4 percent
  5 sec CPU utilization:
    User                  0 percent
    Background            0 percent
    Kernel                2 percent
    Interrupt             0 percent

```

```

Idle 98 percent
1 min CPU utilization:
User 0 percent
Background 0 percent
Kernel 1 percent
Interrupt 0 percent
Idle 98 percent
5 min CPU utilization:
User 0 percent
Background 0 percent
Kernel 1 percent
Interrupt 0 percent
Idle 98 percent
15 min CPU utilization:
User 0 percent
Background 0 percent
Kernel 1 percent
Interrupt 0 percent
Idle 96 percent
Model RE-S-2X00x6
Start time 2017-08-08 23:13:16 PDT
Uptime 53 minutes, 38 seconds
Last reboot reason 0x1:power cycle/failure
Load averages: 1 minute 5 minute 15 minute
                0.23      0.28      0.25

Routing Engine status:
Slot 1:
Current state Backup
Election priority Backup (default)
Temperature 38 degrees C / 100 degrees F
CPU temperature 39 degrees C / 102 degrees F
DRAM 49112 MB (49152 MB installed)
Memory utilization 4 percent
5 sec CPU utilization:
User 0 percent
Background 0 percent
Kernel 1 percent
Interrupt 0 percent
Idle 99 percent
Model RE-S-2X00x6
Start time 2017-08-08 23:13:18 PDT
Uptime 53 minutes, 25 seconds
Last reboot reason 0x1:power cycle/failure
Load averages: 1 minute 5 minute 15 minute
                0.21      0.19      0.17

```

show chassis routing-engine (MX204 Router)

```
user@host> show chassis routing-engine
```

```

Routing Engine status:
Temperature 52 degrees C / 125 degrees F
CPU temperature 52 degrees C / 125 degrees F
DRAM 16341 MB (16384 MB installed)
Memory utilization 11 percent
5 sec CPU utilization:
User 0 percent
Background 0 percent
Kernel 0 percent
Interrupt 0 percent
Idle 100 percent

```



```

1 min CPU utilization:
  User          0 percent
  Background    0 percent
  Kernel        0 percent
  Interrupt     0 percent
  Idle          100 percent
5 min CPU utilization:
  User          0 percent
  Background    0 percent
  Kernel        0 percent
  Interrupt     0 percent
  Idle          100 percent
15 min CPU utilization:
  User          0 percent
  Background    0 percent
  Kernel        0 percent
  Interrupt     0 percent
  Idle          100 percent
Model          RE-S-2X00x6
Start time     2017-11-04 00:30:31 PDT
Uptime        4 days, 7 hours, 17 minutes, 3 seconds
Last reboot reason 0x1:power cycle/failure
Load averages: 1 minute   5 minute   15 minute
                  0.17       0.12       0.13

```

show chassis routing-engine (T320 Router)

```

user@host> show chassis routing-engine
Slot 0:
  Current state      Master
  Election priority  Master (default)
  Temperature        51 degrees C / 123 degrees F
  CPU temperature    55 degrees C / 131 degrees F
  DRAM               3584 MB
  Memory utilization 11 percent
  CPU utilization:
    User             0 percent
    Background       0 percent
    Kernel           2 percent
    Interrupt        0 percent
    Idle             97 percent
  Model              RE-A-2000
  Serial ID          9009010618
  Start time         2012-10-10 01:24:05 PDT
  Uptime             5 days, 10 hours, 49 minutes, 23 seconds
  Last reboot reason 0x1:power cycle/failure
  Load averages:    1 minute   5 minute   15 minute
                      0.00       0.05       0.04

Routing Engine status:
Slot 1:
  Current state      Backup
  Election priority  Backup (default)
  Temperature        45 degrees C / 113 degrees F
  CPU temperature    48 degrees C / 118 degrees F
  DRAM               3584 MB
  Memory utilization 9 percent
  CPU utilization:
    User             0 percent
    Background       0 percent
    Kernel           0 percent
    Interrupt        0 percent

```

```
Idle 100 percent
Model RE-A-2000
Serial ID 9009003642
Start time 2012-10-10 01:24:04 PDT
Uptime 5 days, 10 hours, 49 minutes, 28 seconds
Last reboot reason 0x1:power cycle/failure
```

show chassis routing-engine (T640 Router)

```
user@host> show chassis routing-engine
Routing Engine status:
Slot 0:
  Current state Master
  Election priority Master (default)
  Temperature 50 degrees C / 122 degrees F
  CPU temperature 58 degrees C / 136 degrees F
  DRAM 3584 MB
  Memory utilization 14 percent
  CPU utilization:
    User 1 percent
    Background 0 percent
    Kernel 4 percent
    Interrupt 1 percent
    Idle 95 percent
  Model RE-A-2000
  Serial ID 1000686556
  Start time 2012-10-10 01:24:02 PDT
  Uptime 5 days, 10 hours, 50 minutes, 27 seconds
  Last reboot reason 0x1:power cycle/failure
  Load averages: 1 minute 5 minute 15 minute
                  1.24 0.33 0.12
Routing Engine status:
Slot 1:
  Current state Backup
  Election priority Backup (default)
  Temperature 44 degrees C / 111 degrees F
  CPU temperature 49 degrees C / 120 degrees F
  DRAM 3584 MB
  Memory utilization 12 percent
  CPU utilization:
    User 0 percent
    Background 0 percent
    Kernel 0 percent
    Interrupt 1 percent
    Idle 99 percent
  Model RE-A-2000
  Serial ID 1000702739
  Start time 2012-10-10 01:24:02 PDT
  Uptime 5 days, 10 hours, 50 minutes, 26 seconds
  Last reboot reason 0x1:power cycle/failure
```

show chassis routing-engine (T1600 Router)

```
user@host> show chassis routing-engine
Routing Engine status:
Slot 0:
  Current state Master
  Election priority Master (default)
  Temperature 48 degrees C / 118 degrees F
  CPU temperature 58 degrees C / 136 degrees F
```

```

DRAM                                3584 MB
Memory utilization                    13 percent
CPU utilization:
  User                               0 percent
  Background                         0 percent
  Kernel                             3 percent
  Interrupt                           1 percent
  Idle                               96 percent
Model                                RE-A-2000
Serial ID                            1000704521
Start time                           2012-10-10 01:23:41 PDT
Uptime                               5 days, 10 hours, 46 minutes, 56 seconds
Last reboot reason                    0x1:power cycle/failure
Load averages:                       1 minute   5 minute   15 minute
                                      0.05       0.03       0.01

Routing Engine status:
Slot 1:
  Current state                       Backup
  Election priority                   Backup (default)
  Temperature                         44 degrees C / 111 degrees F
  CPU temperature                     48 degrees C / 118 degrees F
  DRAM                                3584 MB
  Memory utilization                  12 percent
  CPU utilization:
    User                             0 percent
    Background                       0 percent
    Kernel                           0 percent
    Interrupt                         0 percent
    Idle                             100 percent
  Model                               RE-A-2000
  Serial ID                           9009006579
  Start time                          2012-10-10 01:23:42 PDT
  Uptime                              5 days, 10 hours, 46 minutes, 54 seconds
  Last reboot reason                  0x1:power cycle/failure

```

show chassis routing-engine (T4000 Router)

```

user@host> show chassis routing-engine
Routing Engine status:
Slot 0:
  Current state                       Master
  Election priority                   Master (default)
  Temperature                         33 degrees C / 91 degrees F
  CPU temperature                     50 degrees C / 122 degrees F
  DRAM                                8960 MB
  Memory utilization                  18 percent
  CPU utilization:
    User                             0 percent
    Background                       0 percent
    Kernel                           4 percent
    Interrupt                         1 percent
    Idle                             95 percent
  Model                               RE-DUO-1800
  Serial ID                           P737F-002248
  Start time                          2012-02-09 22:49:53 PST
  Uptime                              2 hours, 21 minutes, 35 seconds
  Last reboot reason                  Router rebooted after a normal shutdown.
  Load averages:                     1 minute   5 minute   15 minute
                                      0.00       0.04       0.00

Routing Engine status:
Slot 1:

```

| | |
|--------------------|--|
| Current state | Backup |
| Election priority | Backup (default) |
| Temperature | 32 degrees C / 89 degrees F |
| CPU temperature | 46 degrees C / 114 degrees F |
| DRAM | 8960 MB |
| Memory utilization | 24 percent |
| CPU utilization: | |
| User | 0 percent |
| Background | 0 percent |
| Kernel | 0 percent |
| Interrupt | 0 percent |
| Idle | 99 percent |
| Model | RE-DUO-1800 |
| Serial ID | P737F-002653 |
| Start time | 2012-02-08 20:12:51 PST |
| Uptime | 1 day, 4 hours, 58 minutes, 28 seconds |
| Last reboot reason | Router rebooted after a normal shutdown. |

show chassis routing-engine (TX Matrix Router)

```
user@host> show chassis routing-engine
scc-re0:
```

Routing Engine status:

Slot 0:

| | |
|--------------------|--|
| Current state | Master |
| Election priority | Master (default) |
| Temperature | 34 degrees C / 93 degrees F |
| CPU temperature | 33 degrees C / 91 degrees F |
| DRAM | 2048 MB |
| Memory utilization | 12 percent |
| CPU utilization: | |
| User | 0 percent |
| Background | 0 percent |
| Kernel | 2 percent |
| Interrupt | 0 percent |
| Idle | 98 percent |
| Model | RE-4.0 |
| Serial ID | P11123900153 |
| Start time | 2004-08-05 18:42:05 PDT |
| Uptime | 9 days, 22 hours, 49 minutes, 50 seconds |
| Last reboot reason | Router rebooted after a normal shutdown |
| Load averages: | 1 minute 5 minute 15 minute |
| | 0.00 0.08 0.07 |

lcc0-re0:

Routing Engine status:

Slot 0:

| | |
|--------------------|-----------------------------|
| Current state | Master |
| Election priority | Master (default) |
| Temperature | 33 degrees C / 91 degrees F |
| CPU temperature | 30 degrees C / 86 degrees F |
| DRAM | 2048 MB |
| Memory utilization | 12 percent |
| CPU utilization: | |
| User | 0 percent |
| Background | 0 percent |
| Kernel | 1 percent |
| Interrupt | 0 percent |
| Idle | 98 percent |

```

Model RE-3.0
Serial ID 210865700363
Start time 2004-08-05 18:42:05 PDT
Uptime 9 days, 22 hours, 48 minutes, 20 seconds
Last reboot reason Router rebooted after a normal shutdown
Load averages: 1 minute 5 minute 15 minute
                0.00      0.02      0.00

```

lcc2-re0:

Routing Engine status:

Slot 0:

```

Current state Master
Election priority Master (default)
Temperature 34 degrees C / 93 degrees F
CPU temperature 35 degrees C / 95 degrees F
DRAM 2048 MB
Memory utilization 12 percent
CPU utilization:
  User 0 percent
  Background 0 percent
  Kernel 2 percent
  Interrupt 0 percent
  Idle 98 percent
Model RE-4.0
Serial ID P11123900126
Start time 2004-08-05 18:42:05 PDT
Uptime 9 days, 22 hours, 49 minutes, 4 seconds
Last reboot reason Router rebooted after a normal shutdown
Load averages: 1 minute 5 minute 15 minute
                0.01      0.01      0.0

```

show chassis routing-engine lcc (TX Matrix Router)

```
user@host> show chassis routing-engine 0 lcc 0
```

lcc0-re0:

Routing Engine status:

Slot 0:

```

Current state Master
Election priority Master (default)
Temperature 33 degrees C / 91 degrees F
CPU temperature 30 degrees C / 86 degrees F
DRAM 2048 MB
Memory utilization 12 percent
CPU utilization:
  User 0 percent
  Background 0 percent
  Kernel 1 percent
  Interrupt 0 percent
  Idle 98 percent
Model RE-3.0
Serial ID 210865700363
Start time 2004-08-05 18:42:05 PDT
Uptime 7 days, 22 hours, 49 minutes, 6 seconds
Last reboot reason Router rebooted after a normal shutdown
Load averages: 1 minute 5 minute 15 minute
                0.00      0.00      0.00

```

show chassis routing-engine bios (TX Matrix Router)

```
user@host> show chassis routing-engine bios
scc-re0:
```

```
-----
Routing Engine BIOS Version: V1.0.0
```

```
1cc0-re0:
```

```
-----
Routing Engine BIOS Version: V1.0.17
```

```
1cc2-re0:
```

```
-----
Routing Engine BIOS Version: V1.0.0
```

show chassis routing-engine (TX Matrix Plus Router)

```
user@host> show chassis routing-engine
sfc0-re0:
```

```
-----
Routing Engine status:
```

```
Slot 0:
```

| | |
|--------------------|--|
| Current state | Master |
| Election priority | Master (default) |
| Temperature | 27 degrees C / 80 degrees F |
| CPU temperature | 42 degrees C / 107 degrees F |
| DRAM | 3327 MB |
| Memory utilization | 12 percent |
| CPU utilization: | |
| User | 0 percent |
| Background | 0 percent |
| Kernel | 2 percent |
| Interrupt | 0 percent |
| Idle | 98 percent |
| Model | RE-TXP-SFC |
| Serial ID | 737A-1024 |
| Start time | 2009-05-11 17:39:49 PDT |
| Uptime | 3 hours, 45 minutes, 25 seconds |
| Last reboot reason | Router rebooted after a normal shutdown. |
| Load averages: | 1 minute 5 minute 15 minute |
| | 0.00 0.00 0.00 |

```
Routing Engine status:
```

```
Slot 1:
```

| | |
|--------------------|---------------------------------|
| Current state | Backup |
| Election priority | Backup (default) |
| Temperature | 29 degrees C / 84 degrees F |
| CPU temperature | 43 degrees C / 109 degrees F |
| DRAM | 3327 MB |
| Memory utilization | 11 percent |
| CPU utilization: | |
| User | 0 percent |
| Background | 0 percent |
| Kernel | 0 percent |
| Interrupt | 0 percent |
| Idle | 100 percent |
| Model | RE-TXP-SFC |
| Serial ID | 737A-1024 |
| Start time | 2009-05-11 17:08:54 PDT |
| Uptime | 4 hours, 16 minutes, 52 seconds |
| Last reboot reason | 0x1:power cycle/failure |

```
1cc0-re0:
```

```

-----
Routing Engine status:
Slot 0:
  Current state           Master
  Election priority       Master (default)
  Temperature             30 degrees C / 86 degrees F
  CPU temperature         43 degrees C / 109 degrees F
  DRAM                   3327 MB
  Memory utilization      9 percent
  CPU utilization:
    User                  0 percent
    Background            0 percent
    Kernel                2 percent
    Interrupt             0 percent
    Idle                  98 percent
  Model                  RE-TXP-LCC
  Serial ID              737F-1024
  Start time             2009-05-11 17:40:32 PDT
  Uptime                 3 hours, 44 minutes, 51 seconds
  Last reboot reason      Router rebooted after a normal shutdown.
  Load averages:         1 minute   5 minute   15 minute
                        0.00       0.00       0.00

Routing Engine status:
Slot 1:
  Current state           Backup
  Election priority       Backup (default)
  Temperature             30 degrees C / 86 degrees F
  CPU temperature         43 degrees C / 109 degrees F
  DRAM                   3327 MB
  Memory utilization      9 percent
  CPU utilization:
    User                  0 percent
    Background            0 percent
    Kernel                0 percent
    Interrupt             0 percent
    Idle                  100 percent
  Model                  RE-TXP-LCC
  Serial ID              737F-1024
  Start time             2009-05-06 17:31:32 PDT
  Uptime                 5 days, 3 hours, 54 minutes, 19 seconds
  Last reboot reason      Router rebooted after a normal shutdown.

```

show chassis routing-engine lcc (TX Matrix Plus Router)

```

user@host> show chassis routing-engine 0 lcc 0
lcc0-re0:
-----
Routing Engine status:
Slot 0:
  Current state           Master
  Election priority       Master (default)
  Temperature             30 degrees C / 86 degrees F
  CPU temperature         43 degrees C / 109 degrees F
  DRAM                   3327 MB
  Memory utilization      9 percent
  CPU utilization:
    User                  0 percent
    Background            0 percent
    Kernel                2 percent
    Interrupt             0 percent
    Idle                  98 percent

```

```

Model RE-TXP-LCC
Serial ID 737F-1024
Start time 2009-05-11 17:40:32 PDT
Uptime 3 hours, 45 minutes, 26 seconds
Last reboot reason Router rebooted after a normal shutdown.
Load averages: 1 minute 5 minute 15 minute
                0.00      0.00      0.00

Routing Engine status:
Slot 1:
  Current state Backup
  Election priority Backup (default)
  Temperature 30 degrees C / 86 degrees F
  CPU temperature 43 degrees C / 109 degrees F
  DRAM 3327 MB
  Memory utilization 9 percent
  CPU utilization:
    User 0 percent
    Background 0 percent
    Kernel 0 percent
    Interrupt 0 percent
    Idle 100 percent
  Model RE-TXP-LCC
  Serial ID 737F-1024
  Start time 2009-05-06 17:31:32 PDT
  Uptime 5 days, 3 hours, 54 minutes, 59 seconds
  Last reboot reason Router rebooted after a normal shutdown.

```

show chassis routing-engine bios (TX Matrix Plus Router)

```

user@host> show chassis routing-engine bios
sfc0-re0:

```

```

-----
Routing Engine BIOS Version: V0.0.Z

```

```

lcc0-re0:

```

```

-----
Routing Engine BIOS Version: V0.0.N

```

show chassis routing-engine (QFX Series)

```

user@switch> show chassis routing-engine
Routing Engine status:
Slot 0:
  Current state Master
  Election priority Master (default)
  DRAM 2820 MB
  Memory utilization 49 percent
  CPU utilization:
    User 1 percent
    Background 0 percent
    Kernel 1 percent
    Interrupt 0 percent
    Idle 97 percent
  Model QFX3500-48S4Q
  Serial ID S/N ED3709
  Uptime 3 days, 4 hours, 29 minutes, 42 seconds
  Last reboot reason 0x200:chassis control reset
  Load averages: 1 minute 5 minute 15 minute
                  0.37 0.26 0.19

```


show chassis routing-engine (OCX Series)

```

user@switch> show chassis routing-engine
Routing Engine status:
Slot 0:
Current state Master
Election priority Master (default)
DRAM 2820 MB
Memory utilization 49 percent
CPU utilization:
User 1 percent
Background 0 percent
Kernel 1 percent
Interrupt 0 percent
Idle 97 percent
Model OCX-1100-48SX-AFI
Serial ID S/N ED3709
Uptime 3 days, 4 hours, 29 minutes, 42 seconds
Last reboot reason 0x200:chassis control reset
Load averages: 1 minute 5 minute 15 minute
0.37 0.26 0.19

```

show chassis routing engine interconnect-device (QFabric Systems)

```

user@switch> show chassis routing-engine
Routing Engine status:
Slot 0:
Current state Master
Election priority Master (default)
Temperature 48 degrees C / 118 degrees F
DRAM 3312 MB
Memory utilization 63 percent
CPU utilization:
User 14 percent
Background 0 percent
Kernel 5 percent
Interrupt 0 percent
Idle 81 percent
Model RE-QFXC08-CB4S
Serial ID BUILTIN
Start time 2011-07-06 13:26:15 UTC
Uptime 11 hours, 24 minutes, 57 seconds
Last reboot reason 0x4:reset-button reset
Load averages: 1 minute 5 minute 15 minute
2.62 2.31 2.28

Routing Engine status:
Slot 1:
Current state Backup
Election priority Backup (default)
Temperature 39 degrees C / 102 degrees F
DRAM 3312 MB
Memory utilization 59 percent
CPU utilization:
User 9 percent
Background 0 percent
Kernel 1 percent
Interrupt 0 percent
Idle 91 percent
Model RE-QFXC08-CB4S
Serial ID BUILTIN

```

```
Start time          2011-07-06 13:24:58 UTC
Uptime              11 hours, 26 minutes, 18 seconds
Last reboot reason  0x4:reset-button reset
```

show chassis routing-engine (PTX Series Packet Transport Router)

```
user@switch> show chassis routing-engine
Routing Engine status:
Slot 0:
  Current state          Master
  Election priority      Master (default)
  Temperature            60 degrees C / 140 degrees F
  CPU temperature        76 degrees C / 168 degrees F
  DRAM                   17152 MB
  Memory utilization     11 percent
  CPU utilization:
    User                 0 percent
    Background           0 percent
    Kernel               4 percent
    Interrupt            0 percent
    Idle                 95 percent
  Model                  RE-DUO-2600
  Serial ID              P737A-002231
  Start time             2011-12-21 16:54:37 PST
  Uptime                 25 minutes, 44 seconds
  Last reboot reason     Router rebooted after a normal shutdown.
  Load averages:        1 minute   5 minute   15 minute
                        0.01        0.02        0.06

Routing Engine status:
Slot 1:
  Current state          Backup
  Election priority      Backup (default)
  Temperature            50 degrees C / 122 degrees F
  CPU temperature        64 degrees C / 147 degrees F
  DRAM                   17152 MB
  Memory utilization     10 percent
  CPU utilization:
    User                 0 percent
    Background           0 percent
    Kernel               0 percent
    Interrupt            0 percent
    Idle                 99 percent
  Model                  RE-DUO-2600
  Serial ID              P737A-002438
  Start time             2011-12-21 16:52:26 PST
  Uptime                 27 minutes, 49 seconds
  Last reboot reason     Router rebooted after a normal shutdown.
```

show chassis routing-engine (EX9200 Switch)

```
user@switch> show chassis routing-engine
Routing Engine status:
Slot 0:
  Current state          Master
  Election priority      Master (default)
  Temperature            35 degrees C / 95 degrees F
  CPU temperature        33 degrees C / 91 degrees F
  DRAM                   8157 MB
  Installed Memory       8192 MB
```

```

Memory utilization      18 percent
CPU utilization:
  User                  1 percent
  Background            0 percent
  Kernel                4 percent
  Interrupt             1 percent
  Idle                  94 percent
Model                  RE-S-EX9200-1800X4
Serial ID              9009119555
Start time             2014-03-12 14:58:05 UTC
Uptime                 1 hour, 41 minutes, 51 seconds
Last reboot reason     Router rebooted after a normal shutdown.
Load averages:         1 minute  5 minute 15 minute
                       0.02      0.02   0.00

Routing Engine status:
Slot 1:
  Current state         Backup
  Election priority     Backup (default)

[...Output truncated...]

```

show chassis routing-engine (ACX2000 Universal Access Router)

```

user@host> show chassis routing-engine
Routing Engine status:
  Temperature           53 degrees C / 127 degrees F
  DRAM                  1536 MB
  Memory utilization    25 percent
  CPU utilization:
    User                0 percent
    Background          0 percent
    Kernel              0 percent
    Interrupt           1 percent
    Idle                99 percent
  Model                 RE-ACX-2000
  Start time            2012-05-09 00:57:07 PDT
  Uptime                5 days, 3 hours, 16 minutes, 15 seconds
  Last reboot reason    Router rebooted after a normal shutdown.
  Load averages:       1 minute  5 minute 15 minute
                       0.00      0.03   0.05

```

show chassis routing-engine (ACX1000 Universal Access Router)

```

user@host> show chassis routing-engine
Routing Engine status:
  Temperature           36 degrees C / 96 degrees F
  DRAM                  768 MB
  Memory utilization    50 percent
  CPU utilization:
    User                3 percent
    Background          0 percent
    Kernel              6 percent
    Interrupt           0 percent
    Idle                91 percent
  Model                 RE-ACX-1000
  Start time            2012-05-10 07:12:23 PDT
  Uptime                4 days, 10 hours, 46 minutes, 53 seconds
  Last reboot reason    Router rebooted after a normal shutdown.
  Load averages:       1 minute  5 minute 15 minute
                       0.00      0.00   0.00

```

show chassis routing-engine (Displaying the guest reboot reason on PTX5000,MX240, MX480, MX960< MX2010, and MX2020)

```
user@host> show chassis routing-engine re0 | match "Last reboot reason"
Last reboot reason 0x4000:VJUNOS reboot
```

show chassis sibs

| | |
|---|---|
| List of Syntax | Syntax on page 445 Syntax (TX Matrix Router) on page 445 Syntax (TX Matrix Plus Router) on page 445 Syntax (PTX Series Packet Transport Routers) on page 445 |
| Syntax | show chassis sibs |
| Syntax (TX Matrix Router) | show chassis sibs <lcc <i>number</i> scc> |
| Syntax (TX Matrix Plus Router) | show chassis sibs <lcc <i>number</i> sfc <i>number</i> > |
| Syntax (PTX Series Packet Transport Routers) | show chassis sibs <detail> <slot> |
| Release Information | <p>Command introduced before Junos OS Release 7.4.</p> <p>Command introduced in Junos OS Release 12.1 for the PTX Series Packet Transport Routers.</p> <p>sfc option introduced for the TX Matrix Plus router in Junos OS Release 9.6.</p> <p>detail and sib-slot options introduced for the PTX Packet Transport Router in Junos OS Release 12.1</p> <p>Command introduced in Junos OS Release 17.2 for PTX10008 Routers.</p> |
| Description | (M320,T Series routers, TX Matrix routers, TX Matrix Plus routers, and PTX Series routers only) Display Switch Interface Boards (SIBs) status information. |
| Options | <p>none—(TX Matrix routers and TX Matrix Plus routers only) On a TX Matrix router, display the SIB status for the TX Matrix router and its attached T640 routers. On a TX Matrix Plus router, display the SIB status for the TX Matrix Plus router and its attached routers.</p> <p>detail—(PTX Series) (Optional) Display detailed SIB status information.</p> <p>lcc <i>number</i>—(TX Matrix routers and TX Matrix Plus routers only) (Optional) On a TX Matrix router, display SIB status information for a specified T640 router (line-card chassis or LCC) that is connected to the TX Matrix router. On a TX Matrix Plus router, display SIB status information for a specified T1600 or T4000 router (LCC) that is connected to the TX Matrix Plus router.</p> |

Replace *number* with the following values depending on the LCC configuration:

- 0 through 3, when T640 routers are connected to a TX Matrix router in a routing matrix.
- 0 through 3, when T1600 routers are connected to a TX Matrix Plus router in a routing matrix.
- 0 through 7, when T1600 routers are connected to a TX Matrix Plus router with 3D SIBs in a routing matrix.
- 0, 2, 4, or 6, when T4000 routers are connected to a TX Matrix Plus router with 3D SIBs in a routing matrix.

scc—(TX Matrix routers only) (Optional) Display SIB status information for the TX Matrix router (switch-card chassis).

sfc number—(TX Matrix Plus routers only) (Optional) Display SIB status information for the TX Matrix Plus router (switch-fabric chassis or SFC). Replace *number* with 0.

slot—(PTX Series) (Optional) Display status information about the SIB in the specified slot only. The range of values is 0 through 8.

Required Privilege Level view

Related Documentation

- [*request chassis sib*](#)
- [*show chassis spmb sibs*](#)
- [*show chassis environment sib*](#)
- [*Monitoring the SIBs*](#)
- [*M320 SIB Description*](#)
- [*Routing Matrix with a TX Matrix Plus Router Solutions Page*](#)

List of Sample Output

- [show chassis sibs \(T640 Router\) on page 449](#)
- [show chassis sibs \(T4000 Router\) on page 449](#)
- [show chassis sibs \(TX Matrix Router\) on page 450](#)
- [show chassis sibs \(T1600 Router\) on page 450](#)
- [show chassis sibs \(TX Matrix Plus Router\) on page 450](#)
- [show chassis sibs \(TX Matrix Plus Router with 3D SIBs\) on page 452](#)
- [show chassis sibs sfc \(TX Matrix Plus Router\) on page 453](#)
- [show chassis sibs lcc \(TX Matrix Plus Router\) on page 454](#)
- [show chassis sibs lcc \(TX Matrix Plus Router with 3D SIBs\) on page 455](#)
- [show chassis sibs \(M320 Router\) on page 455](#)
- [show chassis sibs \(PTX Series\) on page 455](#)
- [show chassis sibs \(PTX Series\) on page 455](#)

Output Fields Table 13 on page 447 lists the output fields for the **show chassis sibs** command. Output fields are listed in the approximate order in which they appear.

Table 13: show chassis sibs Output Fields

| Field Name | Field Description |
|------------|---|
| Slot | SIB slot number. |
| Type | (TX Matrix Plus router only) SIB type. |
| Uptime | How long the SIB has been up and running. |
| State | <p>SIB status:</p> <ul style="list-style-type: none"> • Activating—SIB is coming online; this is a transitional state. • Deactivating—SIB is going offline; this is a transitional state. • Connected—SIBs on a T1600 router are connected and trained but are either not online or are spare, because the plane on the TX Matrix Plus router (or switch-fabric chassis) is still offline. • Disconnected—SIBs on all T640 routers on the TX Matrix router (switch-card chassis) are in the Disconnected state, because a SIB on the SCC has gone offline. Likewise, SIBs on all T1600 routers on the TX Matrix Plus router (or switch-fabric chassis) are in the Disconnected state, because a SIB on the SFC has gone offline. <p>On the TX Matrix Plus router with 3D SIBs, the LCC SIB is also disconnected if the F13 SIB is online, but none of the cables are connected or trained.</p> <ul style="list-style-type: none"> • Online—SIB is operational and running. • Offline—SIB is powered down. <p>NOTE: If a SIB transitions to the Offline state, the command displays an appropriate reason in the output. For instance, if the SIB is taken offline using the request chassis sib command, the show chassis sibs command displays --- Offlined by cli command --- in the output.</p> <ul style="list-style-type: none"> • Spare—SIB is redundant and will move to active state if one of the working SIBs fails to pass traffic. <p>NOTE: Spare does not apply to PTX Series Packet Transport Routers, as there are no spare SIBs.</p> <ul style="list-style-type: none"> • Empty—No SIB is present. • Fault—SIB is in an alarmed state in which none of the SIB's planes are operational for one of the following reasons: <ul style="list-style-type: none"> • All onboard fabric ASICs are not operational. • Fiber-optic connector faults. • FPC connector faults. • SIB midplane connector faults. • Check—SIB is in an alarmed state due to link errors or destination errors. A SIB can transition to the Check state from the online or spare state. |

Table 13: show chassis sibs Output Fields (*continued*)

| Field Name | Field Description |
|------------|--|
| | <p>The Check state can be caused by the following reasons:</p> <ul style="list-style-type: none"> • Unsupported FPC installed on a router. • SIB not inserted properly (such as bent pins). • Destination errors are detected on the SIB. In this case, the Packet Forwarding Engine stops using the SIB to send traffic to the affected destination Packet Forwarding Engine. When a Packet Forwarding Engine cannot be reached on that plane or SIB, a destination error is reported against that SIB. <p>NOTE: For SIBs in the Check state, the output displays some additional information:</p> <ul style="list-style-type: none"> • In Junos OS Release 9.6 and later, the Check state message shows the number of Packet Forwarding Engines in the plane having destination errors. For example, Check (10 destination errors) indicates 10 Packet Forwarding Engines cannot be reached on that particular SIB. If there are no destination errors, and if the SIB transitions to the Check state because of link errors only, the Check state message shows Check (0 destination errors). • In Junos OS Release 9.5 and earlier, the Check state message shows Check (destination errors) if there are Packet Forwarding Engines with destination errors in this plane. However, it does not show the number of Packet Forwarding Engines having destination errors. If there are no destination errors and if the SIB transitions to the Check state because of link errors only, the Check state message shows Check (no destination errors). <p>If the SIB is in a Check state, because of destination errors, the CLI displays an additional line in the output, use "show chassis fabric fpcs" and "show chassis fabric sibs" for more details.</p> <ul style="list-style-type: none"> • Link errors are detected on the channel between the SIB and a Packet Forwarding Engine. Link errors can be detected at initialization time or runtime: <ul style="list-style-type: none"> • Link errors caused by a link training failure at initialization time—The Packet Forwarding Engine does not use the SIB to send traffic. The show chassis fabric fpcs command shows Plane disabled as status for this link. • Link errors caused by CRC errors detected at runtime—The Packet Forwarding Engine continues to use the SIB to send traffic. The show chassis fabric fpcs command shows Link error as the status for this link. <p>NOTE: The Check state does not apply to PTX Series Packet Transport Routers.</p> <ul style="list-style-type: none"> • SFC Error—If an F13 SIB on the TX Matrix Plus router (SFC) transitions to the Fault state (for instance, because of link errors), and then if an LCC SIB (connected to the F13 SIB) comes online, the LCC SIB transitions to the SFC Error state. This state indicates that the F13 SIB to which the LCC SIB is connected has errors. <p>NOTE: The Connected, Disconnected, and SFC Error states are only applicable to the SIBs on an LCC.</p> |

Table 13: show chassis sibs Output Fields (*continued*)

| Field Name | Field Description |
|---------------------------|--|
| | <ul style="list-style-type: none"> Invalid—The specific SIB slot is not valid for 4-LCC chassis configuration. See the <i>TX Matrix Plus Hardware Guide</i> for more information about the supported SIB slots. <p>NOTE: The Invalid state is applicable to TX Matrix Plus routers only.</p> |
| Fabric links | <p>Indicates status of fabric links on the SIB.</p> <ul style="list-style-type: none"> Active—All fabric links on SIB are active. Errors detected on the SIB's fabric links, if any, are reported in the Errors column. Unused—All fabric links on the SIB are not used for fabric traffic. |
| Errors | <p>Indicates if there is any error on the SIB.</p> <ul style="list-style-type: none"> None—No errors Link Errors—Fabric link errors were found on SIB RX link. Cell drops—Fabric cell drops were found on the SIB ASIC. Link Errors, Cell drops—Both link errors and cell drops were detected on at least one of the SIB's fabric links. Asic Errors—A fault affecting one of the ASICs on the SIB is detected. It can be an IO error or an internal error signaled by the ASIC. |
| Link Errors | <p>indicate the number of links which are marked faulty because the errors on them have crossed threshold.</p> |
| Cable Errors | <p>Indicate the number of mandatory cables that are not connected, or in up state for that plane</p> |
| Destination Errors | <p>Indicate the number of destinations that are not reachable on this plane.</p> |

Sample Output

show chassis sibs (T640 Router)

```

user@host> show chassis sibs
Slot  State                               Uptime
0     Empty
1     Offline                               --- Offlined by cli command ---
2     Check (21 destination errors)        1 day, 1 hour, 32 minutes, 55 seconds
3     Check (0 destination errors)        1 day, 1 hour, 32 minutes, 45 seconds
4     Empty

```

use "show chassis fabric fpcs" and "show chassis fabric sibs" for more details

show chassis sibs (T4000 Router)

```

user@host> show chassis sibs

```

| Slot | State | Uptime |
|------|--------|---------------------------------|
| 0 | Spare | |
| 1 | Online | 3 hours, 48 minutes, 38 seconds |
| 2 | Online | 3 hours, 48 minutes, 22 seconds |
| 3 | Online | 3 hours, 48 minutes, 5 seconds |
| 4 | Online | 3 hours, 47 minutes, 49 seconds |

show chassis sibs (TX Matrix Router)

```

user@host> show chassis sibs
scc-re0:
-----
Slot  State                Uptime
0     Empty
1     Empty
2     Offline              --- Offlined by cli command ---
3     Offline
4     Online               7 days, 21 hours, 50 minutes, 4 seconds
lcc0-re0:
-----
Slot  State                Uptime
0     Offline              --- Offlined by cli command ---
1     Empty
2     Check (21 destination errors)  1 day, 1 hour, 32 minutes, 55 seconds
3     Check (0 destination errors)   1 day, 1 hour, 32 minutes, 45 seconds
4     Empty

use "show chassis fabric fpcs" and "show chassis fabric sibs" for more details

```

show chassis sibs (T1600 Router)

```

user@host> show chassis sibs
Slot
Slot  State                Uptime
0     Check (destination errors)    2 hours, 23 minutes, 2 seconds
1     Offline              --- Offlined by cli command ---
2     Check (destination errors)    2 hours, 23 minutes, 3 seconds
3     Check (destination errors)    2 hours, 23 minutes, 3 seconds
4     Check (destination errors)    2 hours, 23 minutes, 3 seconds

use "show chassis fabric fpcs" and "show chassis fabric sibs" for more details

```

show chassis sibs (TX Matrix Plus Router)

```

user@host> show chassis sibs
sfc0-re0:
-----
Slot  State                Type          Link errors  Destination errors  Uptime
0     Spare                SIB F13      NONE         NONE
1     Empty
2     Invalid
3     Online               SIB F13      NONE         NONE              1 hour,
53 minutes, 19 seconds
4     Empty
5     Invalid
6     Online               SIB F13      NONE         NONE              1 hour,
53 minutes, 8 seconds
7     Empty
8     Online               SIB F13      NONE         NONE              1 hour,

```

```

52 minutes, 57 seconds
 9   Empty                NONE      NONE
10   Invalid              NONE      NONE
11   Online               SIB F13    NONE      NONE      1 hour,
52 minutes, 46 seconds
12   Empty                NONE      NONE
13   Invalid              NONE      NONE
14   Invalid              NONE      NONE
15   Invalid              NONE      NONE
0/0   Spare               SIB F2S    NONE      NONE
0/2   Spare               SIB F2S    NONE      NONE
0/4   Spare               SIB F2S    NONE      NONE
0/6   Spare               SIB F2S    NONE      NONE
1/0   Online              SIB F2S    NONE      NONE      1 hour,
53 minutes, 29 seconds
1/2   Online              SIB F2S    NONE      NONE      1 hour,
53 minutes, 28 seconds
1/4   Online              SIB F2S    NONE      NONE      1 hour,
53 minutes, 27 seconds
1/6   Online              SIB F2S    NONE      NONE      1 hour,
53 minutes, 26 seconds
2/0   Online              SIB F2S    NONE      NONE      1 hour,
53 minutes, 18 seconds
2/2   Online              SIB F2S    NONE      NONE      1 hour,
53 minutes, 17 seconds
2/4   Online              SIB F2S    NONE      NONE      1 hour,
53 minutes, 16 seconds
2/6   Online              SIB F2S    NONE      NONE      1 hour,
53 minutes, 14 seconds
3/0   Online              SIB F2S    NONE      NONE      1 hour,
53 minutes, 7 seconds
3/2   Online              SIB F2S    NONE      NONE      1 hour,
53 minutes, 5 seconds
3/4   Online              SIB F2S    NONE      NONE      1 hour,
53 minutes, 4 seconds
3/6   Online              SIB F2S    NONE      NONE      1 hour,
53 minutes, 3 seconds
4/0   Online              SIB F2S    NONE      NONE      1 hour,
52 minutes, 56 seconds
4/2   Online              SIB F2S    NONE      NONE      1 hour,
52 minutes, 54 seconds
4/4   Online              SIB F2S    NONE      NONE      1 hour,
52 minutes, 53 seconds
4/6   Online              SIB F2S    NONE      NONE      1 hour,
52 minutes, 52 seconds

```

lcc0-re0:

```

-----
Slot State      Link errors Destination errors Uptime
0   Spare      NONE      NONE
1   Online     NONE      NONE      1 hour, 53 minutes, 31
seconds
2   Online     NONE      NONE      1 hour, 53 minutes, 27
seconds
3   Online     NONE      NONE      1 hour, 53 minutes, 23
seconds
4   Online     NONE      NONE      1 hour, 53 minutes, 19
seconds

```

show chassis sibs (TX Matrix Plus Router with 3D SIBs)

```
user@host> show chassis sibs
sfc0-re0:
```

| Slot | State | Type | Cable errors | Link errors | Destination |
|------|----------------------------------|---------|--------------|-------------|-------------|
| 0 | Online | SIB F13 | 6 | NONE | NONE |
| | 21 hours, 54 minutes, 28 seconds | | | | |
| 1 | Online | SIB F13 | 8 | NONE | NONE |
| | 21 hours, 54 minutes, 12 seconds | | | | |
| 2 | Invalid | | NONE | NONE | NONE |
| 3 | Online | SIB F13 | 6 | NONE | NONE |
| | 21 hours, 57 minutes, 6 seconds | | | | |
| 4 | Online | SIB F13 | 8 | 1 | NONE |
| | 21 hours, 56 minutes, 49 seconds | | | | |
| 5 | Invalid | | NONE | NONE | NONE |
| 6 | Online | SIB F13 | 6 | NONE | NONE |
| | 21 hours, 56 minutes, 25 seconds | | | | |
| 7 | Online | SIB F13 | 8 | NONE | NONE |
| | 21 hours, 56 minutes, 8 seconds | | | | |
| 8 | Online | SIB F13 | 6 | NONE | NONE |
| | 21 hours, 55 minutes, 43 seconds | | | | |
| 9 | Online | SIB F13 | 8 | NONE | NONE |
| | 21 hours, 55 minutes, 26 seconds | | | | |
| 10 | Invalid | | NONE | NONE | NONE |
| 11 | Empty | | NONE | NONE | NONE |
| 12 | Empty | | NONE | NONE | NONE |
| 13 | Invalid | | NONE | NONE | NONE |
| 14 | Invalid | | NONE | NONE | NONE |
| 15 | Invalid | | NONE | NONE | NONE |
| 0/0 | Online | SIB F2S | -n/a- | NONE | NONE |
| | 21 hours, 55 minutes, 16 seconds | | | | |
| 0/2 | Online | SIB F2S | -n/a- | NONE | NONE |
| | 21 hours, 54 minutes, 49 seconds | | | | |
| 0/4 | Online | SIB F2S | -n/a- | NONE | NONE |
| | 21 hours, 54 minutes, 47 seconds | | | | |
| 0/6 | Online | SIB F2S | -n/a- | NONE | NONE |
| | 21 hours, 54 minutes, 45 seconds | | | | |
| 1/0 | Online | SIB F2S | -n/a- | NONE | NONE |
| | 21 hours, 57 minutes, 29 seconds | | | | |
| 1/2 | Online | SIB F2S | -n/a- | NONE | NONE |
| | 21 hours, 57 minutes, 27 seconds | | | | |
| 1/4 | Online | SIB F2S | -n/a- | NONE | NONE |
| | 21 hours, 57 minutes, 25 seconds | | | | |
| 1/6 | Online | SIB F2S | -n/a- | NONE | NONE |
| | 21 hours, 57 minutes, 23 seconds | | | | |
| 2/0 | Online | SIB F2S | -n/a- | NONE | NONE |
| | 21 hours, 56 minutes, 48 seconds | | | | |
| 2/2 | Online | SIB F2S | -n/a- | NONE | NONE |
| | 21 hours, 56 minutes, 46 seconds | | | | |
| 2/4 | Online | SIB F2S | -n/a- | NONE | NONE |
| | 21 hours, 56 minutes, 43 seconds | | | | |
| 2/6 | Online | SIB F2S | -n/a- | NONE | NONE |
| | 21 hours, 56 minutes, 41 seconds | | | | |
| 3/0 | Online | SIB F2S | -n/a- | NONE | NONE |
| | 21 hours, 56 minutes, 6 seconds | | | | |
| 3/2 | Online | SIB F2S | -n/a- | NONE | NONE |
| | 21 hours, 56 minutes, 4 seconds | | | | |
| 3/4 | Online | SIB F2S | -n/a- | NONE | NONE |
| | 21 hours, 56 minutes, 2 seconds | | | | |

```

3/6  Online          SIB F2S          -n/a-          NONE          NONE
    21 hours, 56 minutes
4/0  Online          SIB F2S          -n/a-          NONE          NONE
    21 hours, 55 minutes, 24 seconds
4/2  Online          SIB F2S          -n/a-          NONE          NONE
    21 hours, 55 minutes, 22 seconds
4/4  Online          SIB F2S          -n/a-          NONE          NONE
    21 hours, 55 minutes, 20 seconds
4/6  Online          SIB F2S          -n/a-          NONE          NONE
    21 hours, 55 minutes, 18 seconds

```

lcc0-re0:

```

-----
Slot State          Cable errors Link errors Destination errors Uptime
0  Online          6          NONE          NONE          21 hours,
47 minutes, 29 seconds
1  Online          6          NONE          NONE          21 hours,
47 minutes, 50 seconds
2  Online          6          NONE          NONE          21 hours,
47 minutes, 43 seconds
3  Online          6          NONE          NONE          21 hours,
47 minutes, 36 seconds
4  Empty          NONE          NONE          NONE
use "show chassis fabric fpcs" and "show chassis fabric sibs" for more details

```

lcc4-re0:

```

-----
Slot State          Cable errors Link errors Destination errors Uptime
0  Online          6          NONE          NONE          21 hours,
57 minutes, 1 second
1  Online          6          NONE          NONE          21 hours,
57 minutes, 21 seconds
2  Online          6          NONE          NONE          21 hours,
57 minutes, 14 seconds
3  Online          6          NONE          NONE          21 hours,
57 minutes, 7 seconds
4  Empty          NONE          NONE          NONE
use "show chassis fabric fpcs" and "show chassis fabric sibs" for more details

```

lcc7-re0:

```

-----
Slot State          Cable errors Link errors Destination errors Uptime
0  Online          2          NONE          NONE          21 hours,
56 minutes, 54 seconds
1  Online          2          NONE          NONE          21 hours,
57 minutes, 21 seconds
2  Online          2          NONE          NONE          21 hours,
57 minutes, 12 seconds
3  Online          2          NONE          NONE          21 hours,
57 minutes, 3 seconds
4  Empty          NONE          NONE          NONE
use "show chassis fabric fpcs" and "show chassis fabric sibs" for more details

```

show chassis sibs sfc (TX Matrix Plus Router))

```
user@host> show chassis sibs sfc 0
```

sfc0-re0:

```

-----
Slot State          Type          Link errors Destination errors Uptime
0  Spare          SIB F13          NONE          NONE
1  Empty

```

| | | | | | |
|-----|-----------------------|---------|------|------|-----------|
| 2 | Invalid | | NONE | NONE | |
| 3 | Online | SIB F13 | NONE | NONE | 12 hours, |
| | 6 minutes, 22 seconds | | | | |
| 4 | Empty | | NONE | NONE | |
| 5 | Invalid | | NONE | NONE | |
| 6 | Online | SIB F13 | NONE | NONE | 12 hours, |
| | 6 minutes, 11 seconds | | | | |
| 7 | Empty | | NONE | NONE | |
| 8 | Online | SIB F13 | NONE | NONE | 12 hours, |
| | 6 minutes | | | | |
| 9 | Empty | | NONE | NONE | |
| 10 | Invalid | | NONE | NONE | |
| 11 | Online | SIB F13 | NONE | NONE | 12 hours, |
| | 5 minutes, 49 seconds | | | | |
| 12 | Empty | | NONE | NONE | |
| 13 | Invalid | | NONE | NONE | |
| 14 | Invalid | | NONE | NONE | |
| 15 | Invalid | | NONE | NONE | |
| 0/0 | Spare | SIB F2S | NONE | NONE | |
| 0/2 | Spare | SIB F2S | NONE | NONE | |
| 0/4 | Spare | SIB F2S | NONE | NONE | |
| 0/6 | Spare | SIB F2S | NONE | NONE | |
| 1/0 | Online | SIB F2S | NONE | NONE | 12 hours, |
| | 6 minutes, 32 seconds | | | | |
| 1/2 | Online | SIB F2S | NONE | NONE | 12 hours, |
| | 6 minutes, 31 seconds | | | | |
| 1/4 | Online | SIB F2S | NONE | NONE | 12 hours, |
| | 6 minutes, 30 seconds | | | | |
| 1/6 | Online | SIB F2S | NONE | NONE | 12 hours, |
| | 6 minutes, 29 seconds | | | | |
| 2/0 | Online | SIB F2S | NONE | NONE | 12 hours, |
| | 6 minutes, 21 seconds | | | | |
| 2/2 | Online | SIB F2S | NONE | NONE | 12 hours, |
| | 6 minutes, 20 seconds | | | | |
| 2/4 | Online | SIB F2S | NONE | NONE | 12 hours, |
| | 6 minutes, 19 seconds | | | | |
| 2/6 | Online | SIB F2S | NONE | NONE | 12 hours, |
| | 6 minutes, 17 seconds | | | | |
| 3/0 | Online | SIB F2S | NONE | NONE | 12 hours, |
| | 6 minutes, 10 seconds | | | | |
| 3/2 | Online | SIB F2S | NONE | NONE | 12 hours, |
| | 6 minutes, 9 seconds | | | | |
| 3/4 | Online | SIB F2S | NONE | NONE | 12 hours, |
| | 6 minutes, 7 seconds | | | | |
| 3/6 | Online | SIB F2S | NONE | NONE | 12 hours, |
| | 6 minutes, 6 seconds | | | | |
| 4/0 | Online | SIB F2S | NONE | NONE | 12 hours, |
| | 5 minutes, 59 seconds | | | | |
| 4/2 | Online | SIB F2S | NONE | NONE | 12 hours, |
| | 5 minutes, 57 seconds | | | | |
| 4/4 | Online | SIB F2S | NONE | NONE | 12 hours, |
| | 5 minutes, 56 seconds | | | | |
| 4/6 | Online | SIB F2S | NONE | NONE | 12 hours, |
| | 5 minutes, 55 seconds | | | | |

show chassis sibs lcc (TX Matrix Plus Router)

```
user@host> show chassis sibs lcc 0
lcc0-re0:
```

```
-----
Slot  State                Link errors  Destination errors  Uptime
```

| | | | | |
|----|---------|------|------|-----------------------|
| 0 | Online | NONE | NONE | 20 hours, 14 minutes, |
| 50 | seconds | | | |
| 1 | Fault | NONE | NONE | |
| 2 | Online | NONE | NONE | 20 hours, 15 minutes, |
| 2 | seconds | | | |
| 3 | Online | NONE | NONE | 20 hours, 14 minutes, |
| 58 | seconds | | | |
| 4 | Online | NONE | NONE | 20 hours, 14 minutes, |
| 54 | seconds | | | |

show chassis sibs lcc (TX Matrix Plus Router with 3D SIBs)

```
user@host> show chassis sibs lcc 0
lcc0-re0:
-----
Slot  State          Cable errors  Link errors  Destination errors  Uptime
0     Disconnected    NONE         NONE         NONE                17 hours,
2 minutes, 37 seconds
1     Online          NONE         NONE         NONE                17 hours,
3 minutes, 6 seconds
2     Online          NONE         NONE         NONE                17 hours,
2 minutes, 59 seconds
3     Online          NONE         NONE         NONE                17 hours,
2 minutes, 52 seconds
4     Online          NONE         NONE         NONE                17 hours,
2 minutes, 44 seconds
```

show chassis sibs (M320 Router)

```
user@host> show chassis sibs

0     Online          1 hour, 18 minutes, 3 seconds
1     Offline         --- Offlined by cli command ---
2     Online          1 hour, 18 minutes, 18 seconds
3     Online          1 hour, 18 minutes, 3 seconds
```

show chassis sibs (PTX Series)

```
user@host> show chassis sibs
Slot  State          Fabric links  Errors
0     Online        Active        Asic Errors
1     Online        Active        Link Errors
2     Online        Active        None
3     Online        Active        Cell drops
4     Offline      Unused        None
5     Online        Active        None
6     Online        Active        None
7     Online        Active        None
8     Online        Active        None
```

show chassis sibs (PTX Series)

```
user@host> show chassis sibs detail
Slot 4 information
State          Offline
Reason         Offlined by cli command
Fabric links    Unused
Errors          None
```


show route summary

| | |
|------------------------------------|--|
| List of Syntax | Syntax on page 457 Syntax (EX Series Switches) on page 457 |
| Syntax | <pre>show route summary <logical-system (all <i>logical-system-name</i>)> <table <i>routing-table-name</i>></pre> |
| Syntax (EX Series Switches) | show route summary |
| Release Information | <p>Command introduced before Junos OS Release 7.4.</p> <p>Command introduced in Junos OS Release 9.0 for EX Series switches.</p> |
| Description | <p>Display summary statistics about the entries in the routing table.</p> <p>CPU utilization might increase while the device learns routes. We recommend that you use the show route summary command after the device learns and enters the routes into the routing table. Depending on the size of your network, this might take several minutes. If you receive a “timeout communicating with routing daemon” error when using the show route summary command, wait several minutes before attempting to use the command again. This is not a critical system error, but you might experience a delay in using the command-line interface (CLI).</p> |
| Options | <p>none—Display summary statistics about the entries in the routing table.</p> <p>logical-system (all <i>logical-system-name</i>)—(Optional) Perform this operation on all logical systems or on a particular logical system.</p> <p>table <i>routing-table-name</i>—(Optional) Display summary statistics for all routing tables whose name begins with this string (for example, inet.0 and inet6.0 are both displayed when you run the show route summary table inet command). If you only want to display statistics for a specific routing table, make sure to enter the exact name of that routing table.</p> |
| Required Privilege Level | view |
| List of Sample Output | show route summary on page 459 show route summary table on page 459 show route summary table (with Route Limits Configured for the Routing Table) on page 460 |
| Output Fields | <p>Table 14 on page 458 lists the output fields for the show route summary command. Output fields are listed in the approximate order in which they appear.</p> |

Table 14: show route summary Output Fields

| Field Name | Field Description |
|---------------------------|--|
| Router ID | Address of the local routing device. |
| <i>routing-table-name</i> | Name of the routing table (for example, inet.0). |
| destinations | Number of destinations for which there are routes in the routing table. |
| routes | <p>Number of routes in the routing table:</p> <ul style="list-style-type: none"> • active—Number of routes that are active. • holddown—Number of routes that are in the hold-down state before being declared inactive. • hidden—Number of routes that are not used because of routing policy. |
| Restart complete | <p>All protocols have restarted for this routing table.</p> <p>Restart state:</p> <ul style="list-style-type: none"> • Pending:protocol-name—List of protocols that have not yet completed graceful restart for this routing table. • Complete—All protocols have restarted for this routing table. <p>For example, if the output shows-</p> <ul style="list-style-type: none"> • LDP.inet.0: 5 routes (4 active, 1 holddown, 0 hidden) Restart Pending: OSPF LDP VPN <p>This indicates that OSPF, LDP, and VPN protocols did not restart for LDP.inet.0 routing table.</p> <ul style="list-style-type: none"> • vpls_1.l2vpn.0: 1 destinations, 1 routes (1 active, 0 holddown, 0 hidden) Restart Complete <p>This indicates that all protocols have restarted for vpls_1.l2vpn.0 routing table.</p> |
| Limit/Threshold | <p>Displays the configured route limits for the routing table set with the <i>maximum-prefixes</i> and the <i>maximum-paths</i> statements. If you do not configure route limits for the routing table, the show output does not display this information.</p> <ul style="list-style-type: none"> • destinations—The first number represents the maximum number of route prefixes installed in the routing table. The second number represents the number of route prefixes that trigger a warning message. • routes—The first number represents the maximum number of routes. The second number represents the number of routes that trigger a warning message. |
| Direct | Routes on the directly connected network. |
| Local | Local routes. |
| <i>protocol-name</i> | Name of the protocol from which the route was learned. For example, OSPF , RSVP , and Static . |

Sample Output

show route summary

```

user@host> show route summary
Autonomous system number: 69
Router ID: 10.255.71.52
Maximum-ECMP: 32
inet.0: 24 destinations, 25 routes (23 active, 0 holddown, 1 hidden)
Restart Complete
    Direct:    6 routes,    5 active
    Local:    4 routes,    4 active
    OSPF:     5 routes,    4 active
    Static:   7 routes,    7 active
    IGMP:     1 routes,    1 active
    PIM:      2 routes,    2 active

inet.3: 2 destinations, 2 routes (2 active, 0 holddown, 0 hidden)
Restart Complete
    RSVP:     2 routes,    2 active

iso.0: 1 destinations, 1 routes (1 active, 0 holddown, 0 hidden)
Restart Complete
    Direct:    1 routes,    1 active

mpls.0: 7 destinations, 7 routes (5 active, 0 holddown, 2 hidden)
Restart Complete
    MPLS:     3 routes,    3 active
    VPLS:     4 routes,    2 active

inet6.0: 5 destinations, 5 routes (5 active, 0 holddown, 0 hidden)
Restart Complete
    Direct:    2 routes,    2 active
    PIM:       2 routes,    2 active
    MLD:       1 routes,    1 active

green.l2vpn.0: 4 destinations, 4 routes (4 active, 0 holddown, 0 hidden)
Restart Complete
    BGP:       2 routes,    2 active
    L2VPN:     2 routes,    2 active

red.l2vpn.0: 3 destinations, 3 routes (3 active, 0 holddown, 0 hidden)
Restart Complete
    BGP:       2 routes,    2 active
    L2VPN:     1 routes,    1 active

bgp.l2vpn.0: 4 destinations, 4 routes (4 active, 0 holddown, 0 hidden)
Restart Complete
    BGP:       4 routes,    4 active

```

show route summary table

```

user@host> show route summary table inet
Router ID: 192.168.0.1

inet.0: 32 destinations, 34 routes (31 active, 0 holddown, 1 hidden)
    Direct:    6 routes,    5 active
    Local:     9 routes,    9 active
    OSPF:      3 routes,    1 active
    Static:   13 routes,   13 active

```

```
IGMP:      1 routes,      1 active
PIM:       2 routes,      2 active

inet.1: 1 destinations, 1 routes (1 active, 0 holddown, 0 hidden)
Multicast: 1 routes,      1 active

inet6.0: 3 destinations, 3 routes (3 active, 0 holddown, 0 hidden)
Local:     1 routes,      1 active
PIM:       2 routes,      2 active

inet6.1: 1 destinations, 1 routes (1 active, 0 holddown, 0 hidden)
Multicast: 1 routes,      1 active
```

show route summary table (with Route Limits Configured for the Routing Table)

```
user@host> show route summary table VPN-A.inet.0
Autonomous system number: 100
Router ID: 10.255.182.142

VPN-A.inet.0: 13 destinations, 14 routes (13 active, 0 holddown, 0 hidden)
Limit/Threshold: 2000/200 destinations 20/12 routes
Direct:      2 routes,      2 active
Local:       1 routes,      1 active
OSPF:        4 routes,      3 active
BGP:         4 routes,      4 active
IGMP:        1 routes,      1 active
PIM:         2 routes,      2 active
```

show system uptime

| | |
|---------------------------------------|--|
| List of Syntax | Syntax on page 461 Syntax (EX Series Switches) on page 461 Syntax (QFX Series) on page 461 Syntax (TX Matrix Router) on page 461 Syntax (TX Matrix Plus Router) on page 461 Syntax (MX Series Router) on page 461 |
| Syntax | show system uptime |
| Syntax (EX Series Switches) | show system uptime <all-members> <local> <member <i>member-id</i> > |
| Syntax (QFX Series) | show system uptime <director-group <i>name</i> > <infrastructure <i>name</i> > <interconnect-device <i>name</i> > <node-group <i>name</i> > |
| Syntax (TX Matrix Router) | show system uptime <all-chassis all-lcc lcc <i>number</i> scc> |
| Syntax (TX Matrix Plus Router) | show system uptime <detail> <all-chassis all-lcc lcc <i>number</i> sfc <i>number</i> > |
| Syntax (MX Series Router) | show system uptime <all-members> <invoke-on> <local> <member <i>member-id</i> > |
| Release Information | Command introduced before Junos OS Release 7.4. Command introduced in Junos OS Release 9.0 for EX Series switches. sfc option introduced for the TX Matrix Plus router in JUNOS Release 9.6. Command introduced in Junos OS Release 11.1 for the QFX Series. Command introduced in Junos OS Release 14.1X53-D20 for the OCX Series. |
| Description | Display the current time and information about how long the router or switch, router or switch software, and routing protocols have been running. |



NOTE: Time values computed from differences in timestamps can vary due to the insertion or deletion of leap-seconds between them.

Options **none**—Show time since the system rebooted and processes started.

all-chassis—(TX Matrix routers and TX Matrix Plus routers only) (Optional) Show time since the system rebooted and processes started on all the routers in the chassis.

all-lcc—(TX Matrix routers and TX Matrix Plus routers only) (Optional) On a TX Matrix router, show time since the system rebooted and processes started for all T640 routers (or line-card chassis) connected to the TX Matrix router. On a TX Matrix Plus router, show time since the system rebooted and processes started for all connected T1600 or T4000 LCCs.

all-members—(EX4200 switches and MX Series routers only) (Optional) Show time since the system rebooted and processes started on all members of the Virtual Chassis configuration.

director-group *name*—(QFabric systems only) (Optional) Show time since the system rebooted and processes started on the Director group.

infrastructure *name*—(QFabric systems only) (Optional) Show time since the system rebooted and processes started on the fabric control Routing Engine and fabric manager Routing Engine.

interconnect-device *name*—(QFabric systems only) (Optional) Show time since the system rebooted and processes started on the Interconnect device.

invoke-on—(MX Series routers only) (Optional) Display the time since the system rebooted and processes started on the master Routing Engine, backup Routing Engine, or both, on a router with two Routing Engines.

lcc *number*—(TX Matrix routers and TX Matrix Plus routers only) (Optional) On a TX Matrix router, show time since the system rebooted and processes started for a specific T640 router that is connected to the TX Matrix router. On a TX Matrix Plus router, show time since the system rebooted and processes started for a specific router that is connected to the TX Matrix Plus router.

Replace *number* with the following values depending on the LCC configuration:

- 0 through 3, when T640 routers are connected to a TX Matrix router in a routing matrix.
- 0 through 3, when T1600 routers are connected to a TX Matrix Plus router in a routing matrix.
- 0 through 7, when T1600 routers are connected to a TX Matrix Plus router with 3D SIBs in a routing matrix.
- 0, 2, 4, or 6, when T4000 routers are connected to a TX Matrix Plus router with 3D SIBs in a routing matrix.

local—(EX4200 switches and MX Series routers only) (Optional) Show time since the system rebooted and processes started on the local Virtual Chassis member.

member *member-id*—(EX4200 switches and MX Series routers only) (Optional) Show time since the system rebooted and processes started on the specified member of the Virtual Chassis configuration. For EX4200 switches, replace ***member-id*** with a value from 0 through 9. For an MX Series Virtual Chassis, replace ***member-id*** with a value of 0 or 1.

node-group *name*—(QFabric systems only) (Optional) Show time since the system rebooted and processes started on the Node group.

scc—(TX Matrix routers only) (Optional) Show time since the system rebooted and processes started for the TX Matrix router (or switch-card chassis).

sfc *number*—(TX Matrix Plus routers only) (Optional) Show time since the system rebooted and processes started for the TX Matrix Plus router. Replace ***number*** with 0.

Additional Information By default, when you issue the **show system uptime** command on the master Routing Engine of a TX Matrix router or a TX Matrix Plus router, the command is broadcast to all the master Routing Engines of the LCCs connected to it in the routing matrix. Likewise, if you issue the same command on the backup Routing Engine of a TX Matrix or a TX Matrix Plus router, the command is broadcast to all backup Routing Engines of the LCCs that are connected to it in the routing matrix.

Required Privilege Level view

Related Documentation

- [10-Gigabit Ethernet LAN/WAN PIC with XFP \(T640 Router\)](#)
- [Routing Matrix with a TX Matrix Plus Router Solutions Page](#)

List of Sample Output

- [show system uptime on page 464](#)
- [show system uptime all-lcc \(TX Matrix Router\) on page 464](#)
- [show system uptime all-lcc \(TX Matrix Plus Router\) on page 464](#)
- [show system uptime \(EX Series\) on page 465](#)
- [show system uptime \(QFX Series\) on page 465](#)

Output Fields [Table 15 on page 463](#) describes the output fields for the **show system uptime** command. Output fields are listed in the approximate order in which they appear.

Table 15: show system uptime Output Fields

| Field Name | Field Description |
|---------------|---|
| Current time | Current system time in UTC. |
| Time Source | Reference time source that the system is locked to. |
| System booted | Date and time when the Routing Engine on the router or switch was last booted and how long it has been running. |

Table 15: show system uptime Output Fields (*continued*)

| Field Name | Field Description |
|--------------------------|---|
| Protocols started | Date and time when the routing protocols were last started and how long they have been running. |
| Last configured | Date and time when a configuration was last committed. Also shows the name of the user who issued the last commit command. |
| time and up | Current time, in the local time zone, and how long the router or switch has been operational. |
| users | Number of users logged in to the router or switch. |
| load averages | Load averages for the last 1 minute, 5 minutes, and 15 minutes. |

Sample Output

show system uptime

```

user@host> show system uptime
Current time:      1998-10-13 19:45:47 UTC
Time Source:      NTP CLOCK
System booted:    1998-10-12 20:51:41 UTC (22:54:06 ago)
Protocols started: 1998-10-13 19:33:45 UTC (00:12:02 ago)
Last configured:  1998-10-13 19:33:45 UTC (00:12:02 ago) by abc
12:45PM up 22:54, 2 users, load averages: 0.07, 0.02, 0.01

```

show system uptime all-lcc (TX Matrix Router)

```

user@host> show system uptime all-lcc
lcc0-re0:
-----
Current time: 2004-09-13 09:55:35 PDT
Time Source: LOCAL CLOCK
System booted: 2004-09-13 03:13:55 PDT (06:41:40 ago)
Last configured: 2004-09-13 03:17:48 PDT (06:37:47 ago) by root
9:55AM PDT up 6:42, 1 user, load averages: 0.02, 0.03, 0.00
lcc2-re0:
-----
Current time: 2004-09-13 09:55:35 PDT
Time Source: LOCAL CLOCK
System booted: 2004-09-12 03:23:43 PDT (1d 06:31 ago)
Last configured: 2004-09-13 03:05:36 PDT (06:49:59 ago) by root
9:55AM PDT up 1 day, 6:32, 1 user, load averages: 0.02, 0.01, 0.00

```

show system uptime all-lcc (TX Matrix Plus Router)

```

user@host> show system uptime all-lcc
sfc0-re0:
-----
Current time: 2009-05-25 00:24:30 PDT
Time Source: NTP CLOCK
System booted: 2009-05-24 06:39:33 PDT (17:44:57 ago)
Protocols started: 2009-05-24 06:40:30 PDT (17:44:00 ago)
Last configured: 2009-05-24 06:33:27 PDT (17:51:03 ago) by user1
12:24AM up 17:45, 2 users, load averages: 0.07, 0.05, 0.01

```


lcc0-re0:

```
-----
Current time: 2009-05-25 00:24:30 PDT
Time Source: NTP CLOCK
System booted: 2009-05-24 06:39:46 PDT (17:44:44 ago)
error: the routing subsystem is not running
Last configured: 2009-05-24 06:40:47 PDT (17:43:43 ago) by root
12:24AM up 17:45, 0 users, load averages: 0.00, 0.00, 0.00
```

lcc1-re0:

```
-----
Current time: 2009-05-25 00:24:30 PDT
Time Source: NTP CLOCK
System booted: 2009-05-24 06:39:38 PDT (17:44:52 ago)
error: the routing subsystem is not running
Last configured: 2009-05-24 06:40:18 PDT (17:44:12 ago) by root
12:24AM up 17:45, 0 users, load averages: 0.00, 0.00, 0.00
```

lcc2-re0:

```
-----
Current time: 2009-05-25 00:24:30 PDT
Time Source: NTP CLOCK
System booted: 2009-05-24 06:39:48 PDT (17:44:42 ago)
error: the routing subsystem is not running
Last configured: 2009-05-24 06:40:44 PDT (17:43:46 ago) by root
12:24AM up 17:45, 0 users, load averages: 0.00, 0.00, 0.00
```

lcc3-re0:

```
-----
Current time: 2009-05-25 00:24:30 PDT
Time Source: NTP CLOCK
System booted: 2009-05-24 06:39:44 PDT (17:44:46 ago)
error: the routing subsystem is not running
Last configured: 2009-05-24 06:40:08 PDT (17:44:22 ago) by root
12:24AM up 17:45, 0 users, load averages: 0.00, 0.00, 0.00
```

show system uptime (EX Series)

```
user@switch> show system uptime
Current time: 2014-03-12 16:39:56 UTC
Time Source: NTP CLOCK
System booted: 2014-03-12 14:58:05 UTC (01:41:51 ago)
Protocols started: 2014-03-12 14:59:48 UTC (01:40:08 ago)
Last configured: 2014-03-12 14:58:58 UTC (01:40:58 ago) by root
4:39PM up 1:42, 4 users, load averages: 0.02, 0.02, 0.00
```

show system uptime (QFX Series)

```
user@switch> show system uptime
Current time: 2010-08-27 03:12:30 PDT
Time Source: NTP CLOCK
System booted: 2010-08-13 17:11:54 PDT (1w6d 10:00 ago)
Protocols started: 2010-08-13 17:13:56 PDT (1w6d 09:58 ago)
Last configured: 2010-08-26 05:54:00 PDT (21:18:30 ago) by user
3:12AM up 13 days, 10:01, 3 users, load averages: 0.00, 0.00, 0.00
```

show version

| | |
|---|--|
| List of Syntax | Syntax on page 466 Syntax (EX Series Switches) on page 466 Syntax (TX Matrix Router) on page 466 Syntax (TX Matrix Plus Router) on page 466 Syntax (MX Series Router) on page 466 Syntax (QFX Series) on page 466 Syntax (ACX5048 and ACX5096 Routers) on page 466 |
| Syntax | <code>show version</code> <code><brief detail></code> |
| Syntax (EX Series Switches) | <code>show version</code> <code><all-members></code> <code><brief detail></code> <code><local></code> <code><member <i>member-id</i>></code> |
| Syntax (TX Matrix Router) | <code>show version</code> <code><brief detail></code> <code><all-chassis all-lcc lcc <i>number</i> scc></code> |
| Syntax (TX Matrix Plus Router) | <code>show version</code> <code><all-chassis all-lcc lcc <i>number</i> sfc <i>number</i>></code> <code><brief detail></code> |
| Syntax (MX Series Router) | <code>show version</code> <code><brief detail></code> <code><all-members></code> <code><local></code> <code><member <i>member-id</i>></code> |
| Syntax (QFX Series) | <code>show version</code> <code><brief detail></code> <code><component <i>component-name</i> all></code> |
| Syntax (ACX5048 and ACX5096 Routers) | <code>show version</code> <code><brief detail></code> |
| Release Information | Command introduced before Junos OS Release 7.4. Command introduced in Junos OS Release 9.0 for EX Series switches. sfc option introduced for the TX Matrix Plus router in Junos OS Release 9.6. Command introduced in Junos OS Release 11.1 for the QFX Series. Command introduced in Junos OS Release 15.1X54-D20 for ACX5048 and ACX5096 Routers. |

Description Display the hostname and version information about the software running on the router or switch.

Beginning in Junos OS Release 13.3, the **show version** command output includes the **Junos** field that displays the Junos OS version running on the device. This field provides a consistent means of identifying the Junos OS version, rather than extracting that information from the list of installed sub-packages.

Options **none**—Display standard information about the hostname and version of the software running on the router or switch.

brief | detail—(Optional) Display the specified level of output.

all-members—(EX4200 switches and MX Series routers only) (Optional) Display standard information about the hostname and version of the software running on all members of the Virtual Chassis configuration.

component all—(QFabric systems only) (Optional) Display the host name and version information about the software running on all the components on the QFabric system.

component *component-name*—(QFabric systems only) (Optional) Display the host name and version information about the software running on a specific QFabric system component. Replace *component-name* with the name of the QFabric system component. The *component-name* can be the name of a diagnostics Routing Engine, Director group, fabric control Routing Engine, fabric manager Routing Engine, Interconnect device, or Node group.

local—(EX4200 switches and MX Series routers only) (Optional) Display standard information about the hostname and version of the software running on the local Virtual Chassis member.

member *member-id*—(EX4200 switches and MX Series routers only) (Optional) Display standard information about the hostname and version of the software running on the specified member of the Virtual Chassis configuration. For EX4200 switches, replace *member-id* with a value from 0 through 9. For an MX Series Virtual Chassis, replace *member-id* with a value of 0 or 1.

scc—(TX Matrix routers only) (Optional) Display the hostname and version information about the software running on the TX Matrix router (or switch-card chassis).

lcc *number*—(TX Matrix routers and TX Matrix Plus routers only) (Optional) On a TX Matrix router, display the host name and version information about the software running on for a specified T640 router (line-card chassis or LCC) that is connected to the TX Matrix router. On a TX Matrix Plus router, display the host name and version information about the software running for a specified T1600 or T4000 router (LCC) that is connected to the TX Matrix Plus router.

Replace *number* with the following values depending on the LCC configuration:

- 0 through 3, when T640 routers are connected to a TX Matrix router in a routing matrix.
- 0 through 3, when T1600 routers are connected to a TX Matrix Plus router in a routing matrix.
- 0 through 7, when T1600 routers are connected to a TX Matrix Plus router with 3D SIBs in a routing matrix.
- 0, 2, 4, or 6, when T4000 routers are connected to a TX Matrix Plus router with 3D SIBs in a routing matrix.

sfc *number*—(TX Matrix Plus routers only) (Optional) Display the hostname and version information about the software running on the TX Matrix Plus router (or switch-fabric chassis). Replace *number* with 0.

Additional Information By default, when you issue the **show version** command on a TX Matrix or TX Matrix Plus master Routing Engine, the command is broadcast to all the T640 (in a routing matrix based on a TX Matrix router) or T1600 or T4000 (in a routing matrix based on a TX Matrix Plus router) master Routing Engines connected to it. Likewise, if you issue the same command on the TX Matrix or TX Matrix Plus backup Routing Engine, the command is broadcast to all the T640 (in a routing matrix based on a TX Matrix router) or T1600 or T4000 (in a routing matrix based on a TX Matrix Plus router) backup Routing Engines that are connected to it.

Required Privilege Level

view

List of Sample Output

[show version \(Devices Running Junos OS Release 13.3 and Later\) on page 469](#)
[show version on page 469](#)
[show version \(TX Matrix Plus Router\) on page 470](#)
[show version \(TX Matrix Plus Router with 3D SIBs\) on page 472](#)
[show version \(MX Series Router\) on page 476](#)
[show version \(QFX3500 Switch\) on page 476](#)
[show version \(QFabric System\) on page 476](#)
[show version component all \(QFabric System\) on page 477](#)
[show version \(ACX5048 Router\) on page 478](#)
[show version \(ACX5096 Router\) on page 479](#)

Sample Output

show version (Devices Running Junos OS Release 13.3 and Later)

The following output is from the MX240 Router and shows the **Junos** field introduced in Junos OS 13.3. Depending on the platform running Junos OS 13.3, you might see different installed sub-packages, but the **Junos** field is common across all platforms that run Junos OS 13.3 and later.

```
user@host > show version
Hostname: lab
Model: mx240
Junos: 13.3R1.4
JUNOS Base OS boot [13.3R1.4]
JUNOS Base OS Software Suite [13.3R1.4]
JUNOS Kernel Software Suite [13.3R1.4]
JUNOS Crypto Software Suite [13.3R1.4]
JUNOS Packet Forwarding Engine Support (M/T/EX Common) [13.3R1.4]
JUNOS Packet Forwarding Engine Support (MX Common) [13.3R1.4]
JUNOS Online Documentation [13.3R1.4]
JUNOS Services AACL Container package [13.3R1.4]
JUNOS Services Application Level Gateways [13.3R1.4]
JUNOS AppId Services [13.3R1.4]
JUNOS Border Gateway Function package [13.3R1.4]
JUNOS Services Captive Portal and Content Delivery Container package [13.3R1.4]
JUNOS Services HTTP Content Management package [13.3R1.4]
JUNOS IDP Services [13.3R1.4]
JUNOS Services Jflow Container package [13.3R1.4]
JUNOS Services LL-PDF Container package [13.3R1.4]
JUNOS Services MobileNext Software package [13.3R1.4]
JUNOS Services Mobile Subscriber Service Container package [13.3R1.4]
JUNOS Services NAT [13.3R1.4]
JUNOS Services PTSP Container package [13.3R1.4]
JUNOS Services RPM [13.3R1.4]
JUNOS Services Stateful Firewall [13.3R1.4]
JUNOS Voice Services Container package [13.3R1.4]
JUNOS Services Crypto [13.3R1.4]
JUNOS Services SSL [13.3R1.4]
JUNOS Services IPSec [13.3R1.4]
JUNOS platform Software Suite [13.3R1.4]
JUNOS Runtime Software Suite [13.3R1.4]
JUNOS Routing Software Suite [13.3R1.4]
JUNOS py-base-i386 [13.3R1.4]
```

show version

```
user@host> show version
Hostname: router1
Model: m20
JUNOS Base OS boot [7.2-20050312.0]
JUNOS Base OS Software Suite [7.2-20050312.0]
JUNOS Kernel Software Suite [7.2R1.7]
JUNOS Packet Forwarding Engine Support (M20/M40) [7.2R1.7]
JUNOS Routing Software Suite [7.2R1.7]
JUNOS Online Documentation [7.2R1.7]
JUNOS Crypto Software Suite [7.2R1.7]
```

```
{master}
```

```
user@host> show version psd 1
psd1-re0:
-----
Hostname: china
Model: t640
JUNOS Base OS boot [9.1I20080311_1959_builder]
JUNOS Base OS Software Suite [9.1-20080321.0]
JUNOS Kernel Software Suite [9.1-20080321.0]
JUNOS Crypto Software Suite [9.1-20080321.0]
JUNOS Packet Forwarding Engine Support (M/T Common) [9.1-20080321.0]
JUNOS Packet Forwarding Engine Support (T-series) [9.1-20080321.0]
JUNOS Online Documentation [9.1-20080321.0]
JUNOS Routing Software Suite [9.1-20080321.0]
labpkg [7.0]
```

show version (TX Matrix Plus Router)

```
user@host> show version
sfc0-re0:
-----
Hostname: host
Model: txp
JUNOS Base OS boot [12.3-20121019.0]
JUNOS Base OS Software Suite [12.3-20121019.0]
JUNOS Kernel Software Suite [12.3-20121019.0]
JUNOS Crypto Software Suite [12.3-20121019.0]
JUNOS Packet Forwarding Engine Support (M/T Common) [12.3-20121019.0]
JUNOS Packet Forwarding Engine Support (T-Series) [12.3-20121019.0]
JUNOS Online Documentation [12.3-20121019.0]
JUNOS Services AACL Container package [12.3-20121019.0]
JUNOS Services Application Level Gateways [12.3-20121019.0]
JUNOS AppId Services [12.3-20121019.0]
JUNOS Border Gateway Function package [12.3-20121019.0]
JUNOS Services Captive Portal and Content Delivery Container package
[12.3-20121019.0]
JUNOS Services HTTP Content Management package [12.3-20121019.0]
JUNOS IDP Services [12.3-20121019.0]
JUNOS Services LL-PDF Container package [12.3-20121019.0]
JUNOS Services NAT [12.3-20121019.0]
JUNOS Services PTSP Container package [12.3-20121019.0]
JUNOS Services RPM [12.3-20121019.0]
JUNOS Services Stateful Firewall [12.3-20121019.0]
JUNOS Voice Services Container package [12.3-20121019.0]
JUNOS Services Example Container package [12.3-20121019.0]
JUNOS Services Crypto [12.3-20121019.0]
JUNOS Services SSL [12.3-20121019.0]
JUNOS Services IPSec [12.3-20121019.0]
JUNOS Runtime Software Suite [12.3-20121019.0]
JUNOS Routing Software Suite [12.3-20121019.0]

lcc0-re0:
-----
Hostname: host1
Model: t1600
JUNOS Base OS boot [12.3-20121019.0]
JUNOS Base OS Software Suite [12.3-20121019.0]
JUNOS Kernel Software Suite [12.3-20121019.0]
JUNOS Crypto Software Suite [12.3-20121019.0]
JUNOS Packet Forwarding Engine Support (M/T Common) [12.3-20121019.0]
JUNOS Packet Forwarding Engine Support (T-Series) [12.3-20121019.0]
JUNOS Online Documentation [12.3-20121019.0]
```

```

JUNOS Services AACL Container package [12.3-20121019.0]
JUNOS Services Application Level Gateways [12.3-20121019.0]
JUNOS AppId Services [12.3-20121019.0]
JUNOS Border Gateway Function package [12.3-20121019.0]
JUNOS Services Captive Portal and Content Delivery Container package
[12.3-20121019.0]
JUNOS Services HTTP Content Management package [12.3-20121019.0]
JUNOS IDP Services [12.3-20121019.0]
JUNOS Services LL-PDF Container package [12.3-20121019.0]
JUNOS Services NAT [12.3-20121019.0]
JUNOS Services PTSP Container package [12.3-20121019.0]
JUNOS Services RPM [12.3-20121019.0]
JUNOS Services Stateful Firewall [12.3-20121019.0]
JUNOS Voice Services Container package [12.3-20121019.0]
JUNOS Services Example Container package [12.3-20121019.0]
JUNOS Services Crypto [12.3-20121019.0]
JUNOS Services SSL [12.3-20121019.0]
JUNOS Services IPSec [12.3-20121019.0]
JUNOS Runtime Software Suite [12.3-20121019.0]
JUNOS Routing Software Suite [12.3-20121019.0]

```

```
lcc1-re0:
```

```

-----
Hostname: host2
Model: t1600
JUNOS Base OS boot [12.3-20121019.0]
JUNOS Base OS Software Suite [12.3-20121019.0]
JUNOS Kernel Software Suite [12.3-20121019.0]
JUNOS Crypto Software Suite [12.3-20121019.0]
JUNOS Packet Forwarding Engine Support (M/T Common) [12.3-20121019.0]
JUNOS Packet Forwarding Engine Support (T-Series) [12.3-20121019.0]
JUNOS Online Documentation [12.3-20121019.0]
JUNOS Services AACL Container package [12.3-20121019.0]
JUNOS Services Application Level Gateways [12.3-20121019.0]
JUNOS AppId Services [12.3-20121019.0]
JUNOS Border Gateway Function package [12.3-20121019.0]
JUNOS Services Captive Portal and Content Delivery Container package
[12.3-20121019.0]
JUNOS Services HTTP Content Management package [12.3-20121019.0]
JUNOS IDP Services [12.3-20121019.0]
JUNOS Services LL-PDF Container package [12.3-20121019.0]
JUNOS Services NAT [12.3-20121019.0]
JUNOS Services PTSP Container package [12.3-20121019.0]
JUNOS Services RPM [12.3-20121019.0]
JUNOS Services Stateful Firewall [12.3-20121019.0]
JUNOS Voice Services Container package [12.3-20121019.0]
JUNOS Services Example Container package [12.3-20121019.0]
JUNOS Services Crypto [12.3-20121019.0]
JUNOS Services SSL [12.3-20121019.0]
JUNOS Services IPSec [12.3-20121019.0]
JUNOS Runtime Software Suite [12.3-20121019.0]
JUNOS Routing Software Suite [12.3-20121019.0]

```

```
lcc2-re0:
```

```

-----
Hostname: host3
Model: t1600
JUNOS Base OS boot [12.3-20121019.0]
JUNOS Base OS Software Suite [12.3-20121019.0]
JUNOS Kernel Software Suite [12.3-20121019.0]
JUNOS Crypto Software Suite [12.3-20121019.0]

```

```

JUNOS Packet Forwarding Engine Support (M/T Common) [12.3-20121019.0]
JUNOS Packet Forwarding Engine Support (T-Series) [12.3-20121019.0]
JUNOS Online Documentation [12.3-20121019.0]
JUNOS Services AACL Container package [12.3-20121019.0]
JUNOS Services Application Level Gateways [12.3-20121019.0]
JUNOS AppId Services [12.3-20121019.0]
JUNOS Border Gateway Function package [12.3-20121019.0]
JUNOS Services Captive Portal and Content Delivery Container package
[12.3-20121019.0]
JUNOS Services HTTP Content Management package [12.3-20121019.0]
JUNOS IDP Services [12.3-20121019.0]
JUNOS Services LL-PDF Container package [12.3-20121019.0]
JUNOS Services NAT [12.3-20121019.0]
JUNOS Services PTSP Container package [12.3-20121019.0]
JUNOS Services RPM [12.3-20121019.0]
JUNOS Services Stateful Firewall [12.3-20121019.0]
JUNOS Voice Services Container package [12.3-20121019.0]
JUNOS Services Example Container package [12.3-20121019.0]
JUNOS Services Crypto [12.3-20121019.0]
JUNOS Services SSL [12.3-20121019.0]
JUNOS Services IPSec [12.3-20121019.0]
JUNOS Runtime Software Suite [12.3-20121019.0]
JUNOS Routing Software Suite [12.3-20121019.0]

```

```
lcc3-re0:
```

```

-----
Hostname: host4
Model: t1600
JUNOS Base OS boot [12.3-20121019.0]
JUNOS Base OS Software Suite [12.3-20121019.0]
JUNOS Kernel Software Suite [12.3-20121019.0]
JUNOS Crypto Software Suite [12.3-20121019.0]
JUNOS Packet Forwarding Engine Support (M/T Common) [12.3-20121019.0]
JUNOS Packet Forwarding Engine Support (T-Series) [12.3-20121019.0]
JUNOS Online Documentation [12.3-20121019.0]
JUNOS Services AACL Container package [12.3-20121019.0]
JUNOS Services Application Level Gateways [12.3-20121019.0]
JUNOS AppId Services [12.3-20121019.0]
JUNOS Border Gateway Function package [12.3-20121019.0]
JUNOS Services Captive Portal and Content Delivery Container package
[12.3-20121019.0]
JUNOS Services HTTP Content Management package [12.3-20121019.0]
JUNOS IDP Services [12.3-20121019.0]
JUNOS Services LL-PDF Container package [12.3-20121019.0]
JUNOS Services NAT [12.3-20121019.0]
JUNOS Services PTSP Container package [12.3-20121019.0]
JUNOS Services RPM [12.3-20121019.0]
JUNOS Services Stateful Firewall [12.3-20121019.0]
JUNOS Voice Services Container package [12.3-20121019.0]
JUNOS Services Example Container package [12.3-20121019.0]
JUNOS Services Crypto [12.3-20121019.0]
JUNOS Services SSL [12.3-20121019.0]
JUNOS Services IPSec [12.3-20121019.0]
JUNOS Runtime Software Suite [12.3-20121019.0]
JUNOS Routing Software Suite [12.3-20121019.0]

```

show version (TX Matrix Plus Router with 3D SIBs)

```

user@host>show version
sfc0-re0:

```



```

Hostname: sfc0
Model: txp
JUNOS Base OS boot [13.1-20130306.0]
JUNOS Base OS Software Suite [13.1-20130306.0]
JUNOS Kernel Software Suite [13.1-20130306.0]
JUNOS Crypto Software Suite [13.1-20130306.0]
JUNOS Packet Forwarding Engine Support (M/T Common) [13.1-20130306.0]
JUNOS Packet Forwarding Engine Support (T-Series) [13.1-20130306.0]
JUNOS Online Documentation [13.1-20130306.0]
JUNOS Services ACL Container package [13.1-20130306.0]
JUNOS Services Application Level Gateways [13.1-20130306.0]
JUNOS AppId Services [13.1-20130306.0]
JUNOS Border Gateway Function package [13.1-20130306.0]
JUNOS Services Captive Portal and Content Delivery Container package
[13.1-20130306.0]
JUNOS Services HTTP Content Management package [13.1-20130306.0]
JUNOS IDP Services [13.1-20130306.0]
JUNOS Services Jflow Container package [13.1-20130306.0]
JUNOS Services LL-PDF Container package [13.1-20130306.0]
JUNOS Services MobileNext Software package [13.1-20130306.0]
JUNOS Services Mobile Subscriber Service Container package [13.1-20130306.0]
JUNOS Services NAT [13.1-20130306.0]
JUNOS Services PTSP Container package [13.1-20130306.0]
JUNOS Services RPM [13.1-20130306.0]
JUNOS Services Stateful Firewall [13.1-20130306.0]
JUNOS Voice Services Container package [13.1-20130306.0]
JUNOS Services Example Container package [13.1-20130306.0]
JUNOS Services Crypto [13.1-20130306.0]
JUNOS Services SSL [13.1-20130306.0]
JUNOS Services IPSec [13.1-20130306.0]
JUNOS Runtime Software Suite [13.1-20130306.0]
JUNOS Routing Software Suite [13.1-20130306.0]

```

```
lcc0-re0:
```

```

-----
Hostname: lcc0
Model: t4000
JUNOS Base OS boot [13.1-20130306.0]
JUNOS Base OS Software Suite [13.1-20130306.0]
JUNOS Kernel Software Suite [13.1-20130306.0]
JUNOS Crypto Software Suite [13.1-20130306.0]
JUNOS Packet Forwarding Engine Support (M/T Common) [13.1-20130306.0]
JUNOS Packet Forwarding Engine Support (T-Series) [13.1-20130306.0]
JUNOS Online Documentation [13.1-20130306.0]
JUNOS Services ACL Container package [13.1-20130306.0]
JUNOS Services Application Level Gateways [13.1-20130306.0]
JUNOS AppId Services [13.1-20130306.0]
JUNOS Border Gateway Function package [13.1-20130306.0]
JUNOS Services Captive Portal and Content Delivery Container package
[13.1-20130306.0]
JUNOS Services HTTP Content Management package [13.1-20130306.0]
JUNOS IDP Services [13.1-20130306.0]
JUNOS Services Jflow Container package [13.1-20130306.0]
JUNOS Services LL-PDF Container package [13.1-20130306.0]
JUNOS Services MobileNext Software package [13.1-20130306.0]
JUNOS Services Mobile Subscriber Service Container package [13.1-20130306.0]
JUNOS Services NAT [13.1-20130306.0]
JUNOS Services PTSP Container package [13.1-20130306.0]
JUNOS Services RPM [13.1-20130306.0]
JUNOS Services Stateful Firewall [13.1-20130306.0]
JUNOS Voice Services Container package [13.1-20130306.0]

```

```
JUNOS Services Example Container package [13.1-20130306.0]
JUNOS Services Crypto [13.1-20130306.0]
JUNOS Services SSL [13.1-20130306.0]
JUNOS Services IPSec [13.1-20130306.0]
JUNOS Runtime Software Suite [13.1-20130306.0]
JUNOS Routing Software Suite [13.1-20130306.0]
```

lcc2-re0:

```
-----
Hostname: lcc2
Model: t4000
JUNOS Base OS boot [13.1-20130306.0]
JUNOS Base OS Software Suite [13.1-20130306.0]
JUNOS Kernel Software Suite [13.1-20130306.0]
JUNOS Crypto Software Suite [13.1-20130306.0]
JUNOS Packet Forwarding Engine Support (M/T Common) [13.1-20130306.0]
JUNOS Packet Forwarding Engine Support (T-Series) [13.1-20130306.0]
JUNOS Online Documentation [13.1-20130306.0]
JUNOS Services ACL Container package [13.1-20130306.0]
JUNOS Services Application Level Gateways [13.1-20130306.0]
JUNOS AppId Services [13.1-20130306.0]
JUNOS Border Gateway Function package [13.1-20130306.0]
JUNOS Services Captive Portal and Content Delivery Container package
[13.1-20130306.0]
JUNOS Services HTTP Content Management package [13.1-20130306.0]
JUNOS IDP Services [13.1-20130306.0]
JUNOS Services Jflow Container package [13.1-20130306.0]
JUNOS Services LL-PDF Container package [13.1-20130306.0]
JUNOS Services MobileNext Software package [13.1-20130306.0]
JUNOS Services Mobile Subscriber Service Container package [13.1-20130306.0]
JUNOS Services NAT [13.1-20130306.0]
JUNOS Services PTSP Container package [13.1-20130306.0]
JUNOS Services RPM [13.1-20130306.0]
JUNOS Services Stateful Firewall [13.1-20130306.0]
JUNOS Voice Services Container package [13.1-20130306.0]
JUNOS Services Example Container package [13.1-20130306.0]
JUNOS Services Crypto [13.1-20130306.0]
JUNOS Services SSL [13.1-20130306.0]
JUNOS Services IPSec [13.1-20130306.0]
JUNOS Runtime Software Suite [13.1-20130306.0]
JUNOS Routing Software Suite [13.1-20130306.0]
```

lcc4-re0:

```
-----
Hostname: lcc4
Model: t4000
JUNOS Base OS boot [13.1-20130306.0]
JUNOS Base OS Software Suite [13.1-20130306.0]
JUNOS Kernel Software Suite [13.1-20130306.0]
JUNOS Crypto Software Suite [13.1-20130306.0]
JUNOS Packet Forwarding Engine Support (M/T Common) [13.1-20130306.0]
JUNOS Packet Forwarding Engine Support (T-Series) [13.1-20130306.0]
JUNOS Online Documentation [13.1-20130306.0]
JUNOS Services ACL Container package [13.1-20130306.0]
JUNOS Services Application Level Gateways [13.1-20130306.0]
JUNOS AppId Services [13.1-20130306.0]
JUNOS Border Gateway Function package [13.1-20130306.0]
JUNOS Services Captive Portal and Content Delivery Container package
[13.1-20130306.0]
JUNOS Services HTTP Content Management package [13.1-20130306.0]
```

```

JUNOS IDP Services [13.1-20130306.0]
JUNOS Services Jflow Container package [13.1-20130306.0]
JUNOS Services LL-PDF Container package [13.1-20130306.0]
JUNOS Services MobileNext Software package [13.1-20130306.0]
JUNOS Services Mobile Subscriber Service Container package [13.1-20130306.0]
JUNOS Services NAT [13.1-20130306.0]
JUNOS Services PTSP Container package [13.1-20130306.0]
JUNOS Services RPM [13.1-20130306.0]
JUNOS Services Stateful Firewall [13.1-20130306.0]
JUNOS Voice Services Container package [13.1-20130306.0]
JUNOS Services Example Container package [13.1-20130306.0]
JUNOS Services Crypto [13.1-20130306.0]
JUNOS Services SSL [13.1-20130306.0]
JUNOS Services IPSec [13.1-20130306.0]
JUNOS Runtime Software Suite [13.1-20130306.0]
JUNOS Routing Software Suite [13.1-20130306.0]

```

```
lcc6-re0:
```

```

-----
Hostname: lcc6
Model: t1600
JUNOS Base OS boot [13.1-20130306.0]
JUNOS Base OS Software Suite [13.1-20130306.0]
JUNOS Kernel Software Suite [13.1-20130306.0]
JUNOS Crypto Software Suite [13.1-20130306.0]
JUNOS Packet Forwarding Engine Support (M/T Common) [13.1-20130306.0]
JUNOS Packet Forwarding Engine Support (T-Series) [13.1-20130306.0]
JUNOS Online Documentation [13.1-20130306.0]
JUNOS Services ACL Container package [13.1-20130306.0]
JUNOS Services Application Level Gateways [13.1-20130306.0]
JUNOS AppId Services [13.1-20130306.0]
JUNOS Border Gateway Function package [13.1-20130306.0]
JUNOS Services Captive Portal and Content Delivery Container package
[13.1-20130306.0]
JUNOS Services HTTP Content Management package [13.1-20130306.0]
JUNOS IDP Services [13.1-20130306.0]
JUNOS Services Jflow Container package [13.1-20130306.0]
JUNOS Services LL-PDF Container package [13.1-20130306.0]
JUNOS Services MobileNext Software package [13.1-20130306.0]
JUNOS Services Mobile Subscriber Service Container package [13.1-20130306.0]
JUNOS Services NAT [13.1-20130306.0]
JUNOS Services PTSP Container package [13.1-20130306.0]
JUNOS Services RPM [13.1-20130306.0]
JUNOS Services Stateful Firewall [13.1-20130306.0]
JUNOS Voice Services Container package [13.1-20130306.0]
JUNOS Services Example Container package [13.1-20130306.0]
JUNOS Services Crypto [13.1-20130306.0]
JUNOS Services SSL [13.1-20130306.0]
JUNOS Services IPSec [13.1-20130306.0]
JUNOS Runtime Software Suite [13.1-20130306.0]
JUNOS Routing Software Suite [13.1-20130306.0]

```

```
lcc7-re0:
```

```

-----
Hostname: lcc7
Model: t1600
JUNOS Base OS boot [13.1-20130306.0]
JUNOS Base OS Software Suite [13.1-20130306.0]
JUNOS Kernel Software Suite [13.1-20130306.0]
JUNOS Crypto Software Suite [13.1-20130306.0]

```

```
JUNOS Packet Forwarding Engine Support (M/T Common) [13.1-20130306.0]
JUNOS Packet Forwarding Engine Support (T-Series) [13.1-20130306.0]
JUNOS Online Documentation [13.1-20130306.0]
JUNOS Services AACL Container package [13.1-20130306.0]
JUNOS Services Application Level Gateways [13.1-20130306.0]
JUNOS AppId Services [13.1-20130306.0]
JUNOS Border Gateway Function package [13.1-20130306.0]
JUNOS Services Captive Portal and Content Delivery Container package
[13.1-20130306.0]
JUNOS Services HTTP Content Management package [13.1-20130306.0]
JUNOS IDP Services [13.1-20130306.0]
JUNOS Services Jflow Container package [13.1-20130306.0]
JUNOS Services LL-PDF Container package [13.1-20130306.0]
JUNOS Services MobileNext Software package [13.1-20130306.0]
JUNOS Services Mobile Subscriber Service Container package [13.1-20130306.0]
JUNOS Services NAT [13.1-20130306.0]
JUNOS Services PTSP Container package [13.1-20130306.0]
JUNOS Services RPM [13.1-20130306.0]
JUNOS Services Stateful Firewall [13.1-20130306.0]
JUNOS Voice Services Container package [13.1-20130306.0]
JUNOS Services Example Container package [13.1-20130306.0]
JUNOS Services Crypto [13.1-20130306.0]
JUNOS Services SSL [13.1-20130306.0]
JUNOS Services IPSec [13.1-20130306.0]
JUNOS Runtime Software Suite [13.1-20130306.0]
JUNOS Routing Software Suite [13.1-20130306.0]
```

show version (MX Series Router)

```
user@host5> show version
Hostname: host5
Model: mx80
JUNOS Base OS boot [11.3-20110717.0]
JUNOS Base OS Software Suite [11.3-20110717.0]
JUNOS Kernel Software Suite [11.3-20110717.0]
JUNOS Crypto Software Suite [11.3-20110717.0]
JUNOS Packet Forwarding Engine Support (MX80) [11.3-20110717.0]
JUNOS Online Documentation [11.3-20110717.0]
JUNOS Routing Software Suite [11.3-20110717.0]
```

show version (QFX3500 Switch)

```
user@switch> show version
Hostname: switch
Model: qfx_s3500
JUNOS Base OS boot [11.1R1]
JUNOS Base OS Software Suite [11.1R1]
JUNOS Kernel Software Suite [11.1R1]
JUNOS Crypto Software Suite [11.1R1]
JUNOS Online Documentation [11.1R1]
JUNOS Enterprise Software Suite [11.1R1]
JUNOS Packet Forwarding Engine Support (QFX) [11.1R1]
JUNOS Routing Software Suite [11.1R1]
```

show version (QFabric System)

```
user@qfabric> show version
Hostname: qfabric
Model: qfx3000-g
```

```

Serial Number: qfsn-0123456789
QFabric System ID: f158527a-f99e-11e0-9fbd-00e081c57cda
JUNOS Base Version [12.2I20111018_0215_dc-builder]

```

show version component all (QFabric System)

```

user@switch> show version component all
dg1:
-
Hostname: qfabric
Model: qfx3100
JUNOS Base Version [11.3R1.6]

dg0:
-
Hostname: qfabric
Model: qfx3100
JUNOS Base Version [11.3R1.6]

NW-NG-0:
-
Hostname: qfabric
Model: qfx-jvre
JUNOS Base OS boot [11.3R1.6]
JUNOS Base OS Software Suite [11.3R1.6]
JUNOS Kernel Software Suite [11.3R1.6]
JUNOS Crypto Software Suite [11.3R1.6]
JUNOS Online Documentation [11.3R1.6]
JUNOS Enterprise Software Suite [11.3R1.6]
JUNOS Packet Forwarding Engine Support (QFX RE) [11.3R1.6]
JUNOS Routing Software Suite [11.3R1.6]

FC-0:
-
Hostname: qfabric
Model: qfx-jvre
JUNOS Base OS boot [11.3R1.6]
JUNOS Base OS Software Suite [11.3R1.6]
JUNOS Kernel Software Suite [11.3R1.6]
JUNOS Crypto Software Suite [11.3R1.6]
JUNOS Online Documentation [11.3R1.6]
JUNOS Enterprise Software Suite [11.3R1.6]
JUNOS Packet Forwarding Engine Support (QFX RE) [11.3R1.6]
JUNOS Routing Software Suite [11.3R1.6]

FC-1:
Hostname: qfabric
Model: qfx-jvre
JUNOS Base OS boot [11.3R1.6]
JUNOS Base OS Software Suite [11.3R1.6]
JUNOS Kernel Software Suite [11.3R1.6]
JUNOS Crypto Software Suite [11.3R1.6]
JUNOS Online Documentation [11.3R1.6]
JUNOS Enterprise Software Suite [11.3R1.6]
JUNOS Packet Forwarding Engine Support (QFX RE) [11.3R1.6]
JUNOS Routing Software Suite [11.3R1.6]

DRE-0:
-
Hostname: dre-0
Model: qfx-jvre

```

```
JUNOS Base OS boot [11.3R1.6]
JUNOS Base OS Software Suite [11.3R1.6]
JUNOS Kernel Software Suite [11.3R1.6]
JUNOS Crypto Software Suite [11.3R1.6]
JUNOS Online Documentation [11.3R1.6]
JUNOS Enterprise Software Suite [11.3R1.6]
JUNOS Packet Forwarding Engine Support (QFX RE) [11.3R1.6]
JUNOS Routing Software Suite [11.3R1.6]
```

```
FM-0:
```

```
-
Hostname: qfabric
Model: qfx-jvre
JUNOS Base OS boot [11.3R1.6]
JUNOS Base OS Software Suite [11.3R1.6]
JUNOS Kernel Software Suite [11.3R1.6]
JUNOS Crypto Software Suite [11.3R1.6]
JUNOS Online Documentation [11.3R1.6]
JUNOS Enterprise Software Suite [11.3R1.6]
JUNOS Packet Forwarding Engine Support (QFX RE) [11.3R1.6]
JUNOS Routing Software Suite [11.3R1.6]
```

```
nodedevice1:
```

```
-
Hostname: qfabric
Model: QFX3500
JUNOS Base OS boot [11.3R1.6]
JUNOS Base OS Software Suite [11.3R1.6]
JUNOS Kernel Software Suite [11.3R1.6]
JUNOS Crypto Software Suite [11.3R1.6]
JUNOS Online Documentation [11.3R1.6]
JUNOS Enterprise Software Suite [11.3R1.6]
JUNOS Packet Forwarding Engine Support (QFX RE) [11.3R1.6]
JUNOS Routing Software Suite [11.3R1.6]
```

```
interconnectdevice1:
```

```
-
Hostname: qfabric
Model: QFX3108
JUNOS Base OS boot [11.3R1.6]
JUNOS Base OS Software Suite [11.3R1.6]
JUNOS Kernel Software Suite [11.3R1.6]
JUNOS Crypto Software Suite [11.3R1.6]
JUNOS Online Documentation [11.3R1.6]
JUNOS Enterprise Software Suite [11.3R1.6]
JUNOS Packet Forwarding Engine Support (QFX RE) [11.3R1.6]
JUNOS Routing Software Suite [11.3R1.6]
warning: from interconnectdevice0: Disconnected
```

show version (ACX5048 Router)

```
user@host> show version
fpc0:
Hostname: acx5k11-ac
Model: acx5048
Junos: 15.1X54-D20.3
JUNOS Base OS boot [15.1X54-D20.3]
JUNOS Online Documentation [15.1X54-D20.3]
JUNOS Crypto Software Suite [15.1X54-D20.3]
JUNOS Base OS Software Suite [15.1X54-D20.3]
JUNOS Kernel Software Suite [15.1X54-D20.3]
```

```
JUNOS Packet Forwarding Engine Support (acx5k) [15.1X54-D20.3]
JUNOS Enterprise Software Suite [15.1X54-D20.3]
JUNOS Routing Software Suite [15.1X54-D20.3]
JUNOS py-base-i386 [15.1X54-D20.3]
JUNOS Host Software [15.1X54-D20.3]
```

show version (ACX5096 Router)

```
user@host> show version
fpc0:
Hostname: acx5k13-ac
Model: acx5096
Junos: 15.1X54-D20.3
JUNOS Base OS boot [15.1X54-D20.3]
JUNOS Online Documentation [15.1X54-D20.3]
JUNOS Crypto Software Suite [15.1X54-D20.3]
JUNOS Base OS Software Suite [15.1X54-D20.3]
JUNOS Kernel Software Suite [15.1X54-D20.3]
JUNOS Packet Forwarding Engine Support (acx5k) [15.1X54-D20.3]
JUNOS Enterprise Software Suite [15.1X54-D20.3]
JUNOS Routing Software Suite [15.1X54-D20.3]
JUNOS py-base-i386 [15.1X54-D20.3]
JUNOS Host Software [15.1X54-D20.3]
```

