

**IDENTIFICATION OF VOLATILE
AND NON-VOLATILE STORAGE
AND
SANITIZATION OF SYSTEM
COMPONENTS**

**JUNIPER NETWORKS
QFX5120-32C**

**REVISION 1.0
January 11, 2018**

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1 INTRODUCTION

1.1 Purpose

The purpose of this document is to provide direction to identify and remove all non-volatile (NV) storage from the Juniper Networks QFX5120-32C platform. Non-Volatile (NV) storage is a system memory that can store user data information and system configuration data even when system not powered. Volatile (V) storage is a system memory that only retains data or its contents while system powered but when system powered off or interrupted, its data or contents are immediately lost.

1.2 Scope

This document only addresses the QFX5120-32C platform. While other platforms offered by Juniper Networks may contain similar hardware components, this document only applies to these devices. Furthermore, this document only provides direction for the identification and removal of NV storage components. It does not address destruction procedures for those components. As all the NV storage components used in the QFX5120-32C are commercial off-the-shelf (COTS) components, directions for destruction of those components are left to the governing Department, Agency, or Office.

2 EQUIPMENT OVERVIEW

2.1 Identification of Chassis

QFX5120-32C is a 1RU top of the rack switch provided scalable connectivity for Cloud service providers and Enterprise Data centers. The switches run under the JUNOS software, which provides Layer 3 switching, routing, and security services. The same JUNOS code base that runs on QFX5120-32C switch also runs on all Juniper Networks products.

QFX5120-32C has 32 QSFP28 (100G) + 2 SFPP (10G) ports. Its configuration is the single PFE provides up to 3.2Tbps bandwidth. QFX5120-32C is designed to fit in a standard 19" rack.

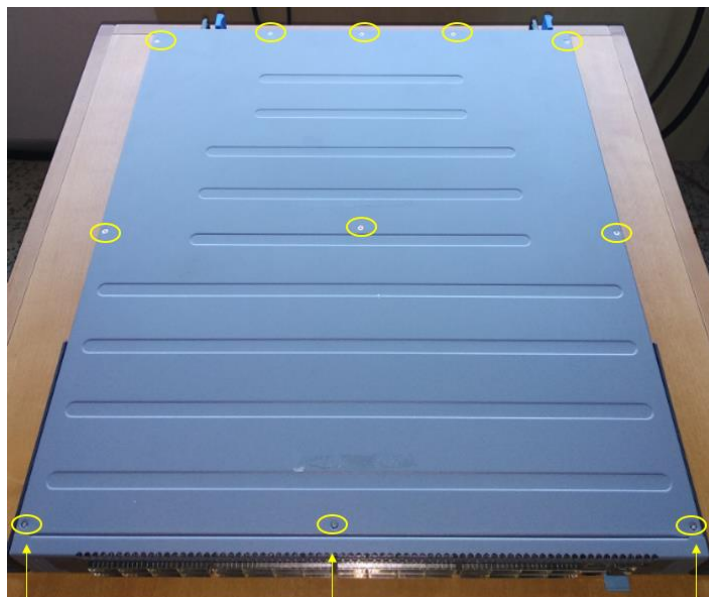


Figure 2-1: QFX5120-32C

2.2 Description of Field Replaceable Units (FRU)

The power supply, fan tray, and transceivers are hot-swappable. You can remove and replace them without powering off the system or disrupting system functions.

None of these components contain NV RAM. All NV RAM is either soldered or installed onto the system board.

3 POWER DOWN AND REMOVAL OF NON-VOLATILE STORAGE

To ensure that no user data or system configurations remain resident on a QFX5120-32C platform, the following steps must be performed:

1. Power must be removed from the system to clear all volatile storage
2. The SATA SSD module must be removed from the system board sockets
3. The BIOS FLASH components must be removed from the system board

A detailed process is included in the following sections.

3.1 System Power Down

Power down the system by removing any connected power cords from power supply.

3.2 Disassembly of the QFX5120-32C Chassis and Identification of NV storage

The QFX5120-32C does contain NV storages that is replaceable as well as it is soldered to the system board. To access the memory for removal, refer to the following steps:

1. Remove the power supplies from the system.
2. Remove the ear-mounts on both left and right side of the chassis if any.



Figure 3-1: Rear side

3. Remove all the screws from the top of the system (figure 3-2)



Figure 3-2: Top screws

4. Slide and lift to remove the Top cover.



Figure 3-3: Slide Top Cover

5. Remove power supplies from rear of chassis. Fan modules are not required to remove the unless it is needed (figure 3-4)
 - a. Move latch towards PSU Handle and Pull PSU out of Chassis.



Figure 3-4: PSU FRUs, FAN FRUs

Main board, CPU board and fan board (figure 3-5)

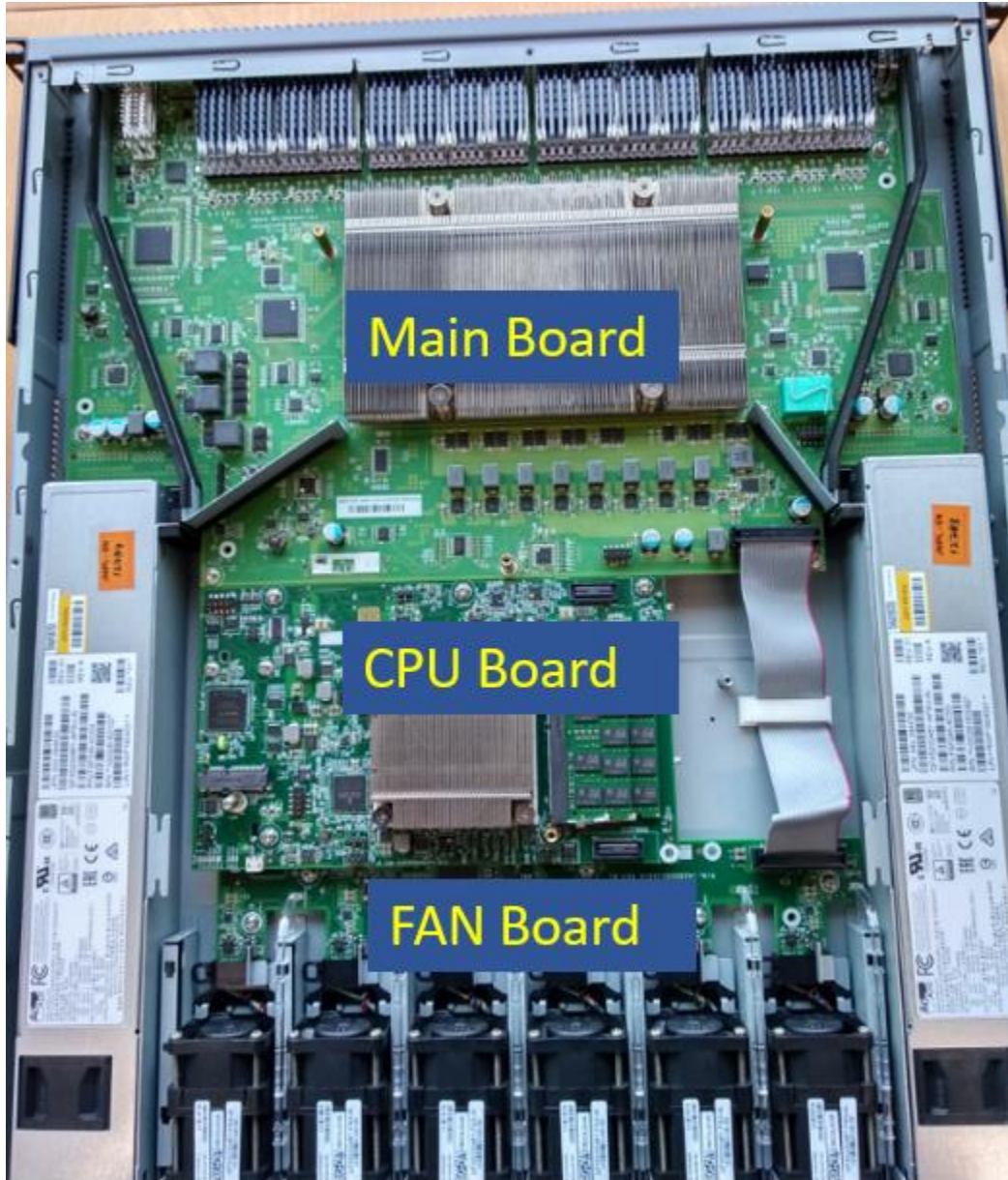


Figure 3-5: Open Chassis

6. Remove screws on CPU board highlighted in yellow (figure 3-6)

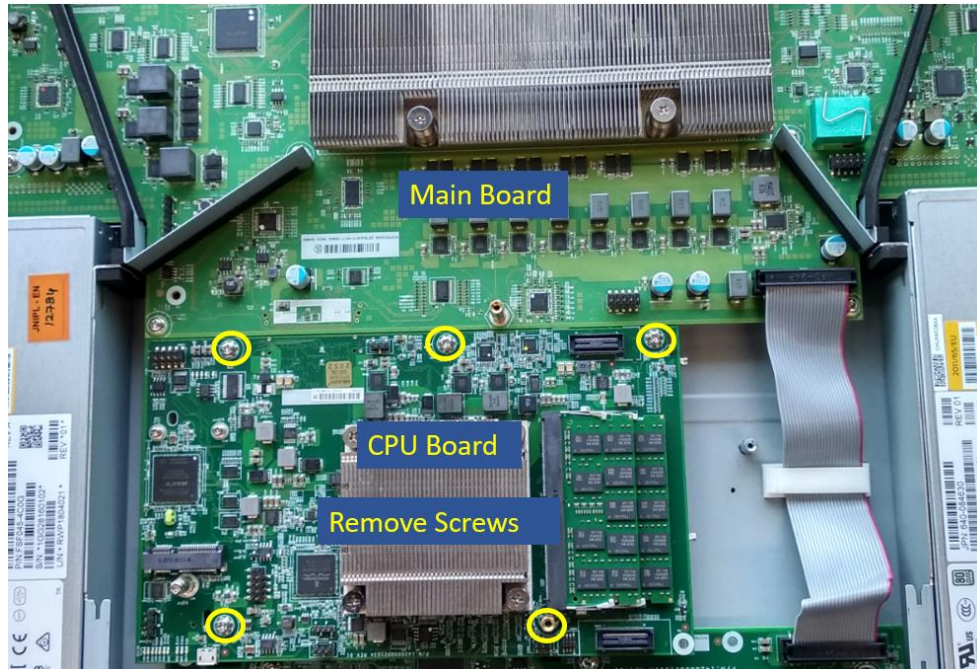


Figure 3-6: CPU Board Removal

7. Slide backwards towards fan FRU's to disengage from connector. Lift and remove CPU board (figure 3-7)

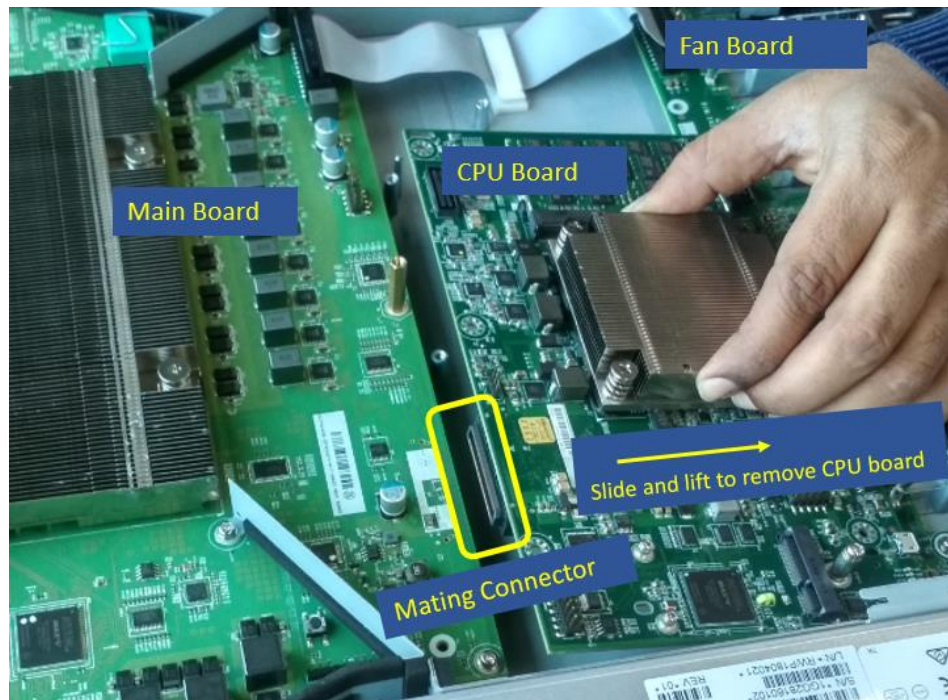


Figure 3-7: CPU Board Removal

8. Locate NV storage (figure 3-8 and 3-9).

CPU board top view

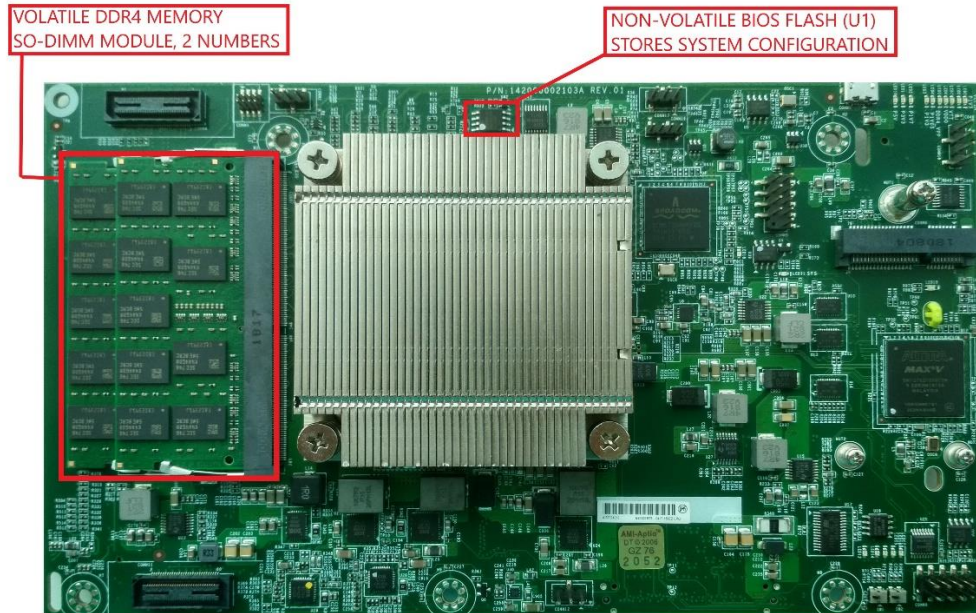


Figure 3-8: Locate NV and volatile storage (BIOS Flash and DDR)

CPU board bottom view

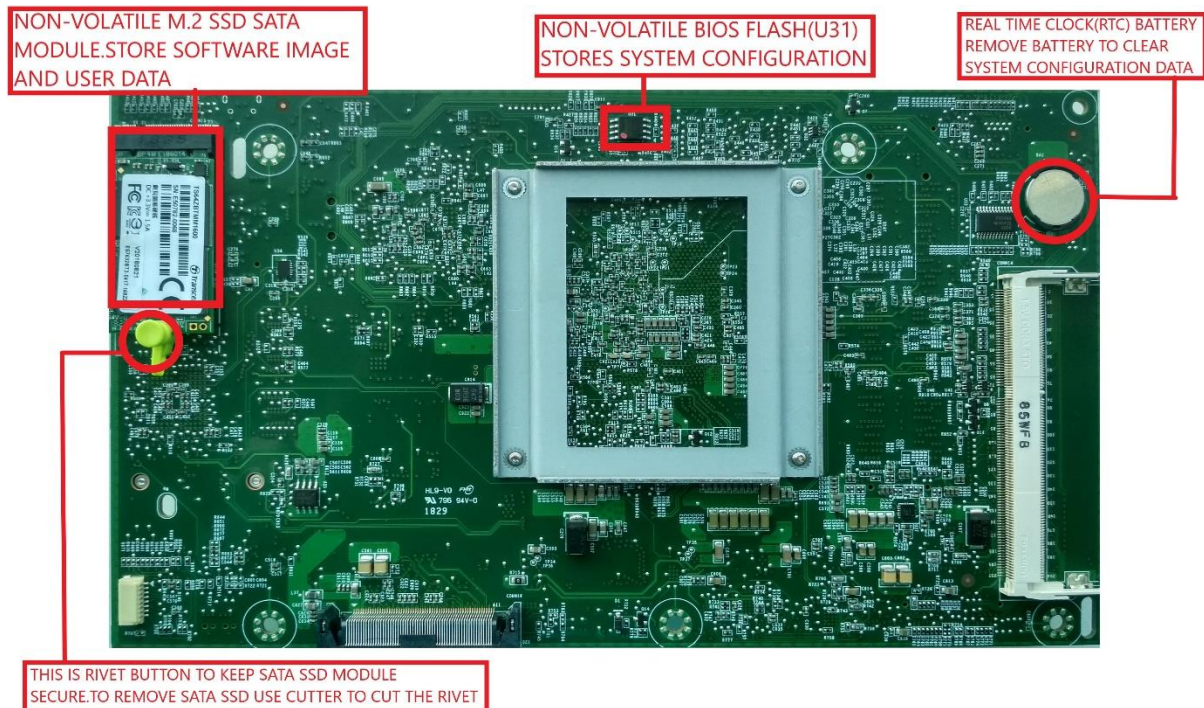


Figure 3-9: Locate NV storage (SSD & BIOS FLASH) and RTC battery

3.3 Removal of the SATA SSD and BIOS FLASH from the System Board

Once the NV storages has been located, follow the instructions below.

- a. Utilize a wire or metal cutter or other means to cut the rivet button and unplug the SATA SSD Module from its socket.

NOTE : Before removal, ensure J-TAC and the appropriate account team has been notified of your intentions.