

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

## **JUNIPER NETWORKS EX2300-C**

**REVISION 1.0  
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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 EX2300-C platform.

NonVolatile (NV) storage is a system memory that can store user data information and system configuration data even when system not powered. Volative (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 EX2300-C 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 of the NV storage components used in the EX2300-C 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**

EX2300-C is mid-end 1G switch for high density wiring closet deployments. As a secondary use case, EX2300-C can also be used as an entry level 1G ToR for Data Center deployments. The switches run under the JUNOS software, which provides Layer 2 and Layer 3 switching services. The same JUNOS code base that runs on EX2300-C switch also runs on all Juniper Networks products.

EX2300-C support 24/48 port 10/100/1000BASE-T Ethernet ports (access ports) with and without PoE, 4 SFP+ based 10Gb/s (10GbE) uplink ports and 2 QSFP based 40Gb/s Ports. EX2300-C is designed to fit in a standard 19" rack.



**Figure 2-1: EX2300-C**

## **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**

In order to ensure that no user data or system configurations remain resident on a EX2300-C platform, the following steps must be performed:

1. Power must be removed from the system to clear all volatile storage
2. The NAND Flash modules must be removed from the system board
3. The SPI Flash components must be removed from the system board

A detailed process is included in the following sections.

### **3.1 System Power Down**

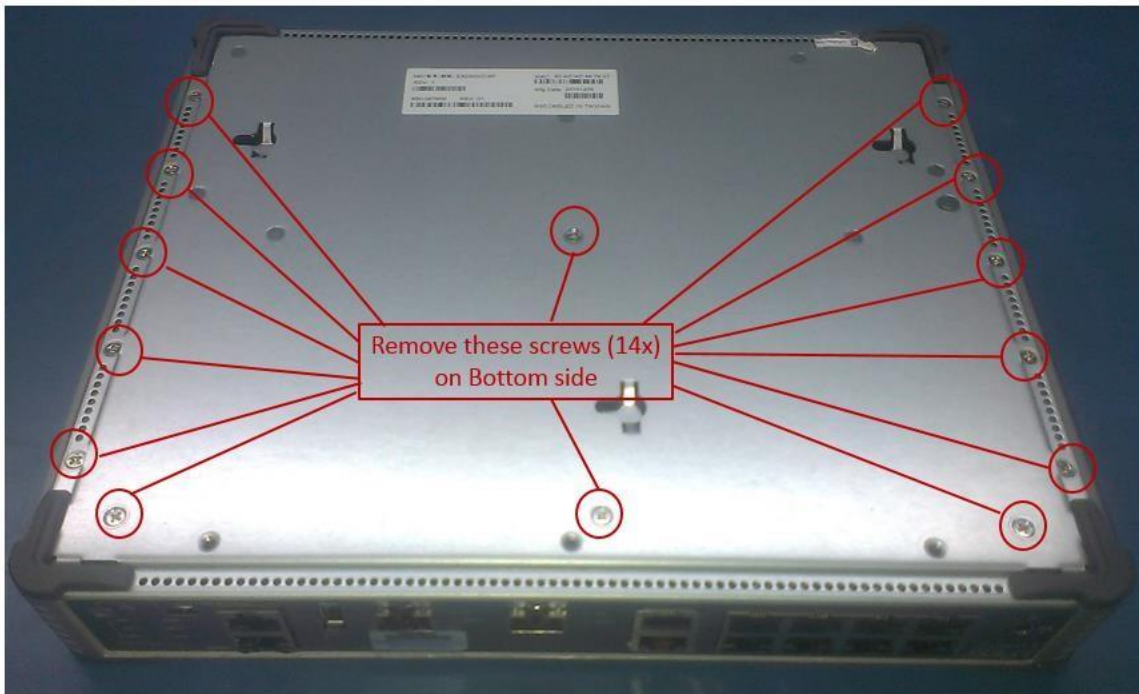
Power down the system by removing any connected power cords from power supply.

### **3.2 Disassembly of the EX2300-C Chassis and Identification of NV storage**

All NV RAM on EX2300-C are soldered to the system board. In order to access the memory for removal, refer to the following steps:

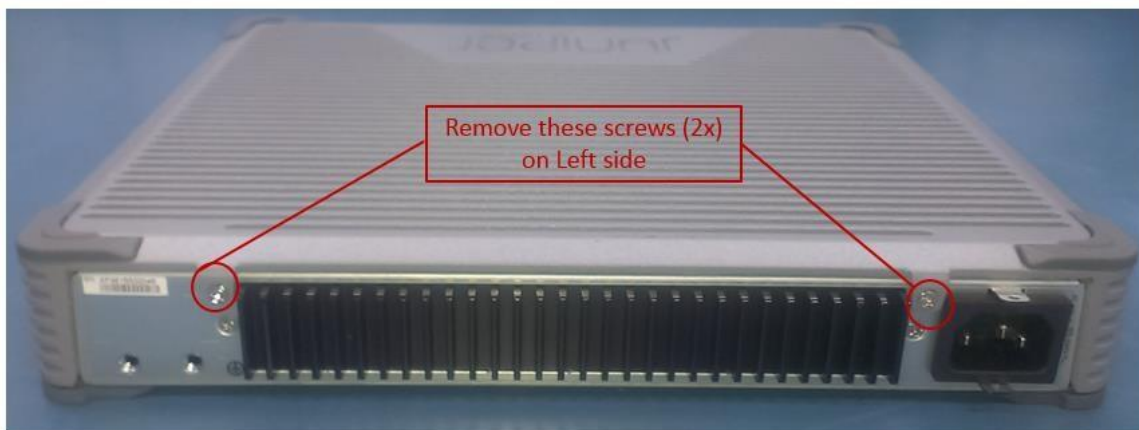
1. Remove the ear-mounts on both left and right side of the chassis if any.
2. Remove the cable arm attached on the bottom side of chassis if any

3. Remove fourteen(14x) screws from the bottom of the system (Figure 3-1)



**Figure 3-1: Bottom side screws**

4. Remove two(2x) screws from left side of chassis (Figure 3-2)



**Figure 3-2: Rear side screws**

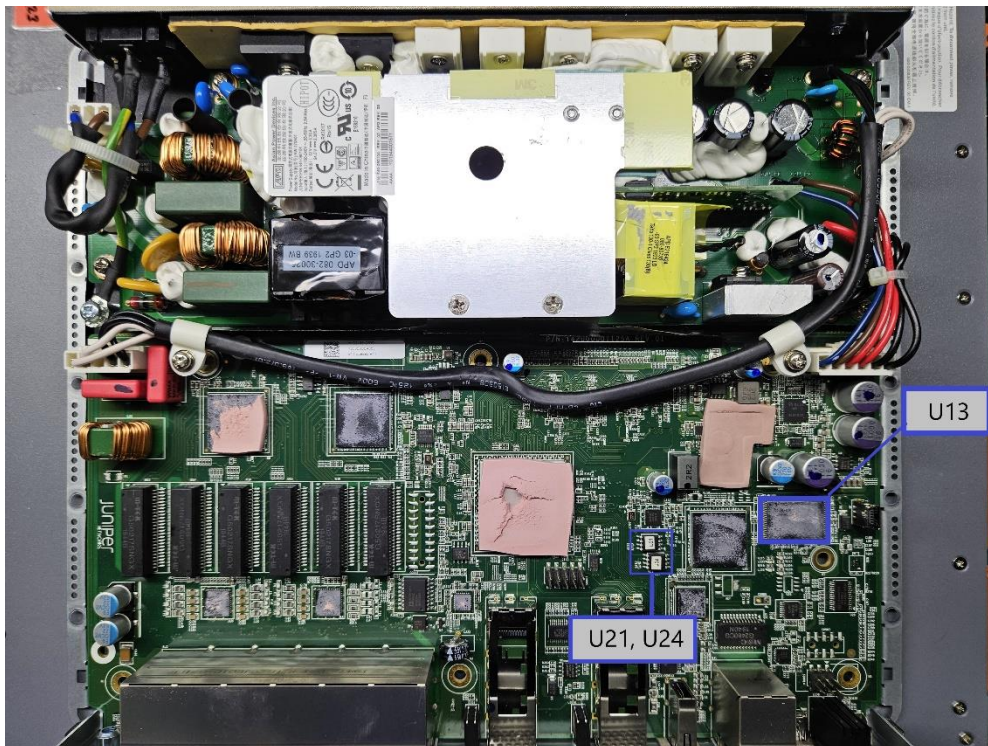
5. Remove the top of the chassis for Main board access (Figure 3-3)





**Figure 3-3: Open Chassis**

6. Locate NV storage and SPI Flash (Figure 3-4).



**Figure 3-4: Locate NV storage (NAND Flash, U13 SPI U21, U24)**

### **3.3 Removal of the NAND FLASH and SPI FLASH from the System Board**

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

- a. Utilize a wire or metal cutter or other means to cut the white rivet button and unplug the Sata Flash Modules from its socket.

### **3.4 Nand flash Drive Sanitization process and associated Junos commands**

Use SW secure erase.

Here is required sequence of cli commands-

- request system zeroize media – removes config and other sensitive user data.

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

*Other SPI Flash / EEPROM components shown for reference only, do not store any user or configuration data.*