

UNCLASSIFIED

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

**JUNIPER NETWORKS  
QFX5200-32C**

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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 QFX5200-32C 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 QFX5200-32C 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 QFX5200-32C 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**

QFX5200-32C is a 1RU top of the rack switch provided scalable connectivity for the enterprise market, including branch offices, campus locations, and data centers. The switches run under the JUNOS software, which provides Layer 2 and Layer 3 switching, routing, and security services. The same JUNOS code base that runs on QFX5200-32C switch also runs on all Juniper Networks products.

QFX5200-32C switch has a maximum throughput of 3.2Tb/s with the I/O bandwidth of 3.2Tb/s. There are 32 QSFP28 front ports and that can be configured as 32x100G ports or 32x40G ports.

QFX5200-32C is designed to fit in a standard 19" rack.



**Figure 1. QFX5200-32C**

## **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 QFX5200-32C platform, the following steps must be performed:

1. Power must be removed from the system to clear all volatile storage
2. The SATA Flash modules must be removed from the system board sockets
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 QFX5200-32C Chassis and Identification of NV storage

The QFX5200-32C 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.
3. Remove the screws from the top of the system (figure 2)

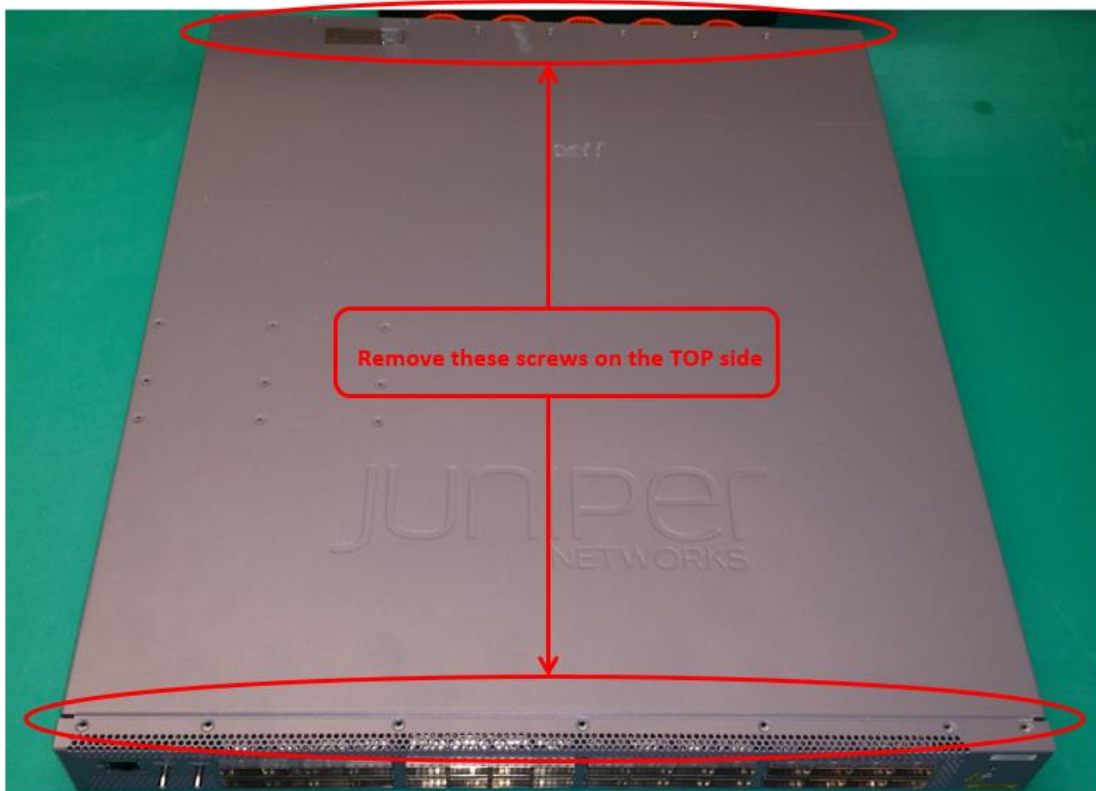
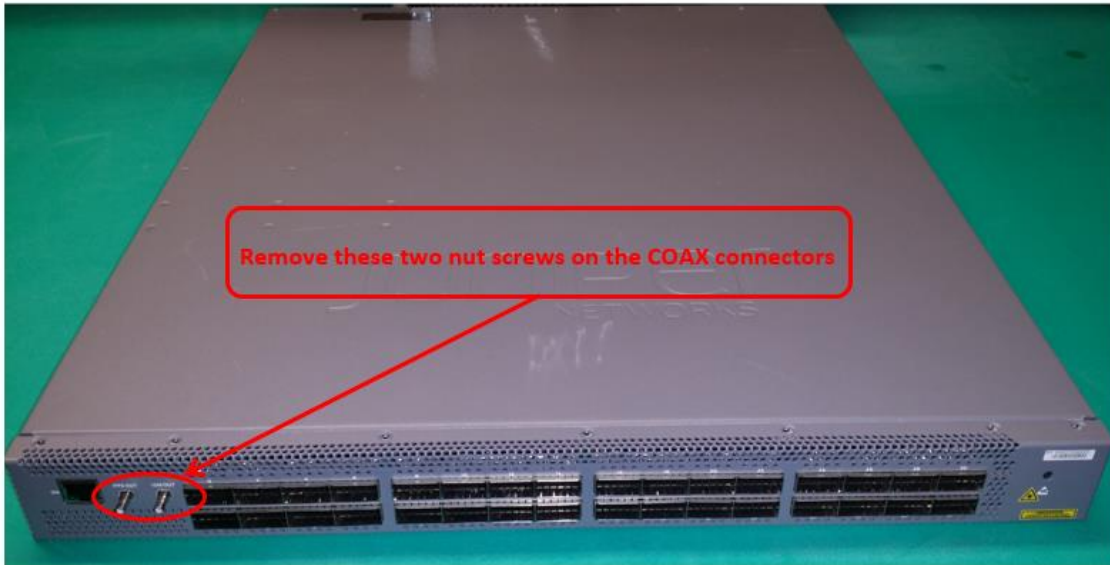


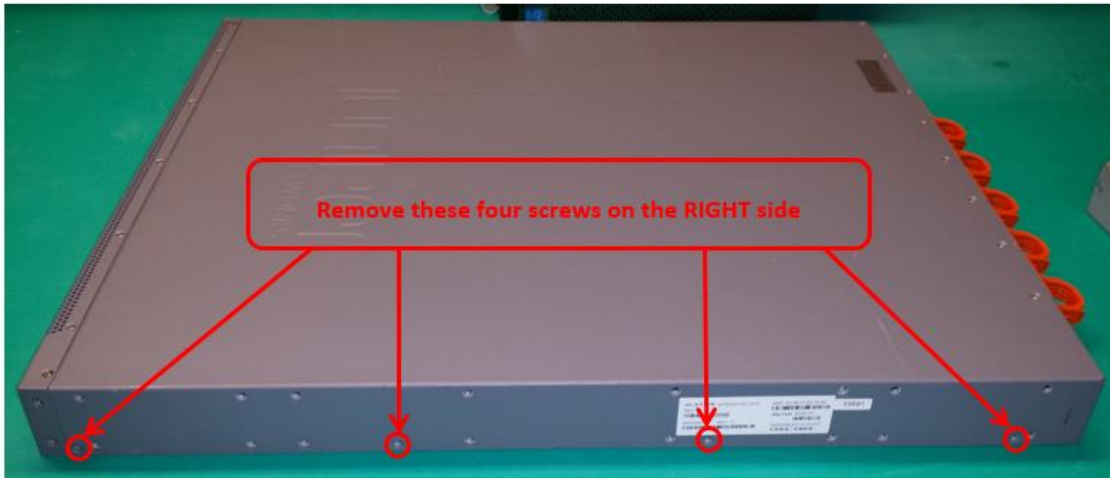
Figure 2. Top side screws

4. Remove the two nut screws on the coax connectors (figure 3)



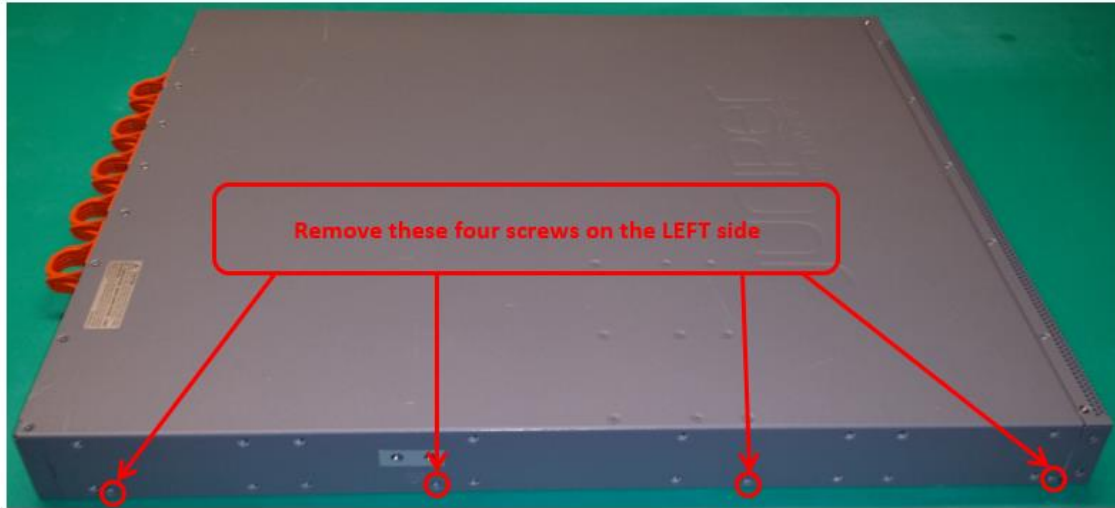
**Figure 3. COAX connector nut screws**

5. Remove four screws from right side of chassis (figure 4)



**Figure 4. Right side screws**

6. Remove four screws from left side of chassis (figure 5)



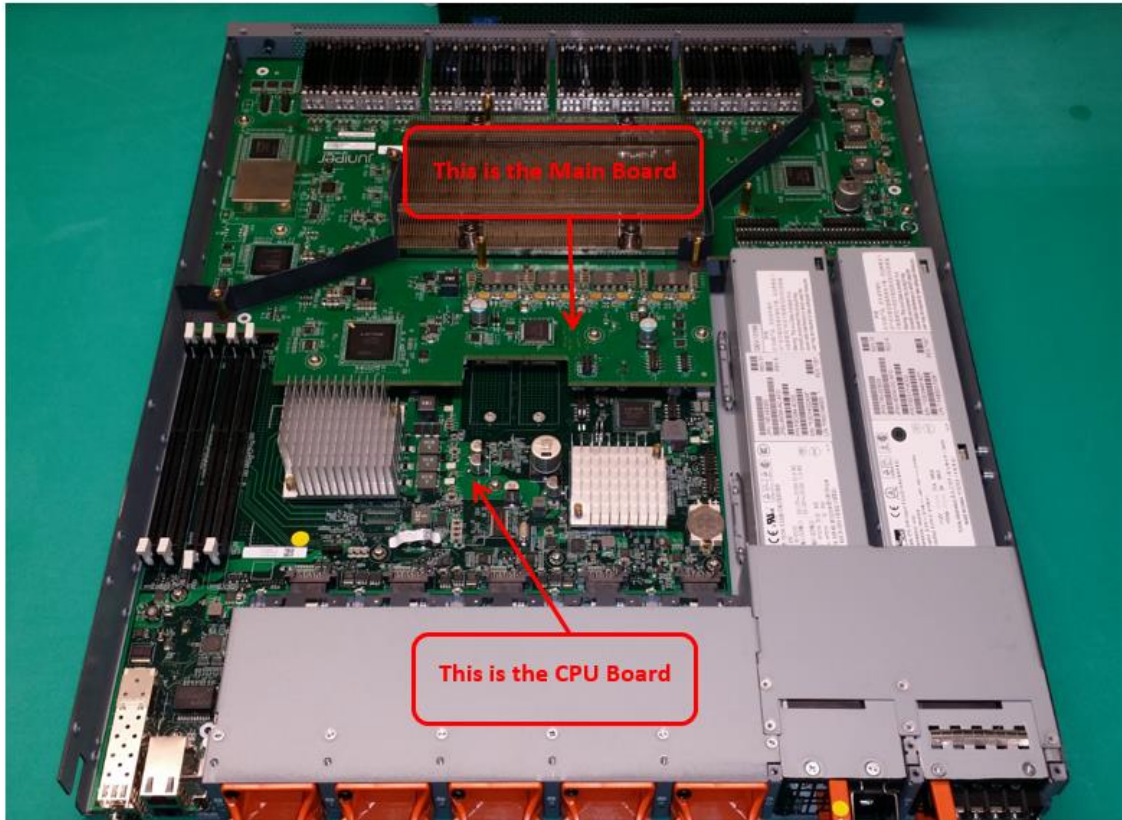
**Figure 5. Left side screws**

7. Remove the power supplies from rear of chassis (figure 6).



**Figure 6. PSU FRUs**

8. Remove the top of the chassis and note the location of Main board and CPU board (figure 7)



**Figure 7. Open Chassis**

9. Remove the Main Board from the chassis. Follow the instructions (figure 8)
  - a. Remove all the screws, standoff and nuts as located in Red Circles.
  - b. Pry it up and lift the Main Board and slide it back ward away from the front panel plate. Note, there are mating connectors between Main Board and CPU board shown below.



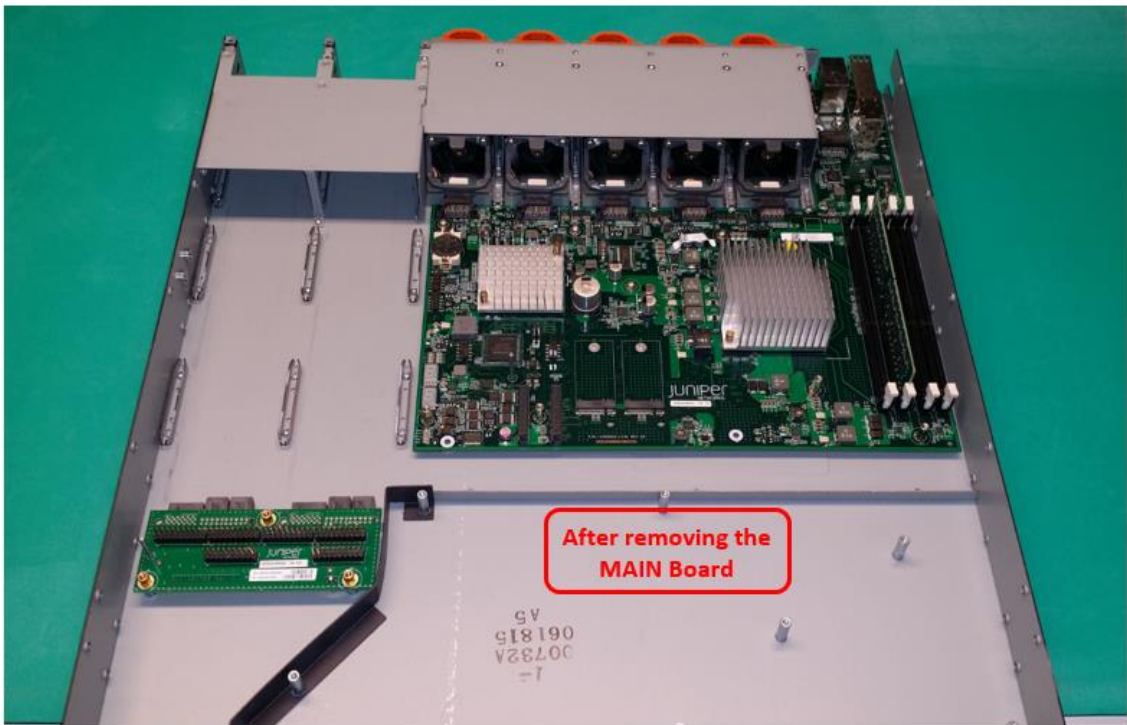
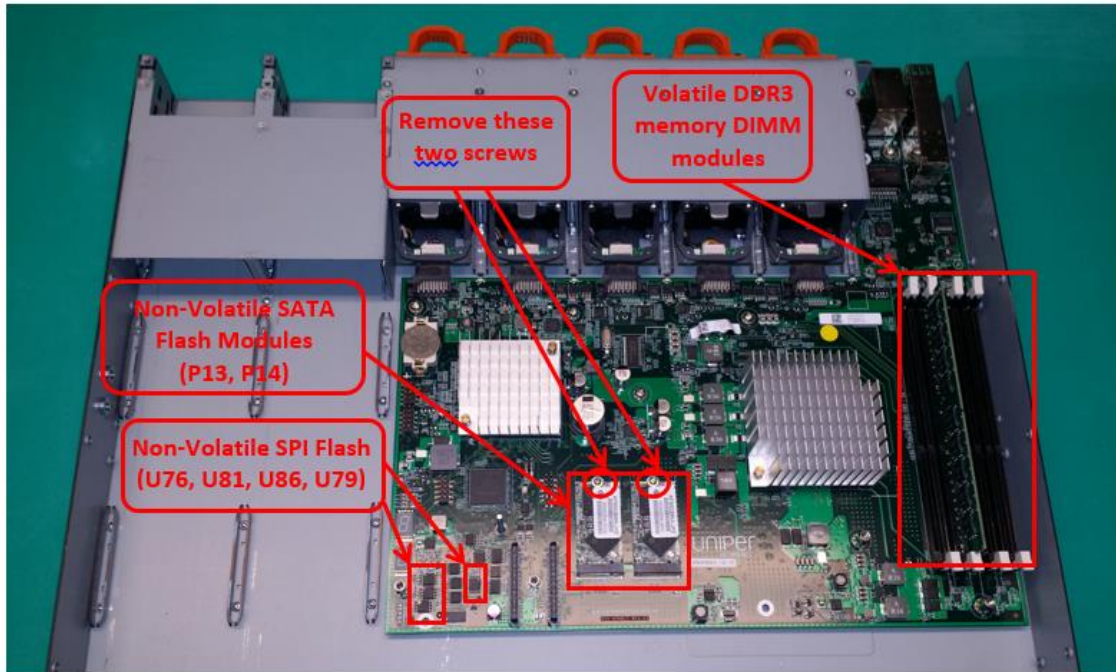


Figure 8. Main Board Removal

10. Locate the NV storage (figure 9).



**Figure 9. Locate NV storage (SATA Flash and SPI Flash)**

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

- a. Remove the screw that is holding the SATA Flash in place and un-plug the SATA Flash module from its socket.

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