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

JUNIPER NETWORKS EX4600-40F

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 EX4600-40F 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 EX4600-40F 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 EX4600-40F 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

EX4600-40F 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 EX4600-40F switch also runs on all Juniper Networks products.

EX4600-40F has 24x10G + 4x40G fixed ports + 2x uplink modules as FRU (4x40G or 8x10G per module). Its configuration is the single PFE provides 720 Gb/s bandwidth. EX4600-40F is designed to fit in a standard 19" rack.

Figure 2-1: EX4600-40F

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 EX4600-40F 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.

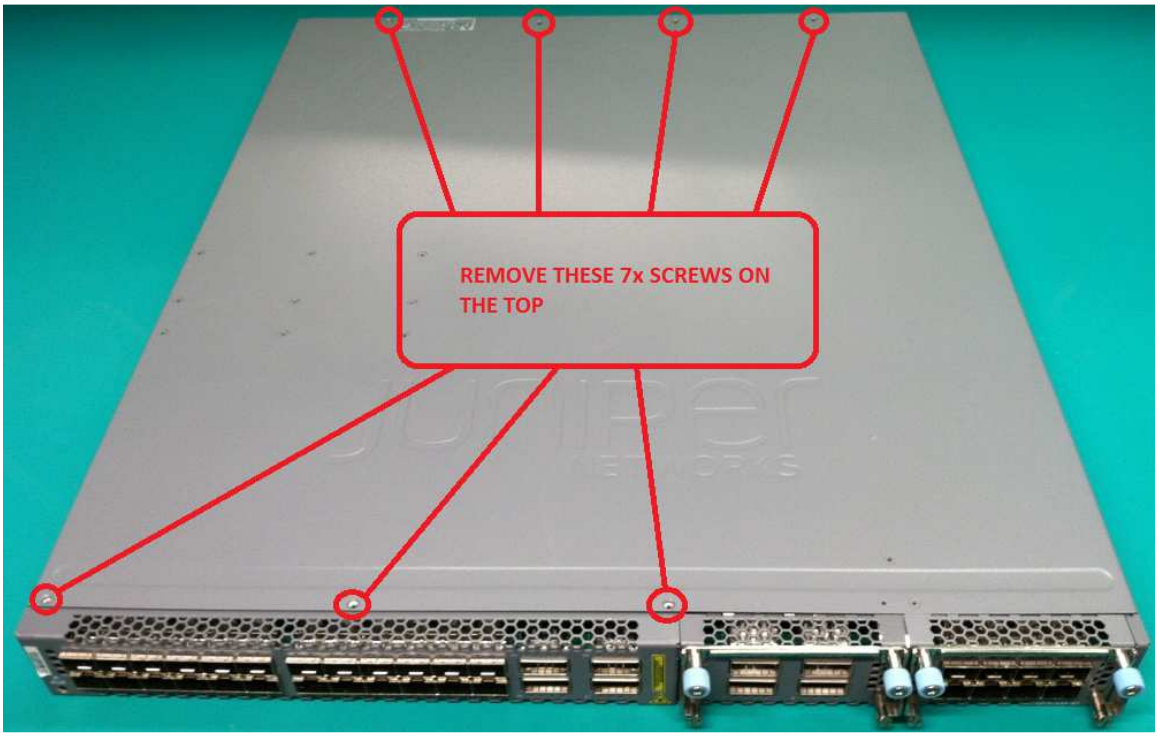
3.1 System Power Down

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

3.2 Disassembly of the EX4600-40F Chassis and Identification of NV storage

The EX4600-40F does contain NV storages that is replaceable as well as it is soldered to the system board. In order to access the memory for removal, refer to the following steps:

1. Remove the power supplies from the system.
2. Remove the Uplink Modules if any. If there are no Uplink Modules, remove the Uplink Blanks.
3. Remove the ear-mounts on both left and right side of the chassis if any.
4. Remove the five screws from the top of the system (figure 3-1)



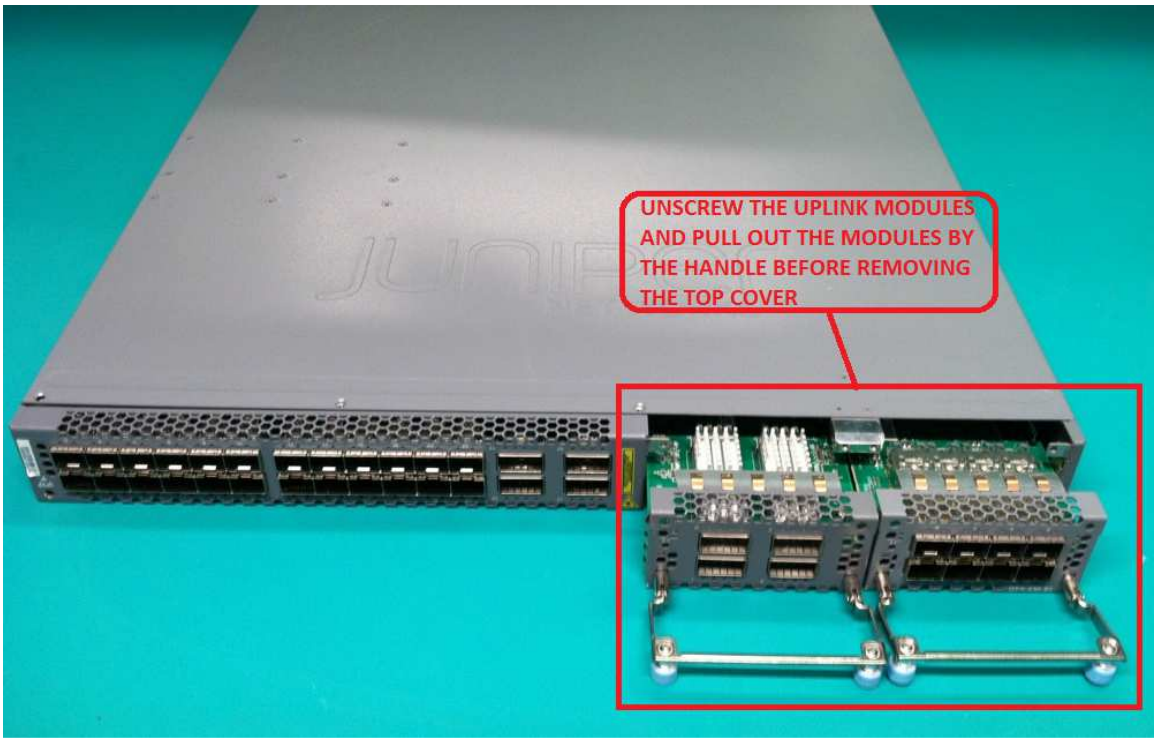


Figure 3-1: Top side screws and Uplink Modules

5. Remove four screws from left side of chassis (figure 3-2)

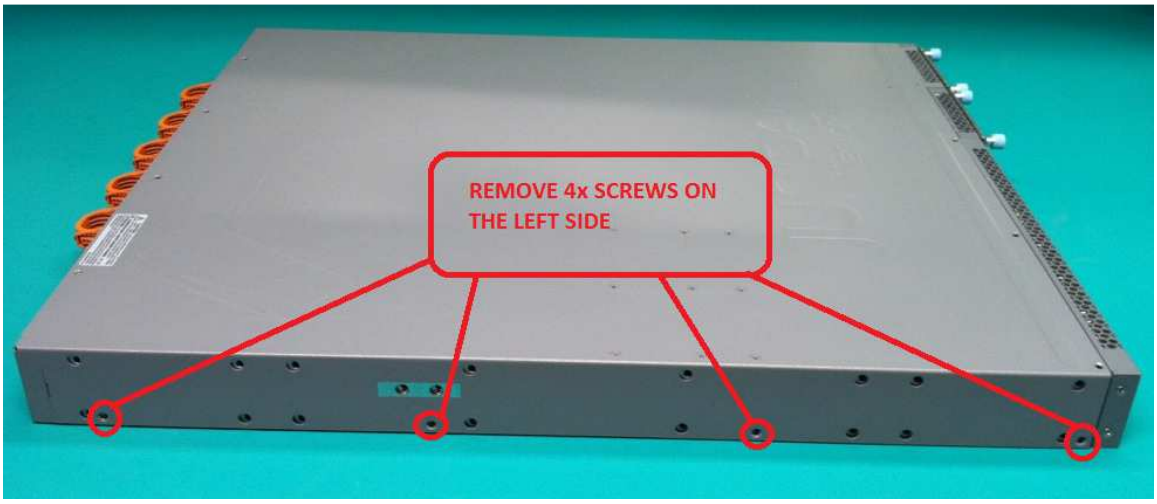


Figure 3-2: Left side screws

6. Remove four screws from right side of chassis (figure 3-3)

Figure 3-3: Right side screws

7. Remove one screw on the bottom of chassis and power supplies from rear of chassis. Does not required to remove the fan modules unless it is needed (figure 3-4)

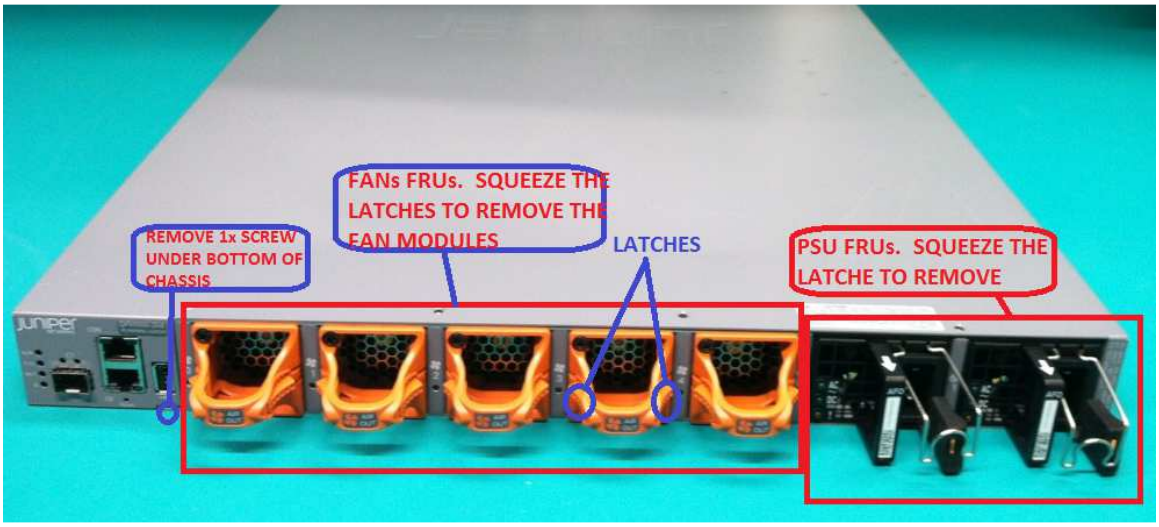


Figure 3-4: Rear screw + FAN FRUs + PSU FRUs

8. Remove the top of the chassis and note the location of Main board and CPU board (figure 3-5)

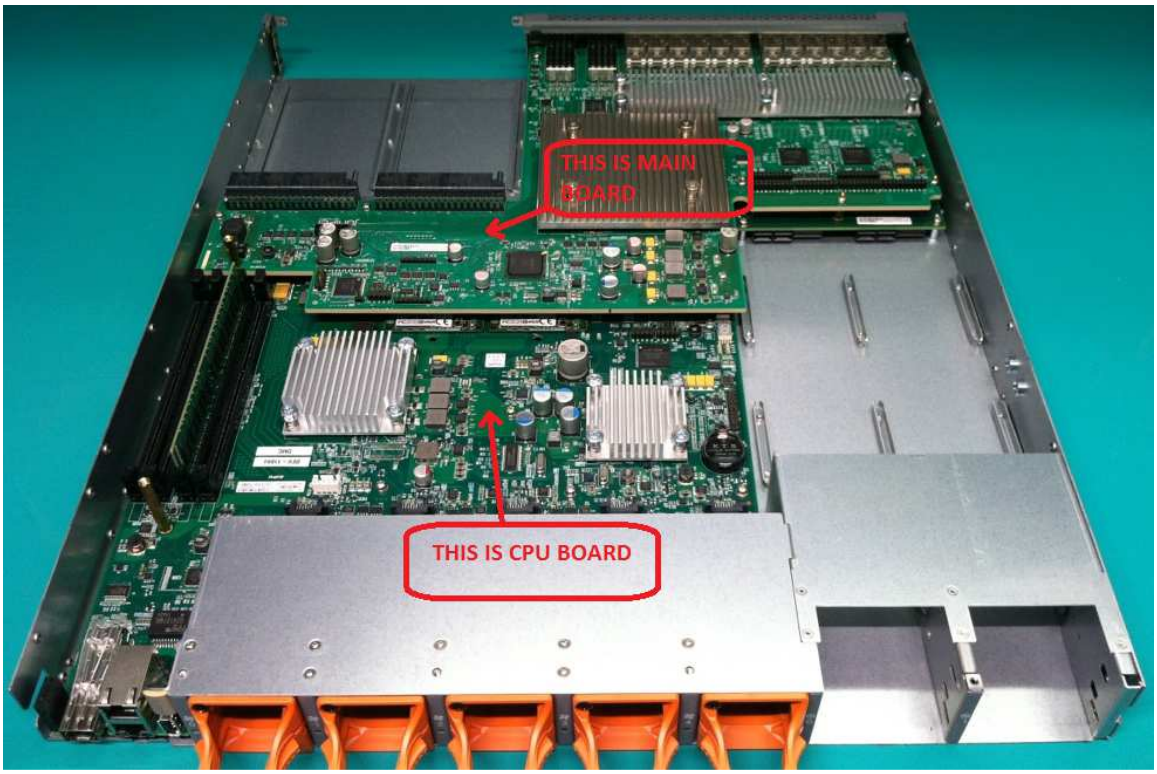


Figure 3-5: Open Chassis

9. Remove the Main Board from the chassis. Follow the instructions (figure 3-6)
   a. Remove all the screws, standoff and nuts as located in Red
   b. Pry it up and lift up 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.

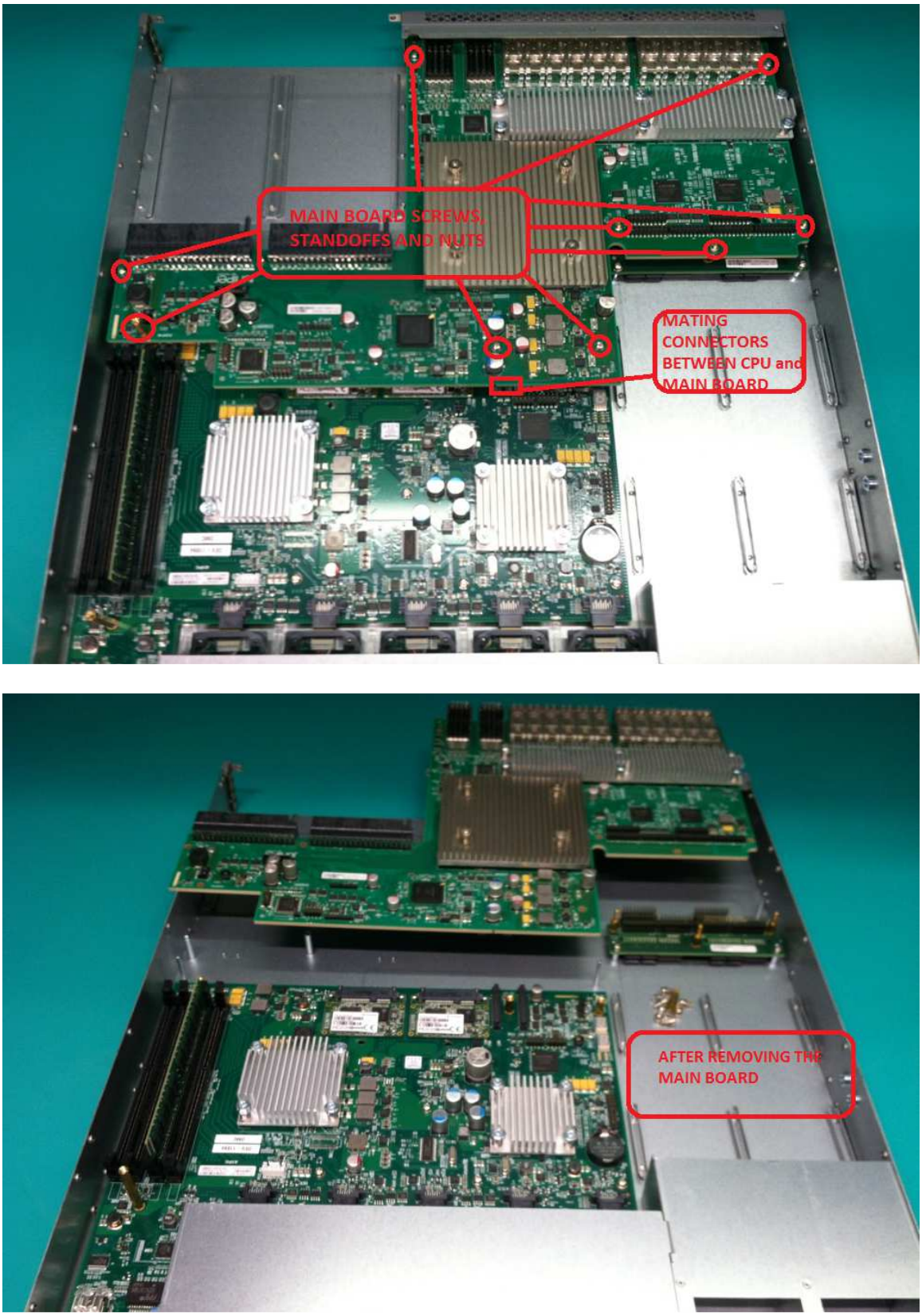


Figure 3-6: Main Board Removal

10. Locate NV storage (figure 3-7).

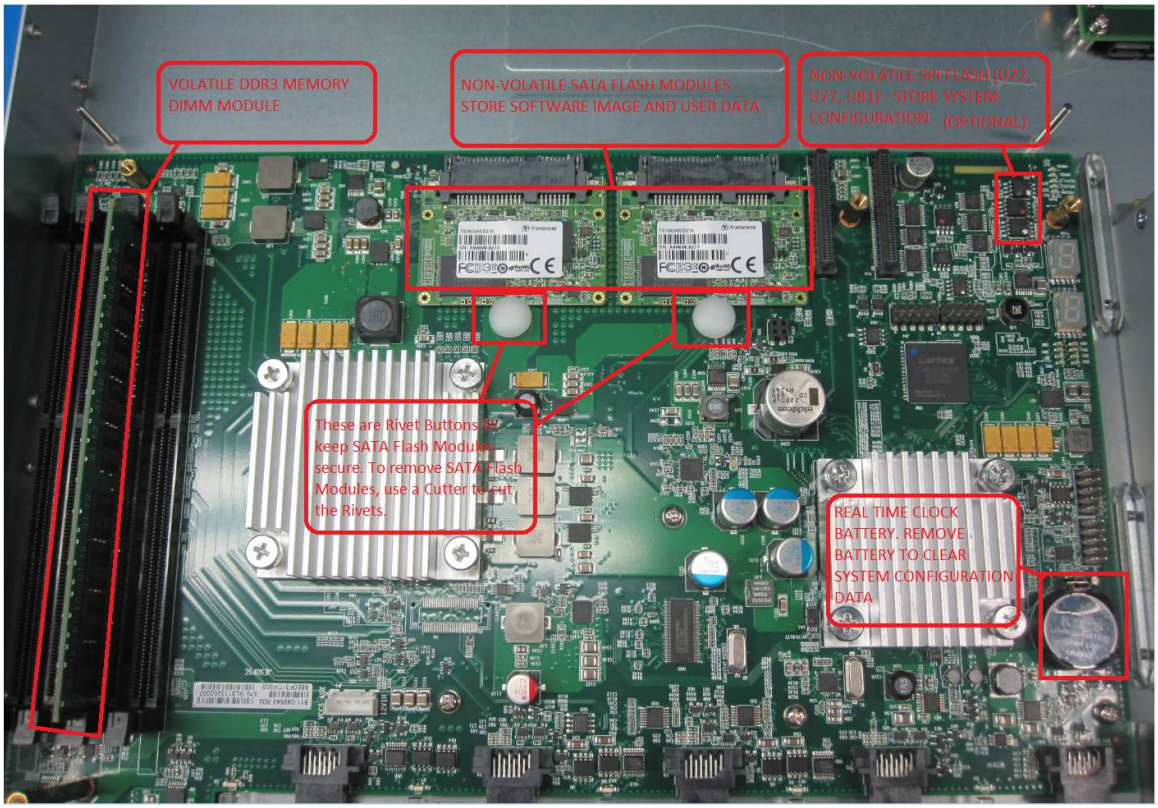


Figure 3-7: Locate NV storage (SATA Flash and SPI Flash)

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

Once the NV storages have 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.

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