

# Hardware replacement tips

Replacing parts in the ST250 V3

Lenovo

## Replacing a firmware and RoT module

After replacing a firmware and RoT security module (RoT module), servicers must update the UEFI and LXPM firmware to the latest supported version before starting the system. If this does not happen, the system will not be able to recognize the correct firmware and will not start normally. As a result, the user will not be able to access the system OS.

Use one of the following methods to update the UEFI and LXPM firmware on the system after replacing the RoT module:

- OneCLI commands
- A USB boot kit with UEFI firmware and LXPM firmware packages
  - For more information on how to create a USB boot kit, refer to the following GLOSSE article: [How to create USB boot kit with OneCLI for RoT replacement in the field](#)

For the complete procedures, refer to the following GLOSSE tip page:

[How to do RoT Module FW update on ThinkSystem V3 machines](#)

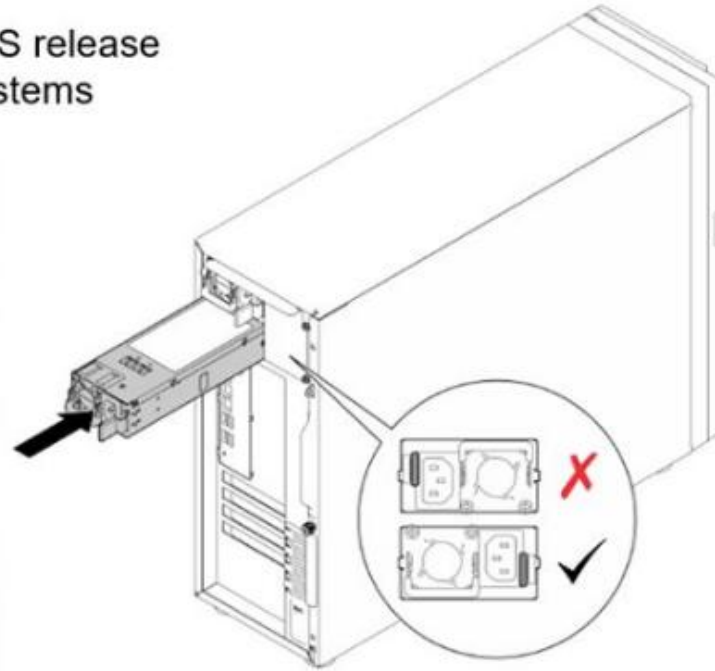
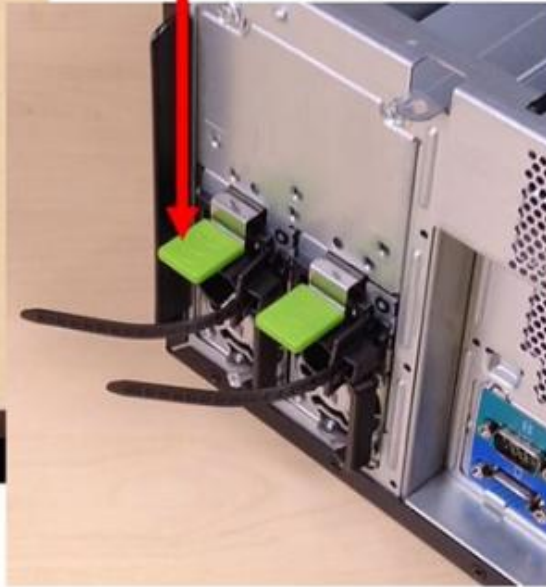
# Installing a hot-swap power supply

To install a hot-swap power supply, make sure the label on the power supply is facing up, hold the handle, and slide the power supply into the power supply bay until it clicks into place.



Make sure the label is facing up

**Note:** The color of the CRPS release tab can vary on different systems



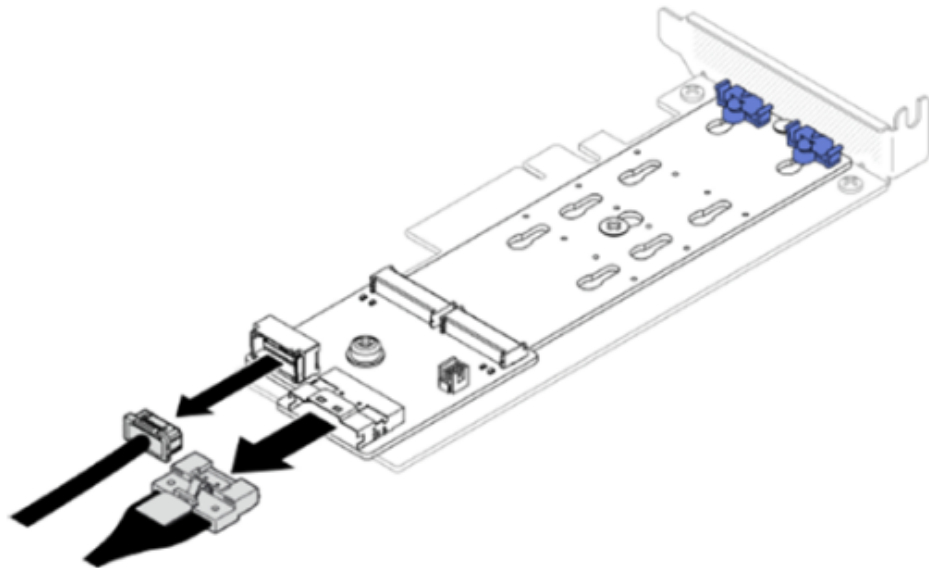
## Replacing an M.2 adapter

The ST250 V3 supports two types of M.2 boot adapter:

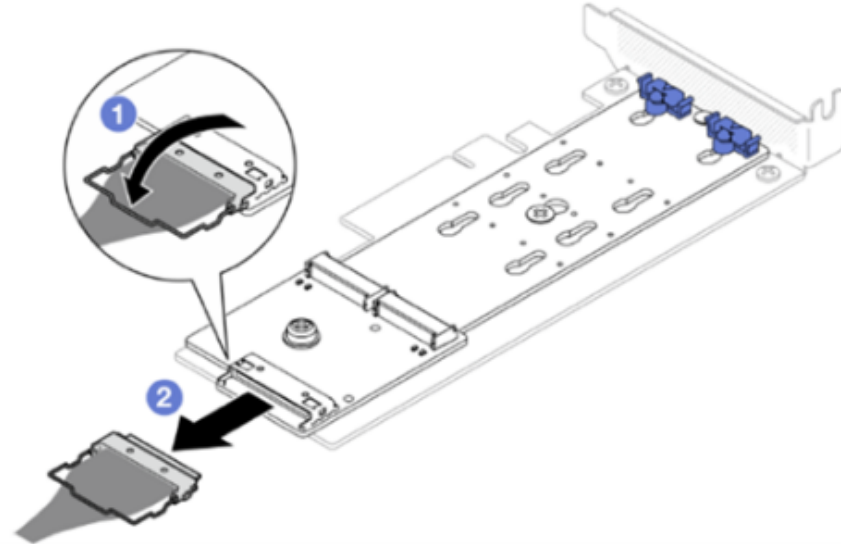
- SATA/x4 NVMe M.2 boot adapter
- SATA/NVMe M.2 boot adapter

The procedures used to connect and disconnect adapter cables are different on the two adapters. Refer to the ST250 V3 User Guide on [Lenovo Docs](#) or the parts replacement videos on the course landing page for more information.

SATA/x4 NVMe M.2 boot adapter



SATA/NVMe M.2 boot adapter





## Replacing a heat sink and fan module

The heat sink and fan module is fastened to the system board with four screws. To avoid damaging the system board when replacing a heat sink and fan module, follow the order shown below to loosen or fasten the screws. Refer to the ST250 V3 User Guide on [Lenovo Docs](#) or the parts replacement videos on the course landing page for more information.

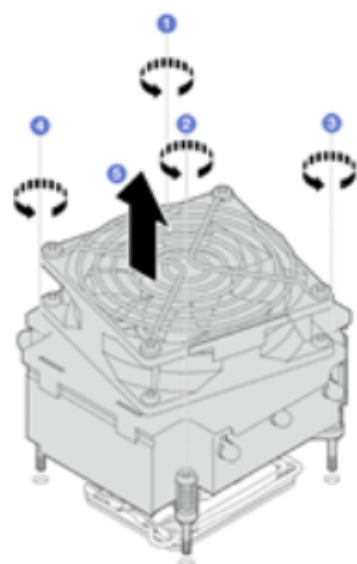
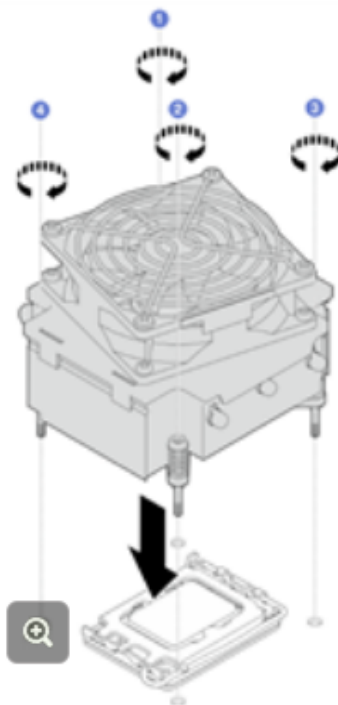


Figure 48. Removing the heat sink and fan module

- a. ① & ② Loosen screw 1 and 2: First, partially loosen screw 1; then, fully loosen screw 2. Finally, fully loosen screw 1.
- b. ③ & ④ Loosen screw 3 and 4: First, partially loosen screw 3; then, fully loosen screw 4. Finally, fully loosen screw 3.
- c. ⑤ Lift evenly and remove the heat sink and fan module from the server.



- a. ① & ② Tighten screw 1 and 2: First, partially tighten screw 1; then, fully tighten screw 2. Finally, fully tighten screw 1.
- b. ③ & ④ Tighten screw 3 and 4: First, partially tighten screw 3; then, fully tighten screw 4. Finally, fully tighten screw 3.

## Replacing a system board

When removing or installing an ST250 V3 system board, you must remove or fasten the eight screws on the system board in a specific order to avoid damaging the system board.

Click the following links to see the screw removal or fastening orders:

- [Screw removal order](#)
- [Screw fastening order](#)

For your reference, the torque required to fully fasten or remove the screws is 5.0 +/- 0.5 lb-in.

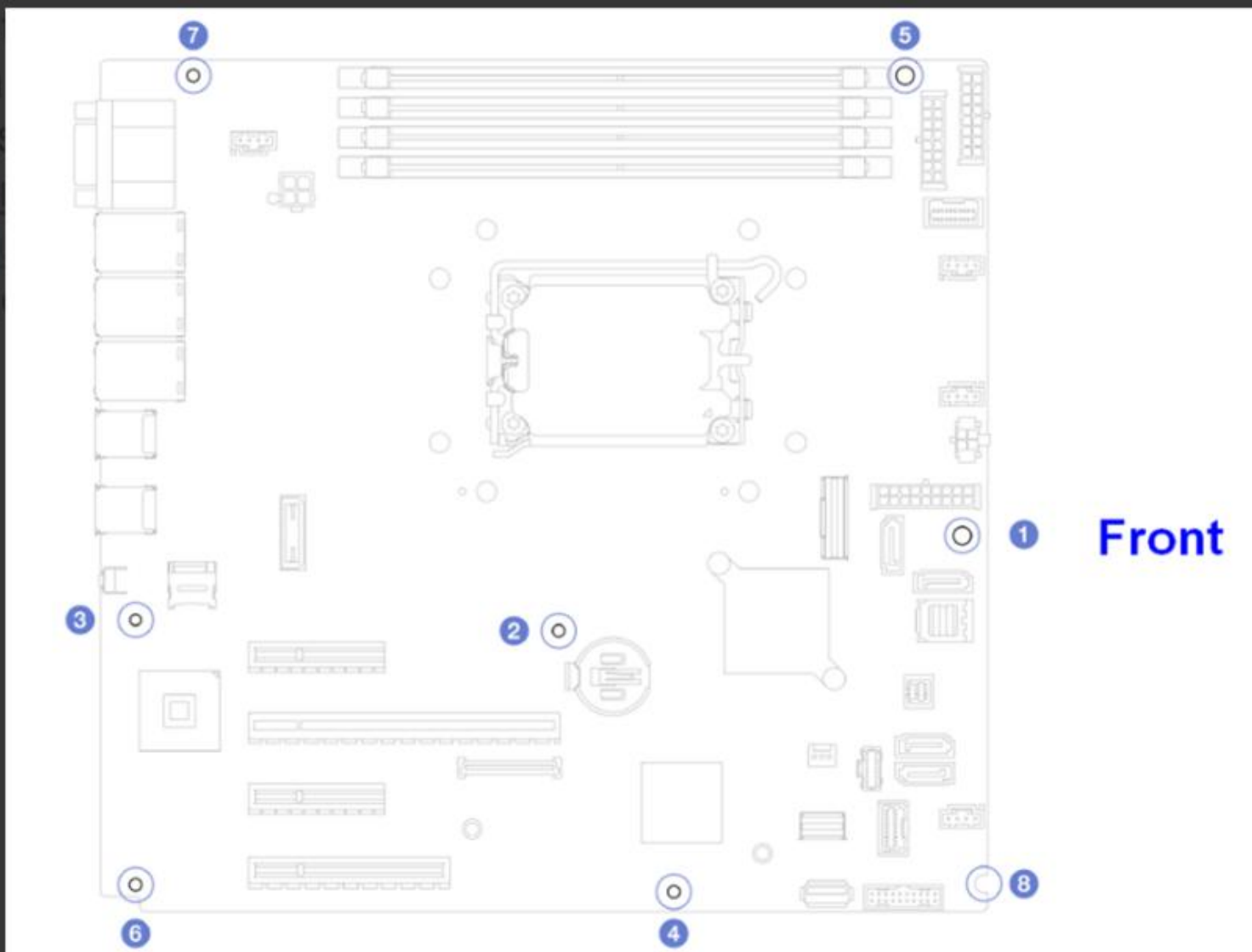
## Replacing a system board

### Screw removal order

When removing or installing the system board, remove or install the screws in the order shown in the diagram. Click the following links:

- [Screw removal order](#)
- [Screw fastening order](#)

For your reference, the torque for the screws is +/- 0.5 lb-in.



## Replacing a system board

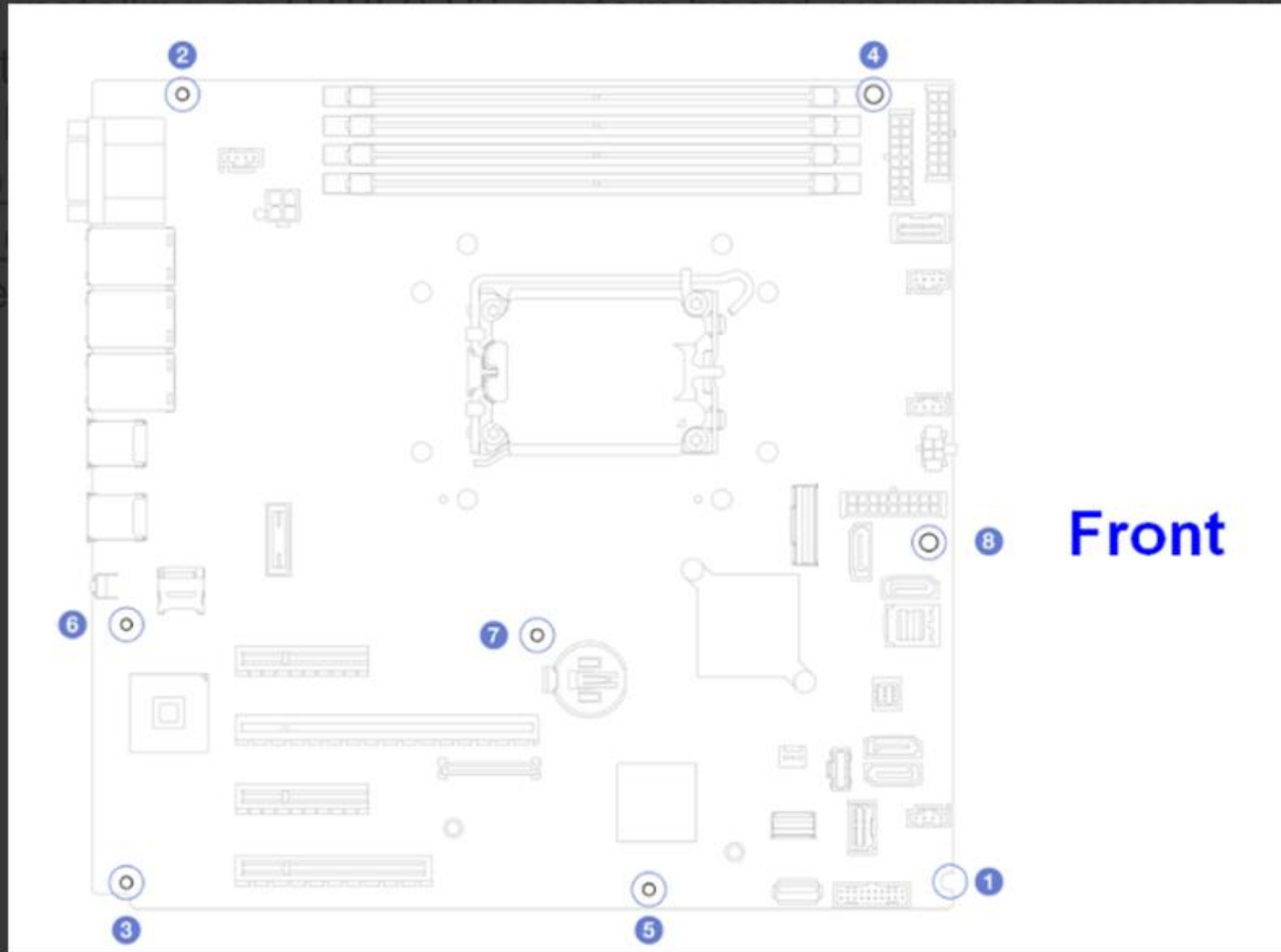
### Screw fastening order



When removing or installing the system board, fasten the eight screws in the following order:

- [Screw removal order](#)
- [Screw fastening order](#)

For your reference



fasten the eight screws on the system board.

5.0 +/- 0.5 lb-in.



## Updating the VPD

After replacing a system board, service personnel must update the VPD (machine type and serial number) on the system board. The ST250 V3 VPD update procedure is the same as that used with other Intel-based ThinkSystem models (using the `onecli config set` OneCLI command).

Replacing a firmware and RoT module or system I/O board does not require an update of the VPD.

For more information, refer to the LXCE OneCLI common task section of course [ES51757B Introducing ThinkSystem tools](#), or the Update the Vital Product Data (VPD) section of the ST250 V3 User Guide on [Lenovo Docs](#).

# Summary

This course enabled you to:

- Describe the ThinkSystem ST250 V3 server and components
- List the ST250 V3 server specifications
- Describe the ST250 V3 server configurations and diagram
- Describe the ST250 V3 server management tools
- Describe the problem determination steps and explain how to troubleshoot issues with the ST250 V3