

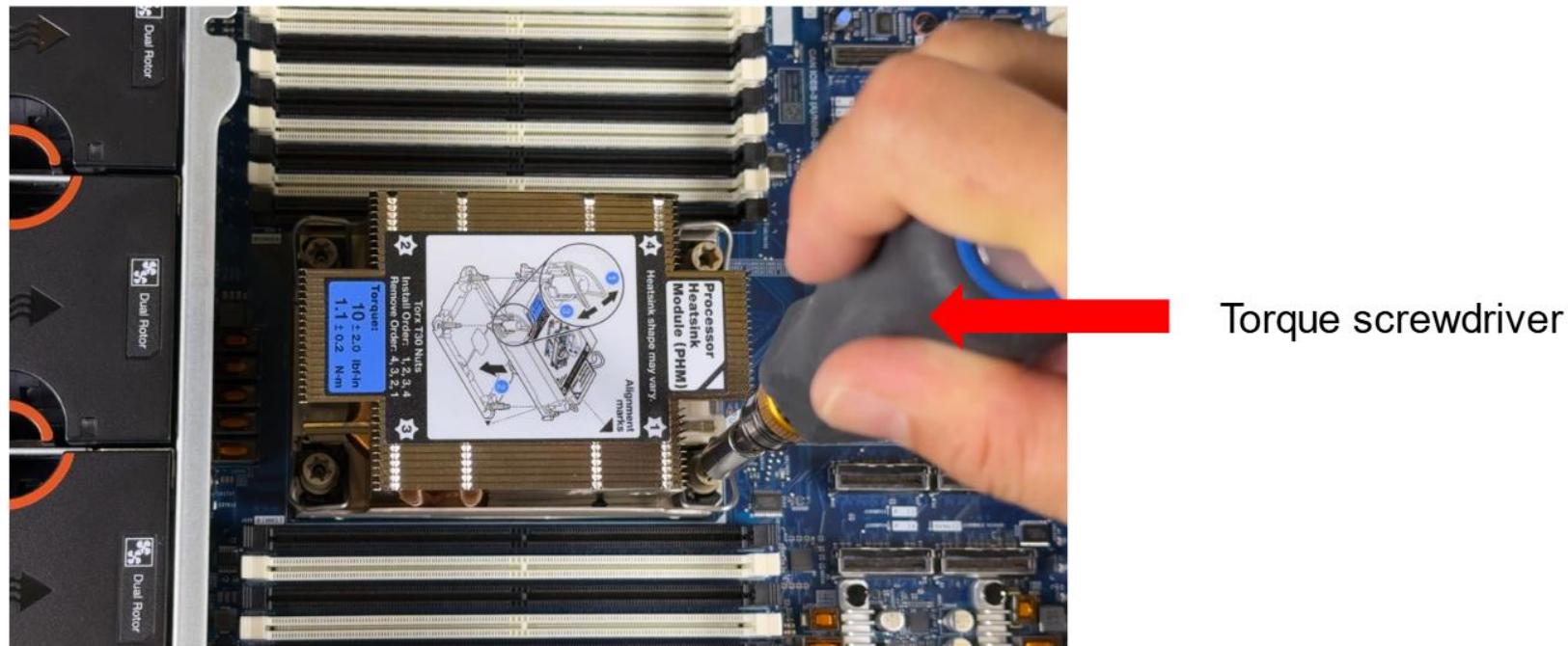
# Hardware replacement tips

Part replacement highlights

Lenovo

# Replacing a CPU heat sink

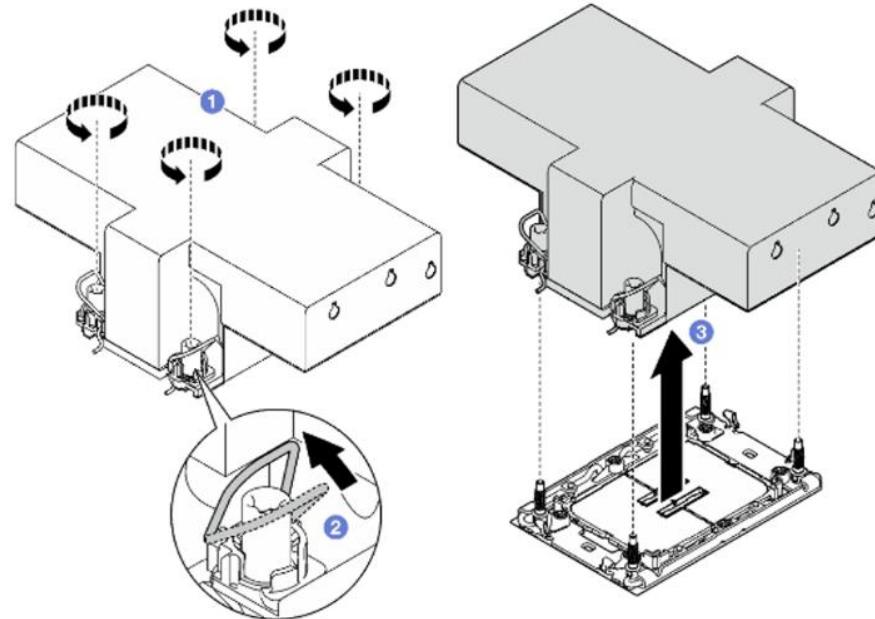
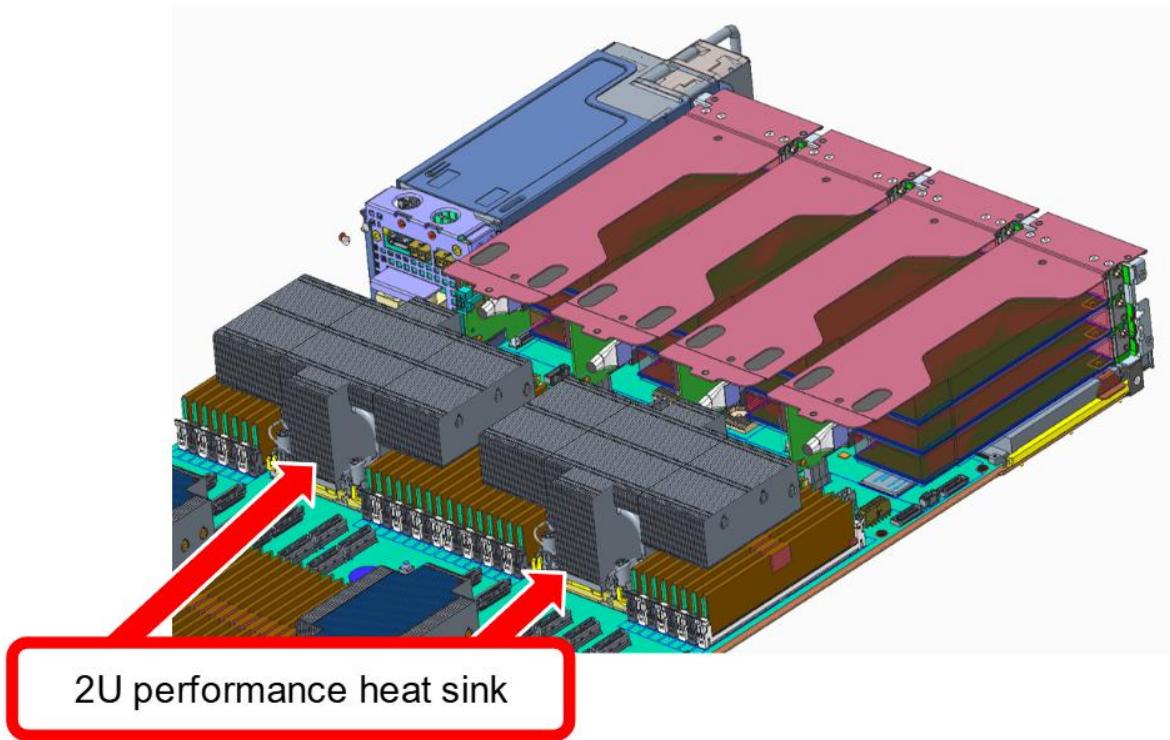
The SR850 V4 CPU heat sink replacement procedure requires a Torx T30 torque screwdriver. Follow the removal sequence instructions and torque settings shown on the heat sink label to remove or install a heat sink.



An 2U standard heat sink in an SR850 V4

# Replacing a DIMM with a 2U performance heat sink

Before replacing a DIMM under a 2U performance heat sink, service engineers must remove the 2U performance heat sink.



# Replacing a CXL memory module

Unlike 2.5-inch or E3.S drives, the CXL memory modules in the front drive bays are non-hot-swap parts. Power off the system before replacing a CXL memory module. A 3 mm flat-head screwdriver is required to unlock or lock the CXL memory module handle.



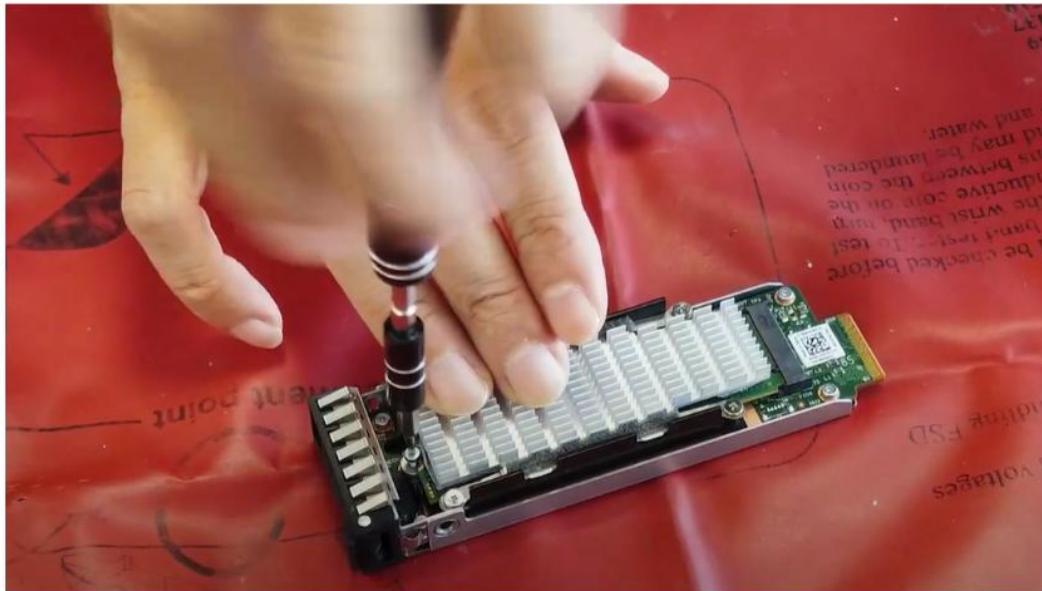
E3.S bay covers (with non-hot-swap blue tags)



Unlock the CXL memory module handle

# Hot-swap M.2 drive replacement tips

The SR850 V4 supports hot-swap M.2 drives at the rear of the server. Hot-swap M.2 drives require a heat sink and thermal pad. When replacing a hot-swap M.2 drive, apply a new thermal pad to the replacement M.2 adapter.



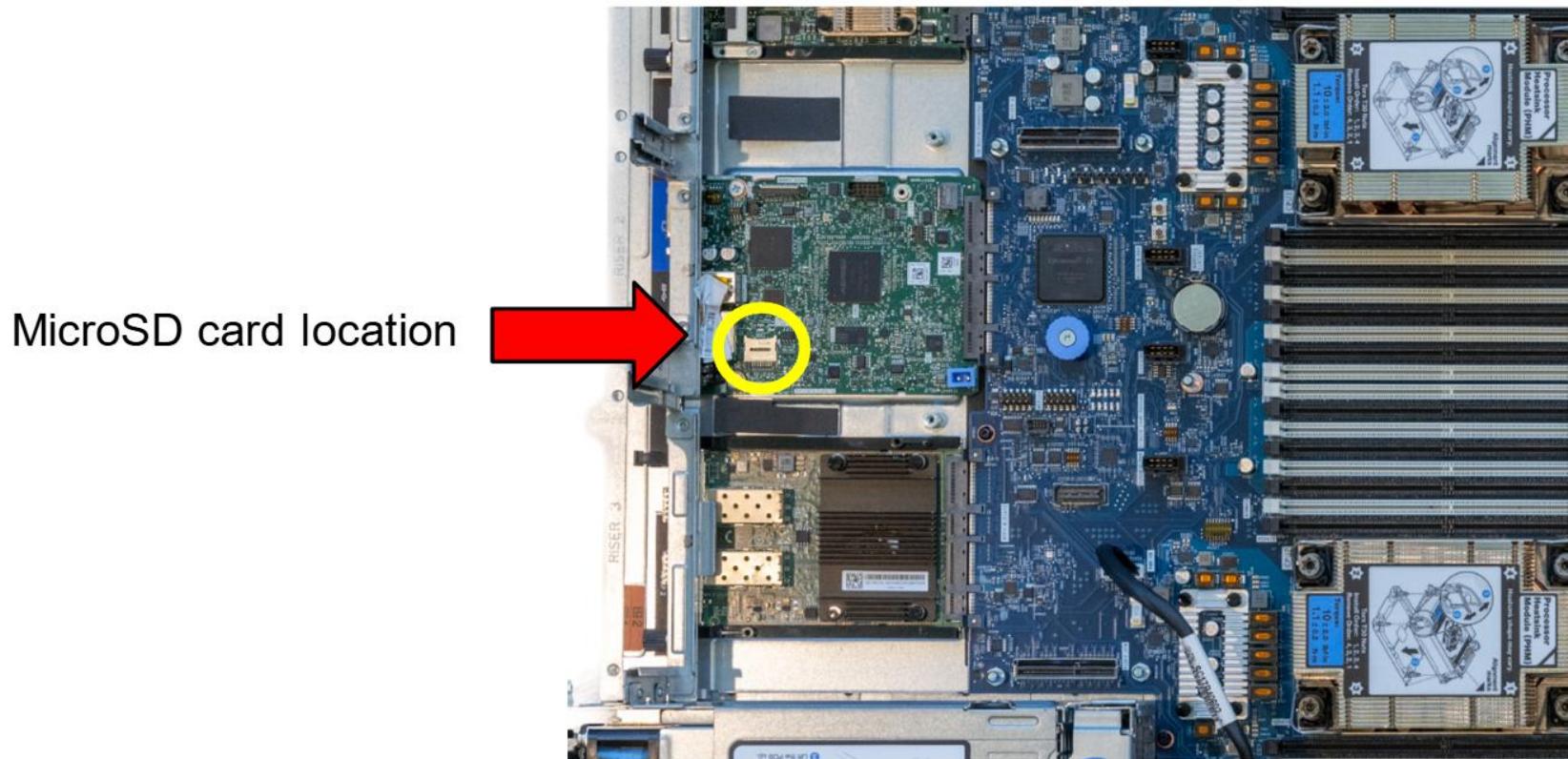
The heat sink on the hot-swap M.2 adapter



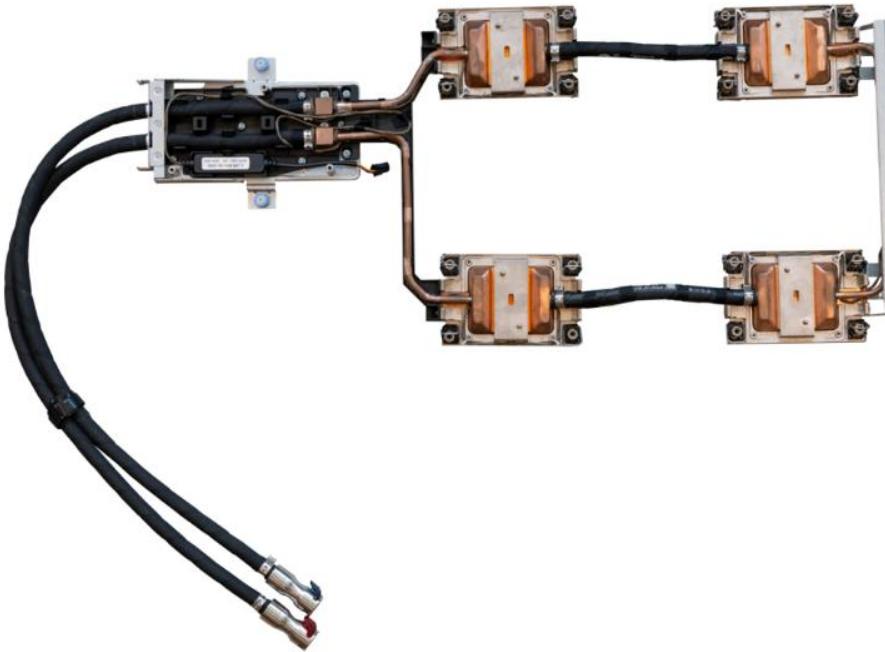
Apply a new thermal pad to the replacement M.2 adapter

# Replacing a system I/O board with MicroSD card

If you are replacing the system I/O board at the rear of the system, remove the MicroSD card from the old system I/O board and install it on the new system I/O board.



# Replacing a Neptune core module



Click each number in turn to see the procedure.

Step

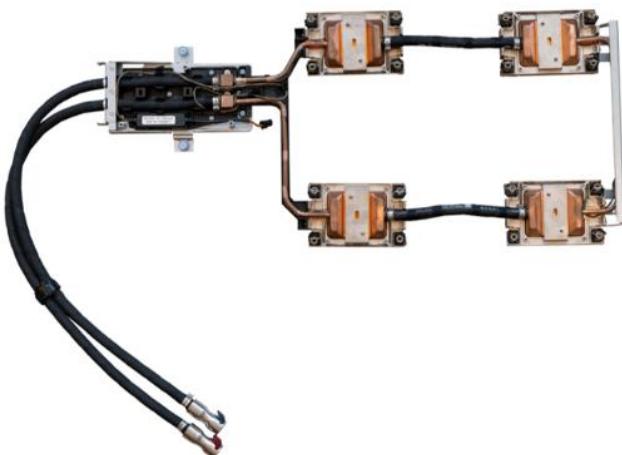
- 1
- 2
- 3

# Replacing a Neptune core module

A shipping bracket is required to replace a Neptune core module in the SR850 V4.

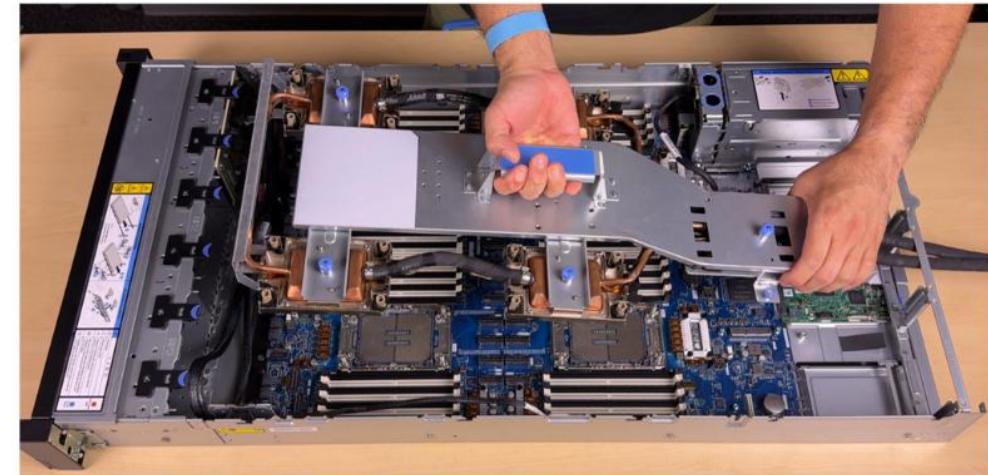
New Neptune core modules are shipped with an attached shipping bracket. Do not lift the Neptune core module without the shipping bracket.

If you need to replace a processor or system board assembly after a Neptune core module has been installed, you will need to order a shipping bracket separately.



An SR850 V4 Neptune core module

Step

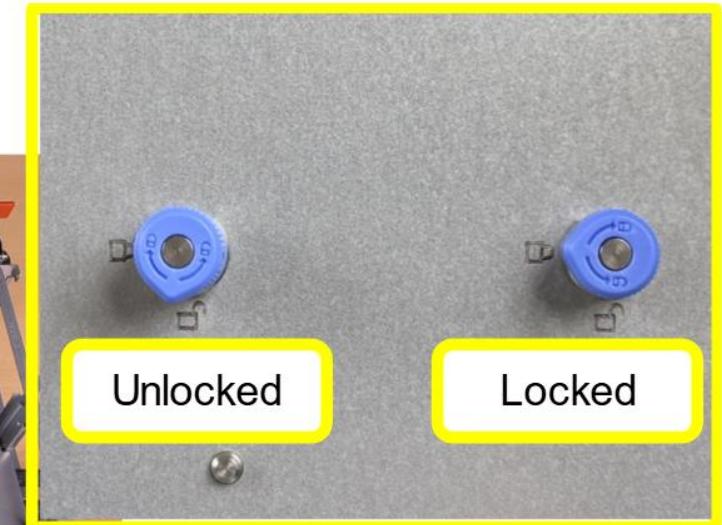
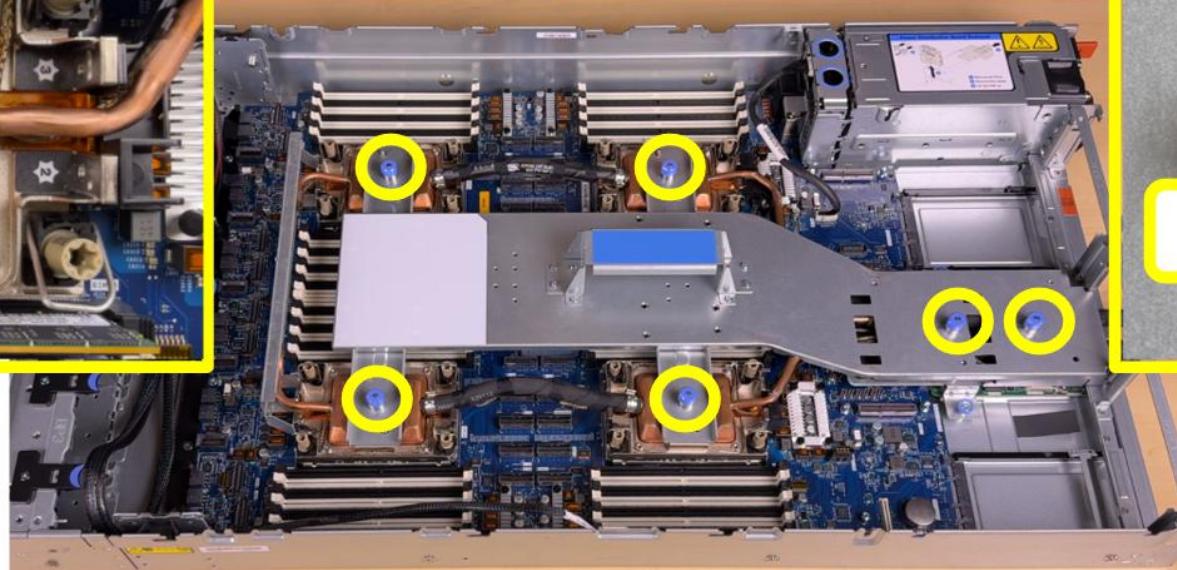
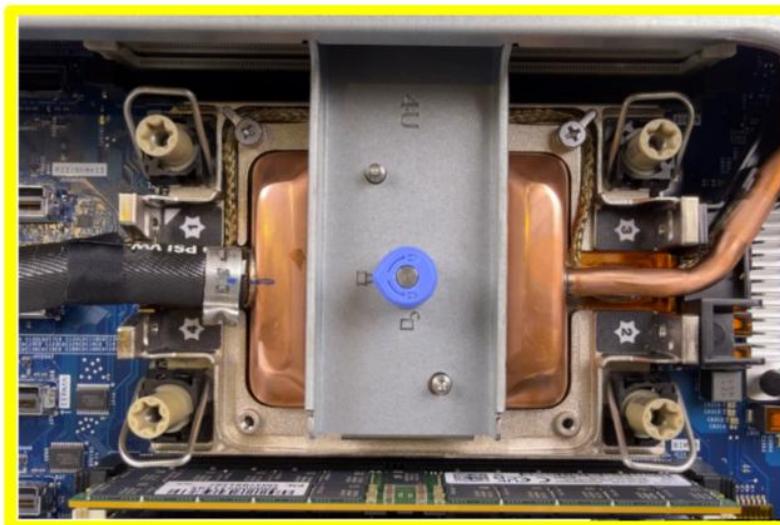


Installing the Neptune core module to the system with the shipping bracket



# Replacing a Neptune core module

When moving a Neptune core module, make sure all six blue plungers on the shipping bracket are in the locked position. Unlock the plungers when you need to separate the shipping bracket from the Neptune core module.

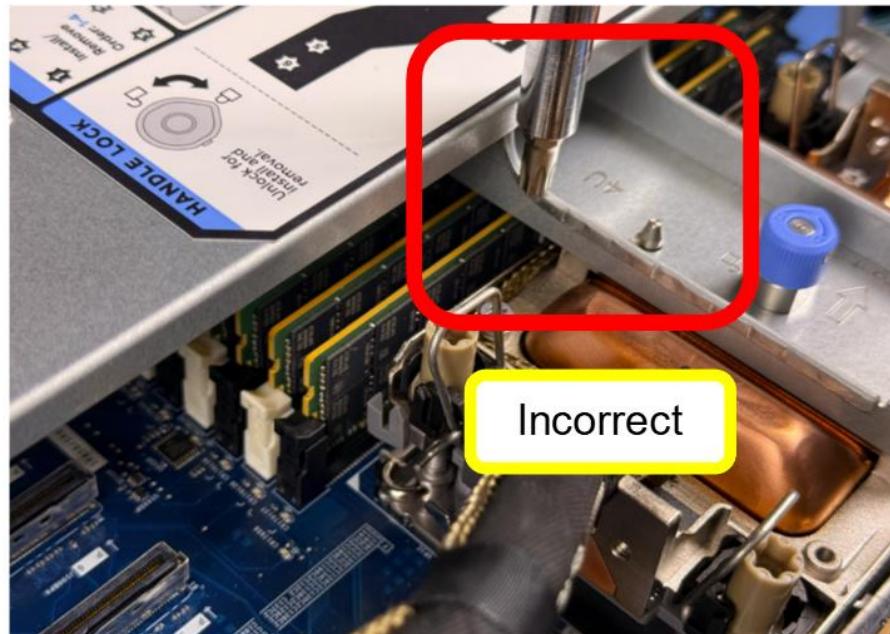
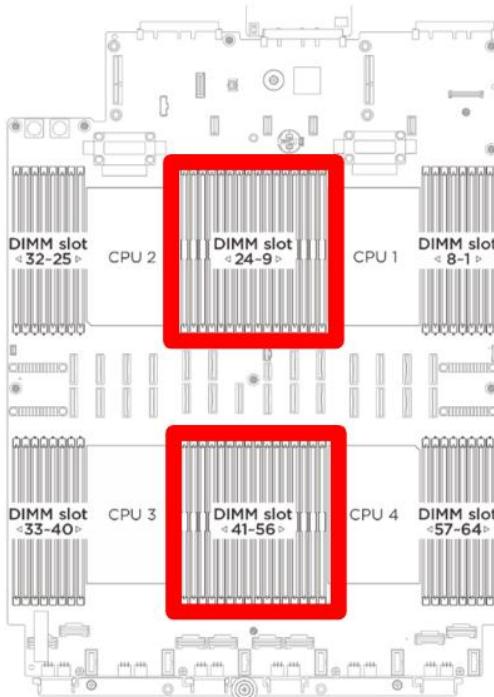


Step **1** — **2** — **3**



# Replacing a Neptune core module

Before installing a Neptune core module in the system or attaching a shipping bracket to an installed Neptune core module, remove the DIMMs from slots 9 to 24 and 41 to 56. These DIMMs would block the shipping bracket and prevent you from completing the Neptune core module replacement procedures.



Step



# Updating firmware

The firmware and RoT module is embedded in the SR850 V4 system I/O board. After replacing a system I/O board, 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 system I/O board:

- 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](#)

# Updating the VPD

After replacing a processor board, service personnel must update the VPD (machine type and serial number) on the processor board. The SR850 V4 VPD update procedure is the same as that used with other ThinkSystem models (using the `onecli config set` OneCLI command).

Replacing an 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 ThinkSystem SR850 V4 User Guide on [Lenovo Support](#).

# Summary

This course enabled you to:

- Describe the ThinkSystem SR850 V4 server and components
- List the SR850 V4 specifications
- Describe the SR850 V4 configurations and block diagrams
- Describe the SR850 V4 management tools
- Describe the problem determination steps and explain how to troubleshoot issues with the SR850 V4