

Recycling the PCB Assemblies

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Recycling the PCB Assemblies

The Cisco UCS X580p PCIe Node has multiple different PCB assemblies (PCBAs), which consist of the PCB motherboard plus any components mounted on it.

For compliance with local e-waste and recycling laws, use the following procedures to disassemble the PCBAs.

- Recycling the GPU Cage PCBA, on page 1
- Recycling the Node PCBA, on page 3

Recycling the GPU Cage PCBA

Use the following task to disassemble the GPU cage for recycling.

Before you begin

Note **For Recyclers Only!** This procedure is not a standard field-service option. This procedure is for recyclers who will be reclaiming the electronics and sheet metal for proper disposal to comply with local eco design and e-waste regulations.

To remove a GPU cage PCBA, the node must be removed from the chassis.

You will find it helpful to gather a #2 Phillips screwdriver before beginning this procedure.

Procedure

Step 1 Remove the node's top cover.

Go to Removing the PCIe Node Cover.

Step 2 Remove the node's air baffle.

Go to Removing the PCIe Node Air Baffle.

Step 3 Remove the node's front panel.

Go to Removing the PCIe Node Front Cover.

Step 4 If you have not already removed the GPU cages, remove them now.

Go to Removing a GPU Cage.

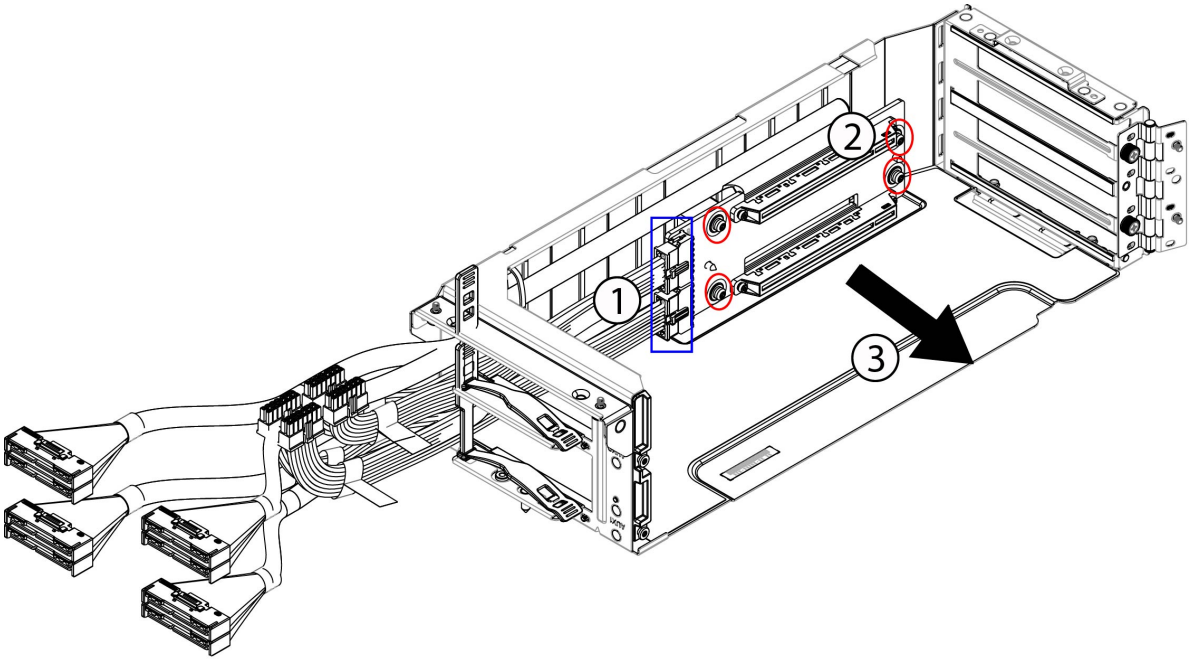
Step 5 If necessary, remove the NVIDIA NVLink GPU interconnect.

Removing the NVIDIA NVLink GPU Interconnect

Step 6 Remove the GPU from the cage as documented in Removing a GPU Cage.

Step 7 Remove the PCB from the cage.

a) Disconnect the cables from the cage's PCB (1).
b) Using a #2 Phillips screwdriver, remove the four screws that secure PCB to the cage (2).
c) Grasp the PCB and remove it (3).



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Step 8 Dispose of the PCB, components, and sheet metal in compliance with relevant e-waste and recycling laws.

Recycling the Node PCBA

Each Cisco UCS X580p PCIe Node has a PCBA (motherboard) that is connected to sheet metal. You must disconnect the PCBA from the chassis sheet metal to recycle the PCBA. You will need to disassemble and remove additional parts to gain access to the PCBA.

You will need to recycle the PCBA for each PCIe node.

Use the following procedure to recycle the Cisco UCS X580p PCIe Node's motherboard.

Note The following illustrations focus on the rear of the node, which is where the PCB is located. In these illustrations, dashed lines indicate the locations of fasteners present on the node, but not visible in the illustration.

Before you begin

Note **For Recyclers Only!** This procedure is not a standard field-service option. This procedure is for recyclers who will be reclaiming the electronics and sheet metal for proper disposal to comply with local eco design and e-waste regulations.

To remove the node's printed circuit board assembly (PCBA) which is the main PCB plus components mounted on it, the node must be removed from the chassis.

You will find it helpful to gather a #2 Phillips, T8 Torx, and T10 Torx screwdriver for this procedure.

The node's PCB is located at the rear of the node. You will find it helpful to remove the GPU cages before attempting this procedure. When the GPU cages are removed, you will have ample space to work on the node's PCB.

Procedure

Step 1 Remove the node's top cover.

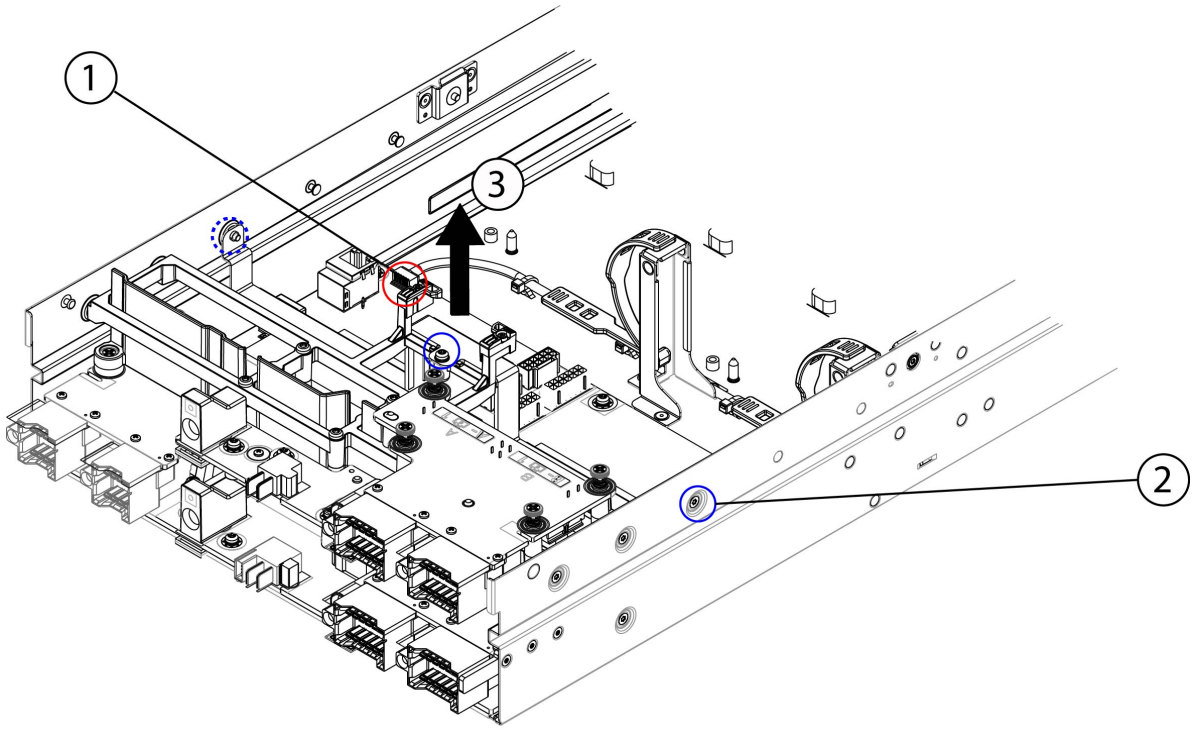
Go to Removing the PCIe Node Cover.

Step 2 If you have not already removed the GPU cages, remove them now.

Go to Removing a GPU Cage.

Step 3 Begin disconnecting the node PCB.

a) Disconnect the cable (1) from the node's PCB.
b) Using T8 and T10 Torx screwdriver, remove three mounting screws from the small mounting bracket (2), including the one screw on each exterior sidewall.
c) Grasp the small support bracket and remove it from the node (3).

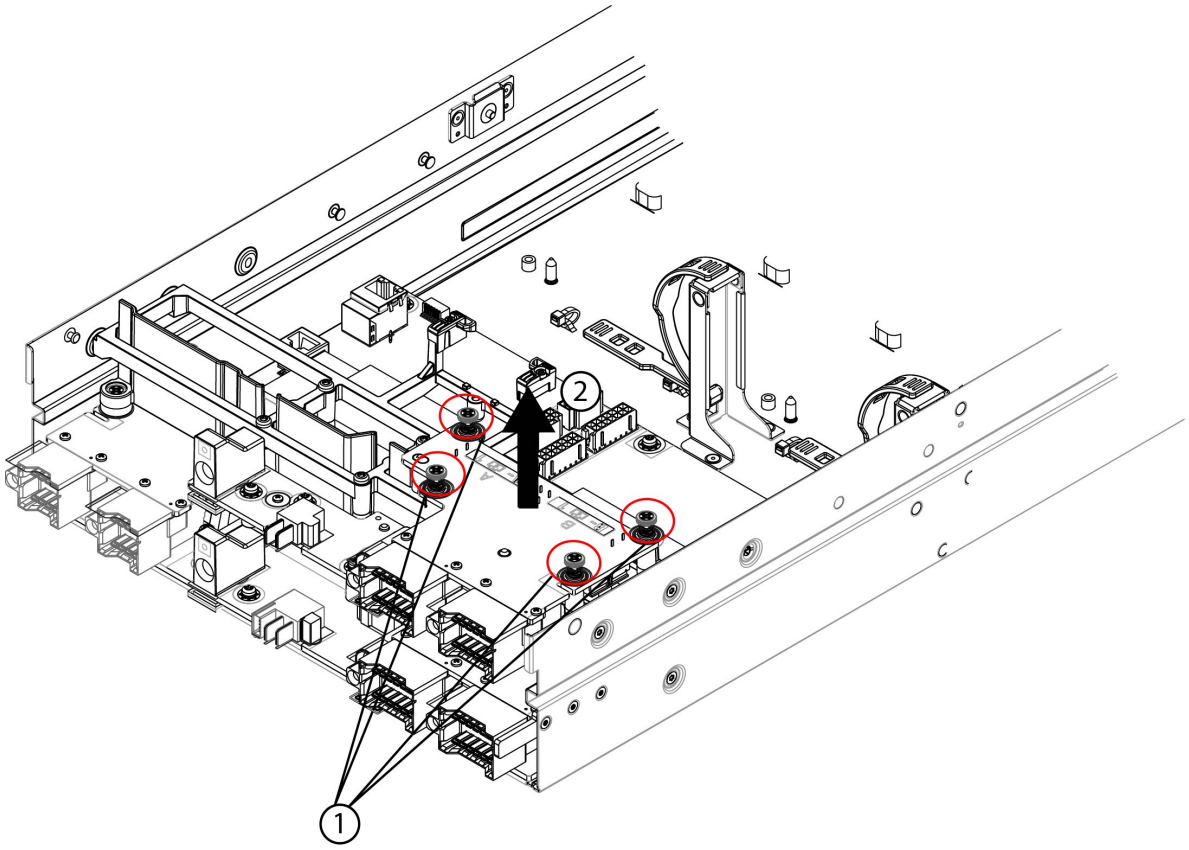


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Step 4 Remove the upper rear mezzanine card.

a) Using the #2 Phillips screwdriver, loosen the four captive thumbscrews (1).

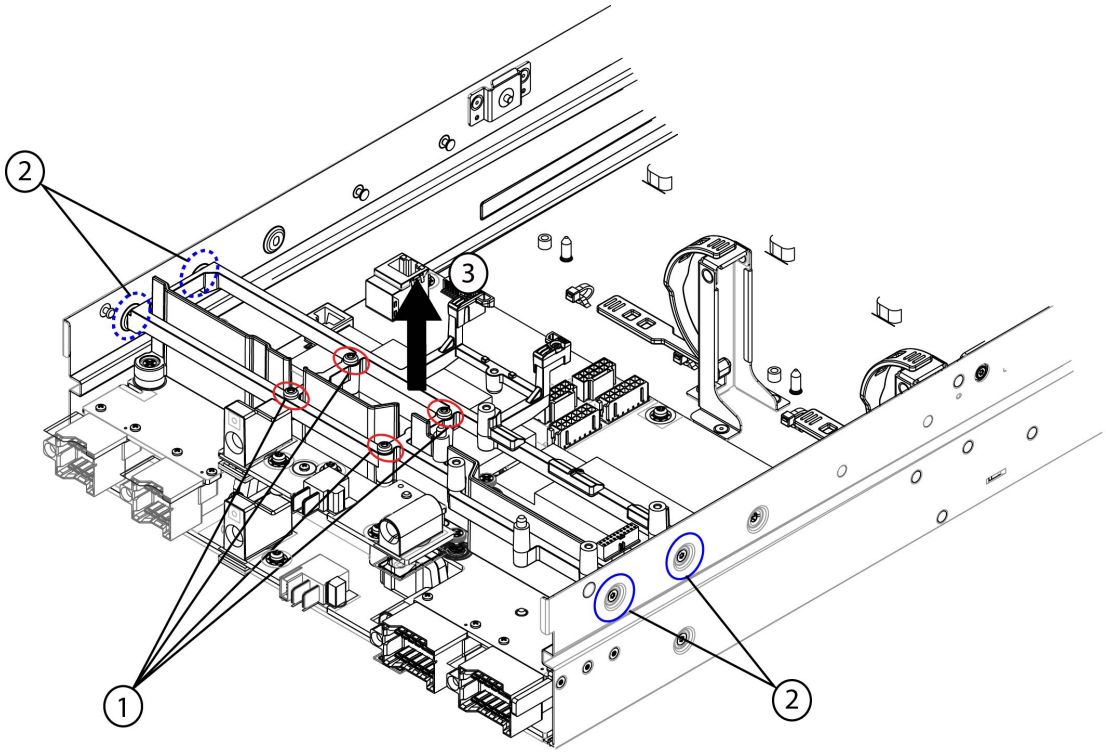
b) Grasp the top-layer rear mezzanine card, and remove it from the node (2).



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Step 5 Remove the upper support frame.

a) Using the T10 Torx screwdriver, remove the four screws on the top of the support frame (1).
b) Using the T8 Torx screwdriver, remove the four screws on the node's sidewalls, two screws per side (2).
c) Grasp the upper support frame, and remove it from the node (3).

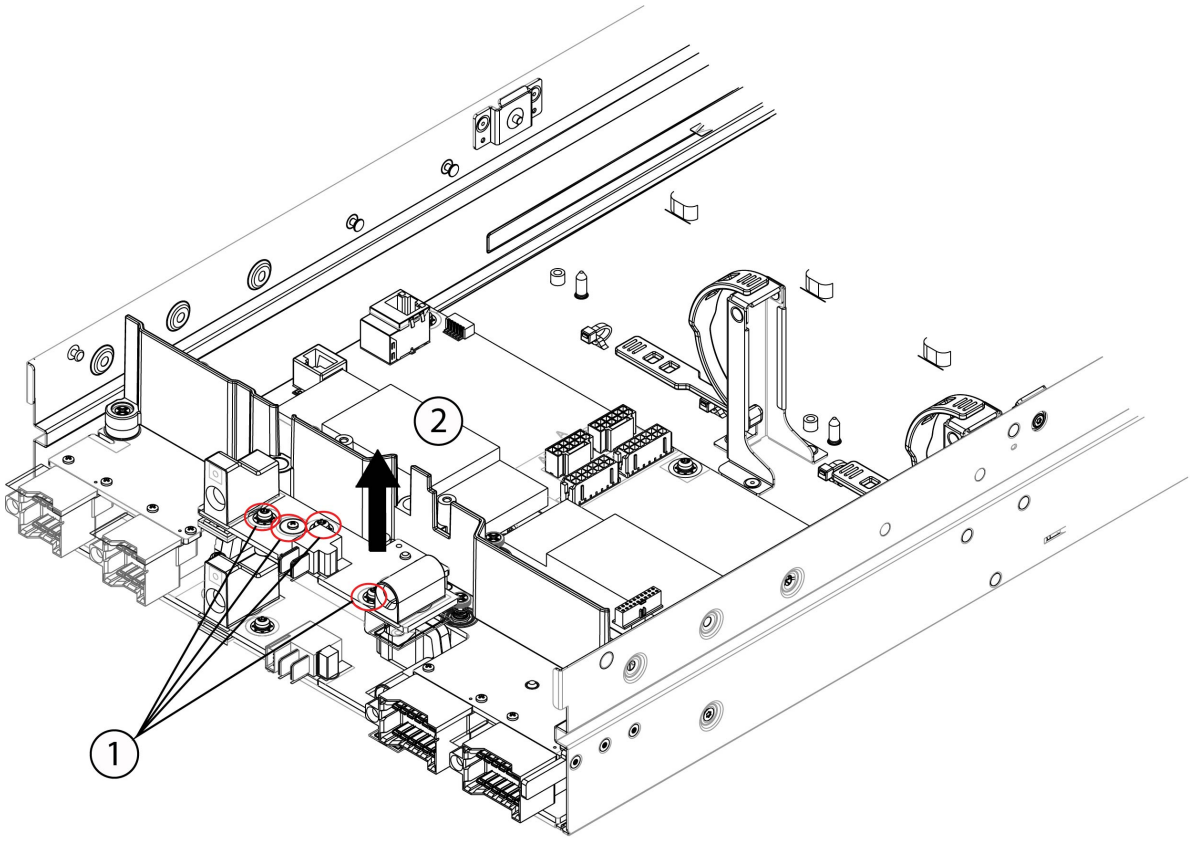


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Step 6 Remove the node power card.

a) Using the T10 Torx screwdriver, remove the four screws on top of the power card (1).

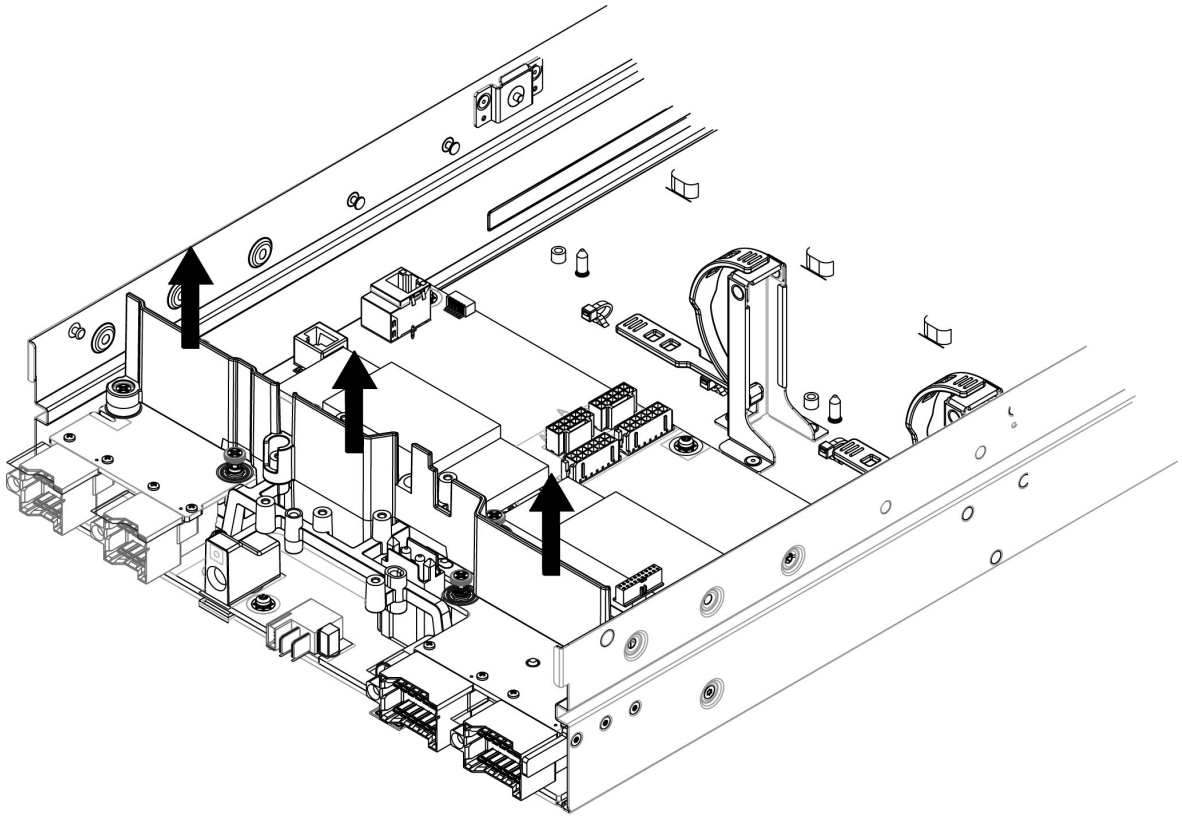
b) Grasp the power card and remove it from the node (2).



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Step 7 Grasp the node's air blocker and remove it.

Note
Each end of the air blocker has a cylinder that fits around a captive screw on the lower level rear mezzanine cards. If you feel some resistance while removing the air blocker, check the ends of the air blocker.

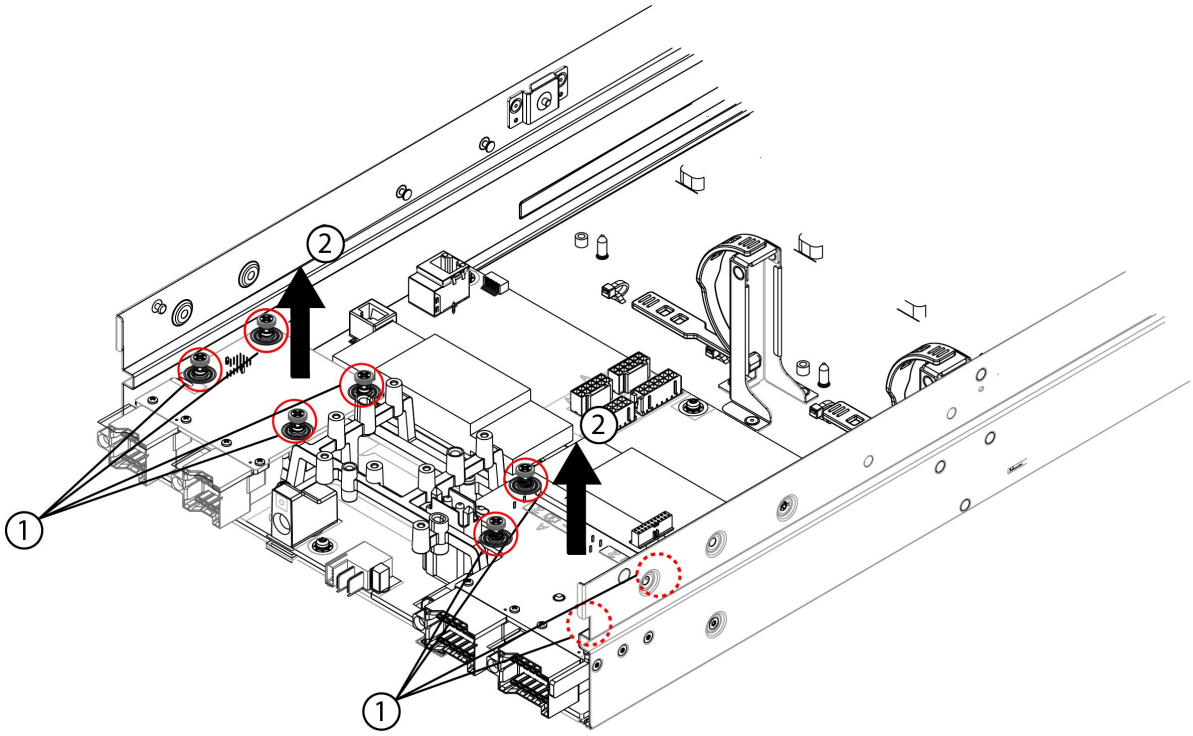


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Step 8 Remove both of the lower cards.

a) For each card, using the #2 Phillips screwdriver, loosen the four captive thumbscrews (1).

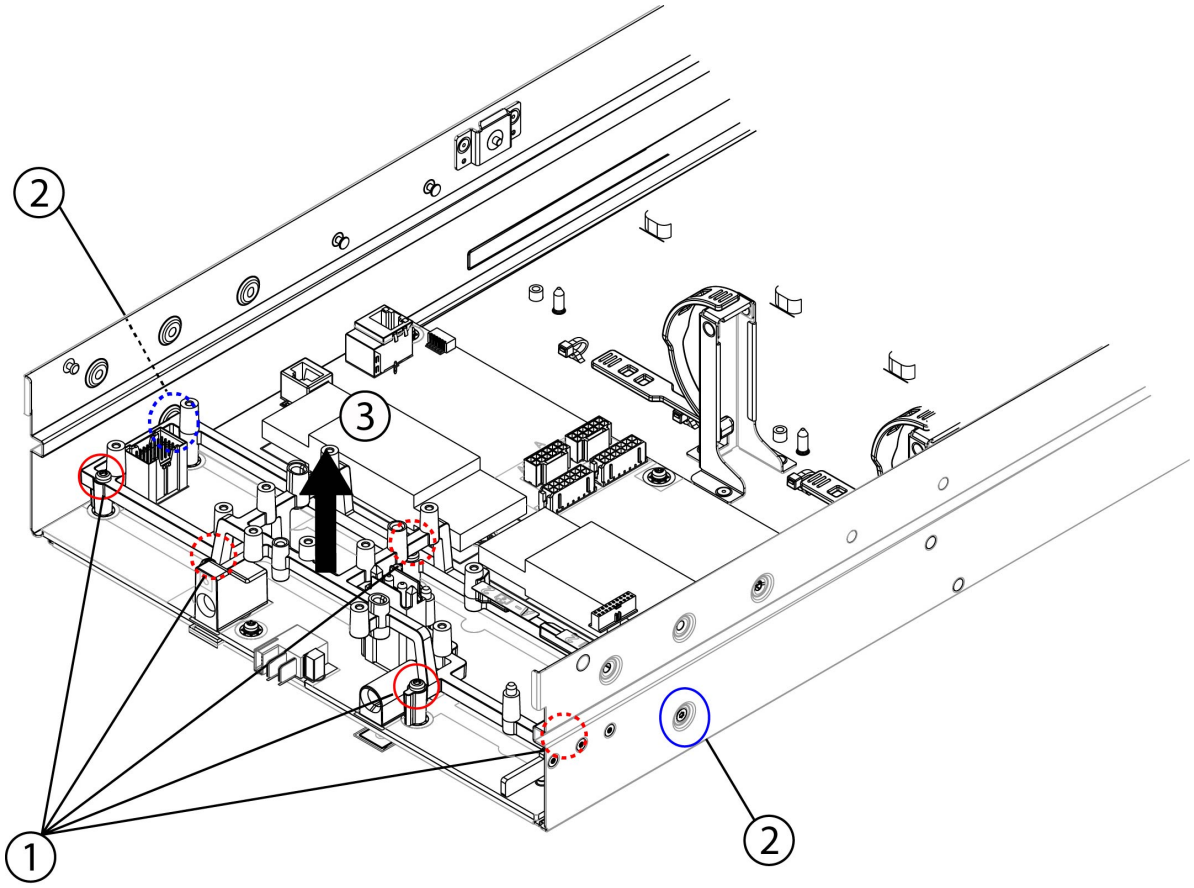
b) For each card, grasp the card, and remove it from the node (2).



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Step 9 Remove the lower support frame.

a) Using the T10 Torx screwdriver, loosen the five thumbscrews on top of the frame (1).
b) Using the T8 Torx screwdriver, loosen the two screws on the exterior of the node's sidewalls, one per side (2).
c) Grasp the lower support frame and remove it from the node (3).

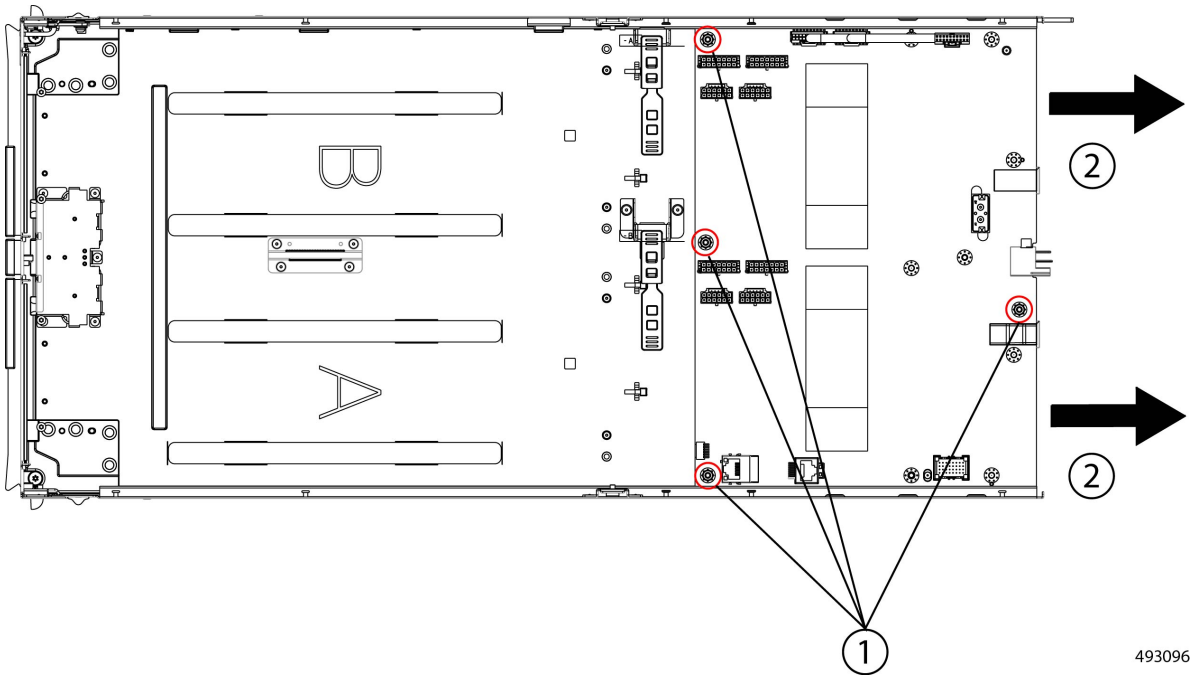


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Step 10 Detach the node's PCB from the sheet metal tray.

a) Using a T10 Torx screwdriver, remove the four screws (1).

b) Grasp the node's PCB and remove it from the node (2).



Step 11 Dispose of the PCB, components, and sheet metal in compliance with relevant e-waste and recycling laws.