WEEE DISASSEMBLY INSTRUCTIONS

SUPERMICRO SYS-211GT-HNC8F ENCLOSURE

Abstract

This document provides clear guidance for end-of-life recyclers on how to identify and disassemble reportable materials in compliance with the Waste Electrical and Electronic Equipment (WEEE) directive.

Table of Contents

1. Product Views

Front view

Rear view

Product construct view
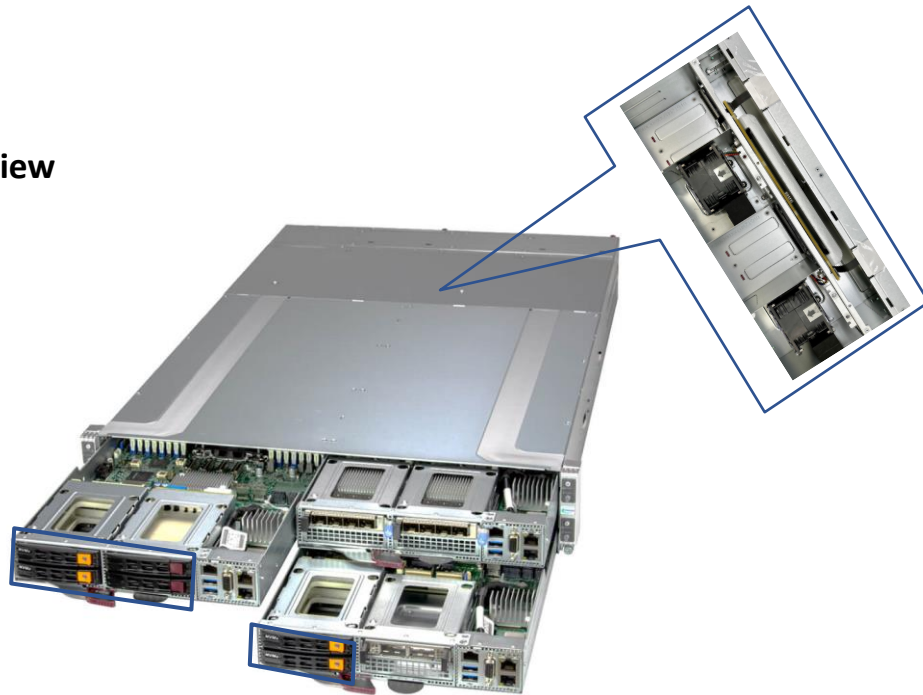
Hard Disk Drive/ Solid State Drive
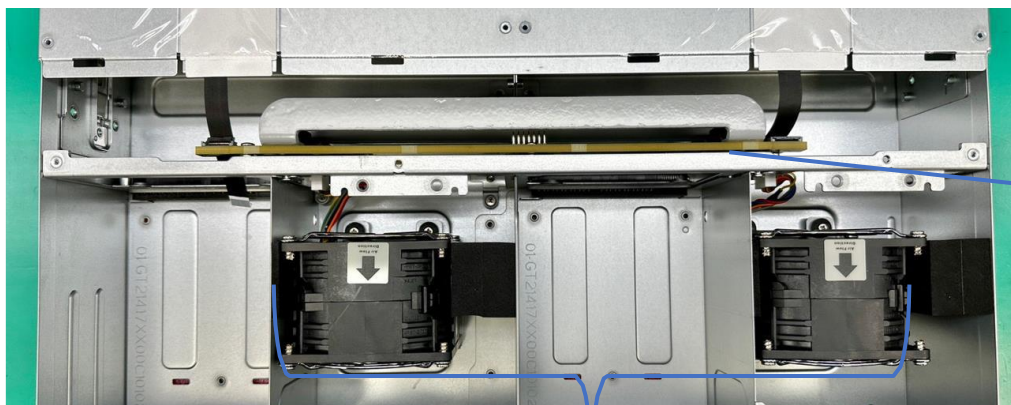
Power Distributor Backplane

Fans

Power Supply
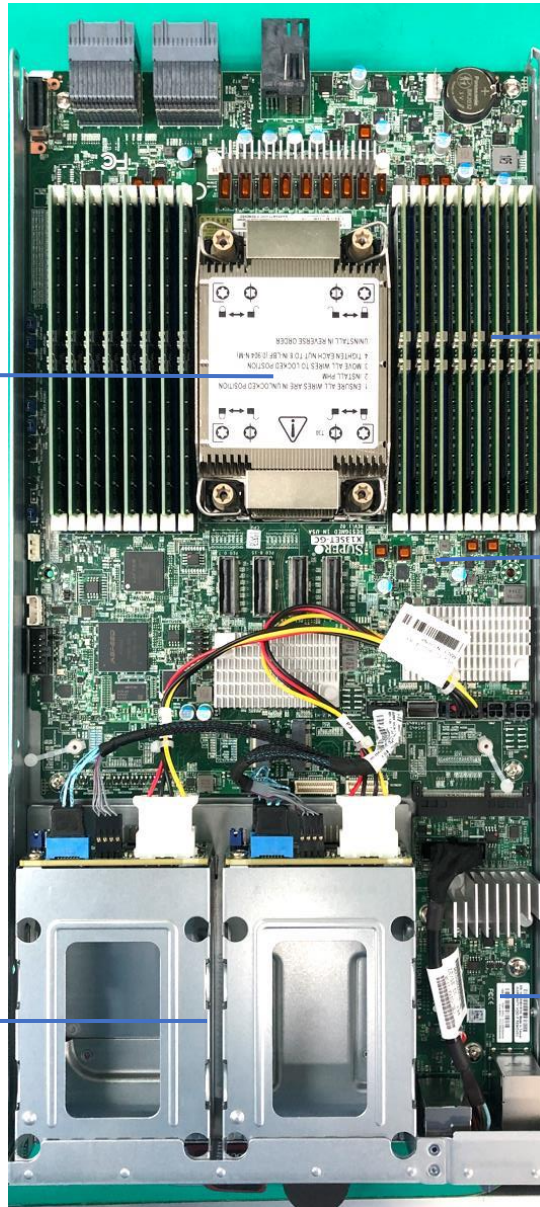
DIMM

Processor

Motherboard

I/O Card

Drive Trays

2. Reportable Materials on SYS-211GT-HNC8F

According to Article 8(2) and Annex VII of WEEE directive 2012/19/EU, below materials and components should be selectively treated.

Description	Notes	No.	Quantity
Printed Circuit Boards (PCB) or Printed Circuit Assemblies (PCA)	With a surface greater than 10 sq cm	2.3, 3.5, 4.1, 5.1, 6.1, 7.1, 9.1, 10.2, 11.1, 12.1	80
Batteries	All types, including standard alkaline and lithium coin or button style batteries	14.2	4
Mercury-containing components	For example, mercury in lamps, display backlights, scanner lamps, switches, batteries		
Liquid Crystal Displays (LCD) with a surface greater than 100 sq cm	Includes background illuminated displays with gas discharge lamps		
Cathode Ray Tubes (CRT)			
Capacitors / condensers (Containing PCB/PCT)			
Electrolytic Capacitors / Condensers measuring greater than 2.5 cm in diameter or height	Depending on the power supply model	3.6	2
External electrical cables and cords		1.6	2
Gas Discharge Lamps			
Plastics containing Brominated Flame Retardants		15.1, 15.2	4
Components and parts containing toner and ink, including liquids, semi-liquids (gel/paste), and toner	Include the cartridges, print heads, tubes, vent chambers, and service stations.		
Components and waste containing asbestos			
Components, parts, and materials containing refractory ceramic fibers			
Components, parts, and materials containing radioactive substances			

3.   Disassemble Instructions

The intent of this document is to provide guidance to recyclers on the presence of materials and components at the product / family level, as required by the EU WEEE Directive 2012/10/EU. This document should also help direct recyclers to proper methods for removing parts and general product disassembly instructions.
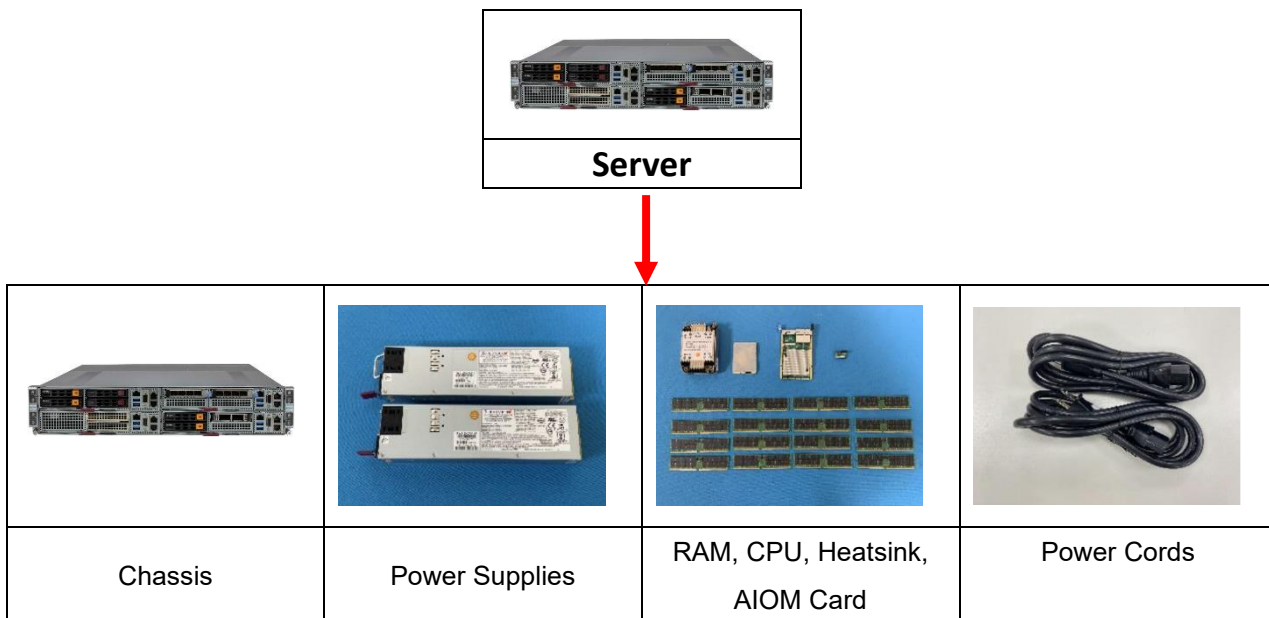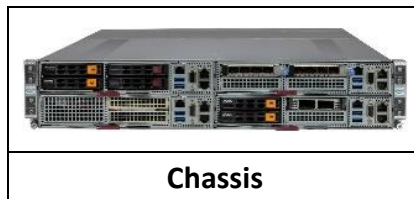
This chapter consists of three subsections:

Recommended disassembly tools, disassembled flowchart, and step-by-step disassembly instructions to direct recycler proper methods to treat.

3.1 Recommended Disassembly Tools

Disassembly tool	Cross screwdriver	
	Flathead screwdriver	

3.2 Disassembled flowchart

Server

Chassis	Power Supplies	RAM, CPU, Heatsink, AIOM Card	Power Cords
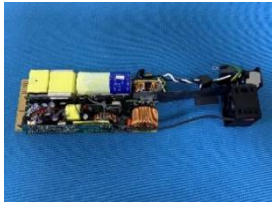
Chassis
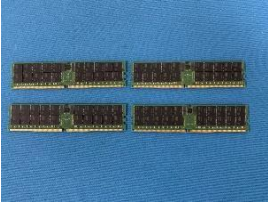
Backplane * 8 set	Fans * 2 set	Screws	Motherboard*4 set
Battery*4 set	Cables	Power Distributor Backplane	I/O Card * 4 set

Power Supply

Power Enclosure*2	Screws and Standoff*2 Set	Power Supply Module*2

5

Storage Card and CPU
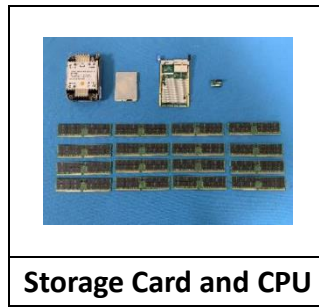
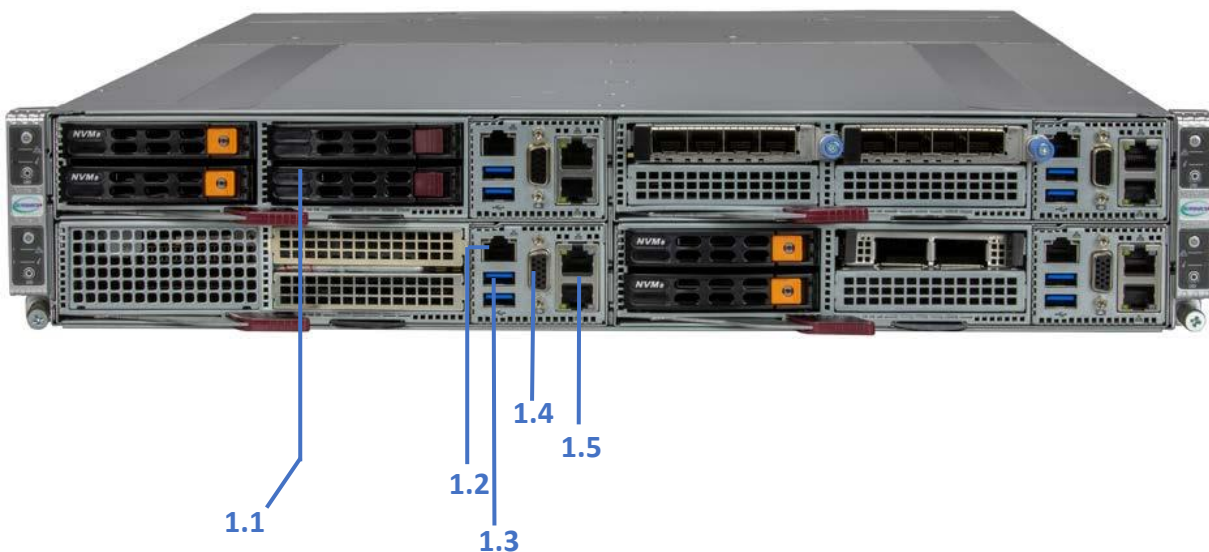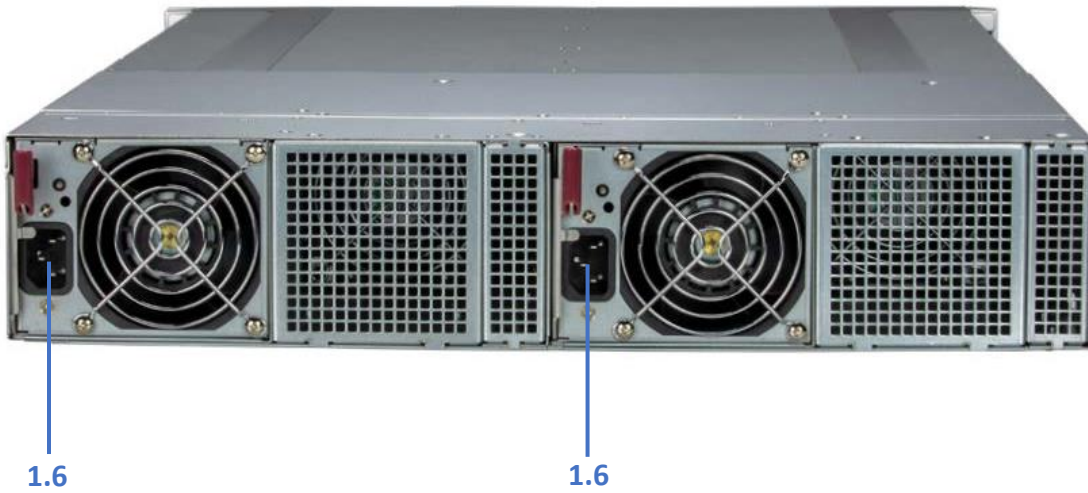|		
Heat Sink	Processor * 4 set	Add-On TPM Module
DIMM *8 Set	AIOM Module	

3.3 Step-by-Step Disassembly Instructions

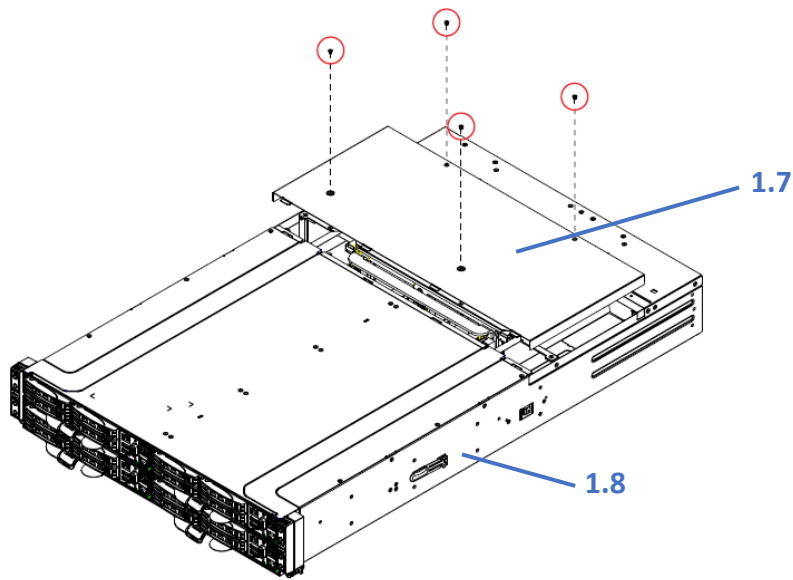## 1. Removing Cable and Chassis Top Cover

1. Use the operating system to power down the system.

2. After the system has completely shutdown, disconnect the power cords from the power supply modules.

3. Remove all cables/ unit from the server IO port.

1.6 **1.6**

4. The chassis top cover can be lifted off after removing the four screws as shown below.

1.7

1.8

No.	Description	No.	Description
1.1	Drive Bays	1.6	Power Cable
1.2	BMC LAN Port	1.7	Top Cover
1.3	USB 3.0 Ports	1.8	Chassis
1.4	VGA Port		
1.5	LAN Ports		

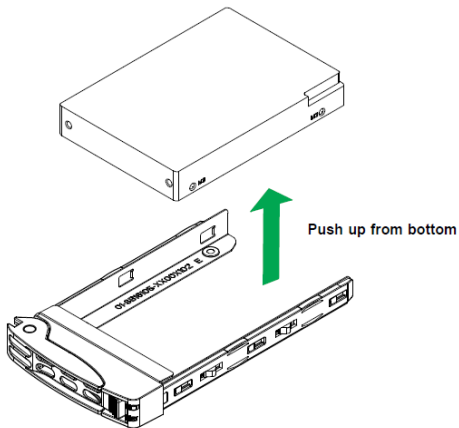## 2. Removing Hard Disk Drive (HDD) / Solid State Drive (SDD)

1. Press the release button to extend the drive carrier handle.

2. Use the drive carrier handle to pull the drive out of the chassis.

Release Button
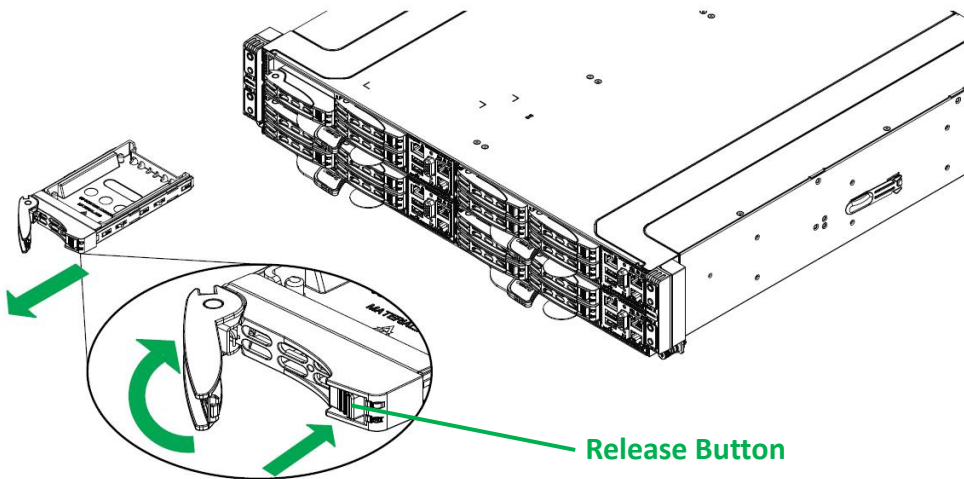
3. Push up from the bottom of the SSD as shown below to remove it from the drive tray.
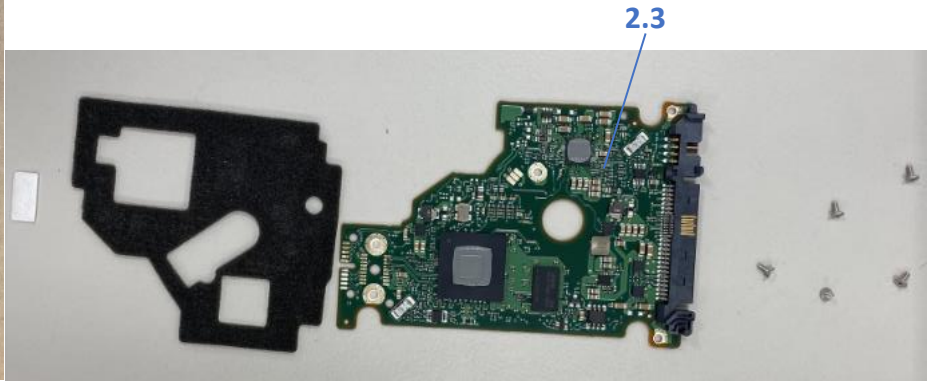
2.1

Push up from bottom

2.2

5. Use a cross screwdriver to remove drive enclosure

6. Use a cross screwdriver to remove screws and lift off the PCB
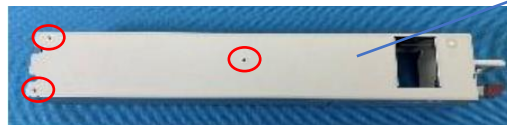
No.	Description
2.1	HDD/ SSD
2.2	Hard Drive Enclosure
2.3	Hard Drive PCB

3. Removing Power Supply

1. Ensure the system is unplugged and powered down.

2. Release the locking clip to unlock the power supply module

2. Pull out the locking lever and remove the unit.
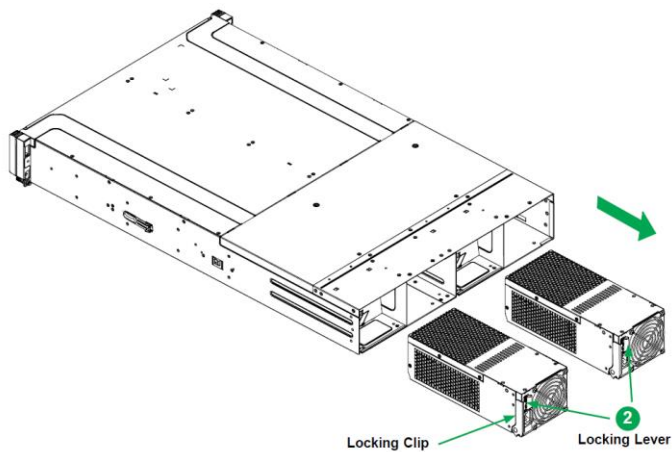
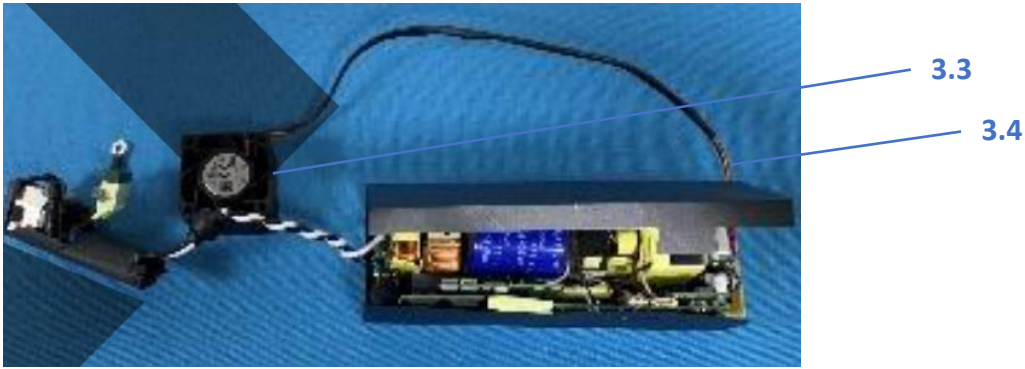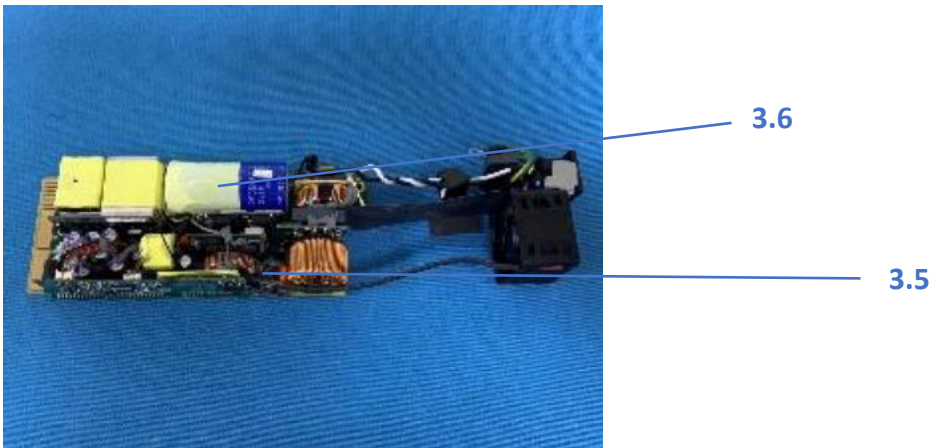

3. Remove the screw from the enclosure

4. Cut the power leads connected to the fan and lift the main board from the chassis

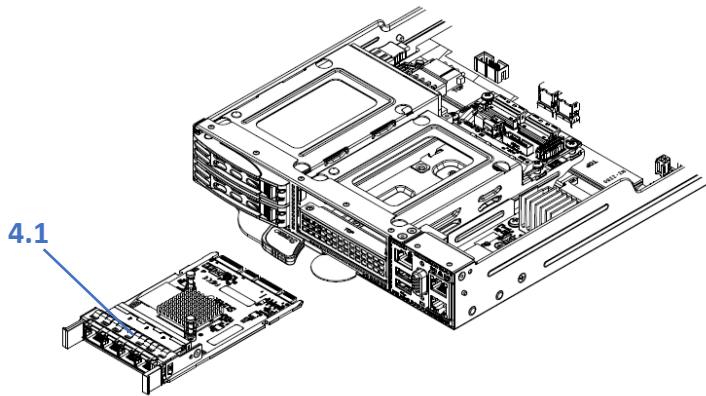5. Use a flathead screwdriver to cut the capacitor adhesive and pin solder.

Pin

Adhesive

No.	Description
3.1	Power Supply
3.2	Power Enclosure
3.3	Fan
3.4	Fan Cable
3.5	Power Module PCB
3.6	Capacitor

4. Removing Advanced I/O (AIOM) Network Card

1. Loosen the thumbscrew using your hand.
2. Slide the AIOM out of the opening.

No.	Description
4.1	AIOM Network Card

5. Removing Add-On Module for AIOM Network Card

1. Locate the Add-On Module (AOM) next to the motherboard and ensure that all cables and the AIOM are disconnected from the module.
2. Remove the four screws using a screwdriver as shown below (circled in red).
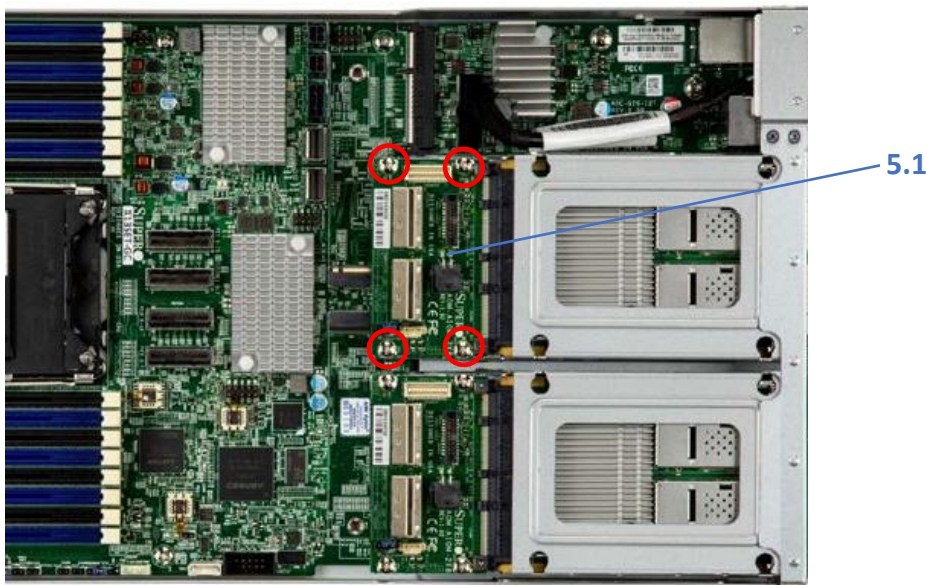
No.	Description
5.1	Add-On Module

6. Removing Power Distributor Backplane

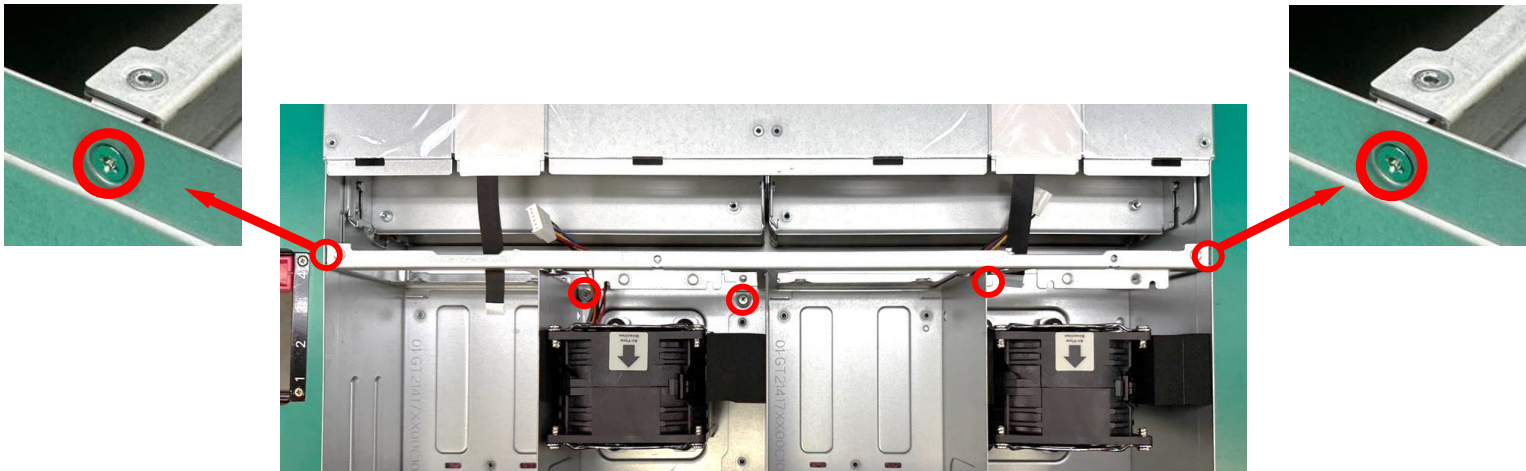1. Unscrew the screws (circled in red) holding the Power Distributor (PDB) bracket from the chassis.

2. Unscrew the PDB backplane from the bracket as shown below.

6.1
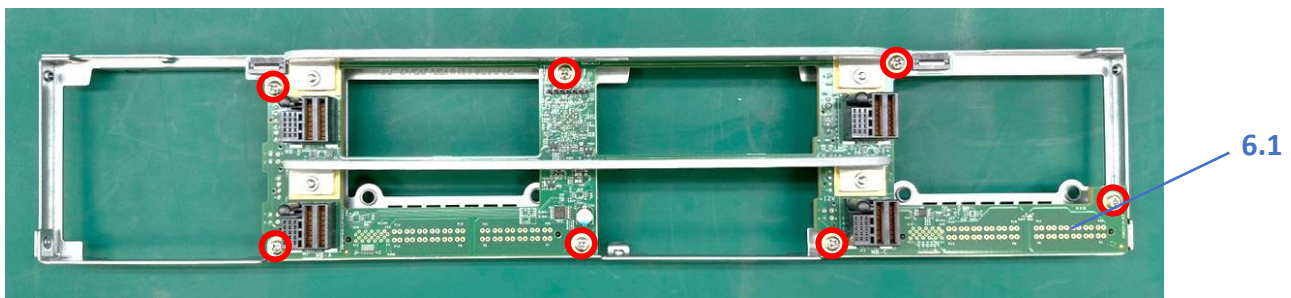
No.	Description
6.1	Power Distributor Backplane

7. Removing I/O Card

1. Unscrew the screw holding the card in place using a screwdriver as shown below.
2. Slide the I/O card out of the system.

Screw

7.1
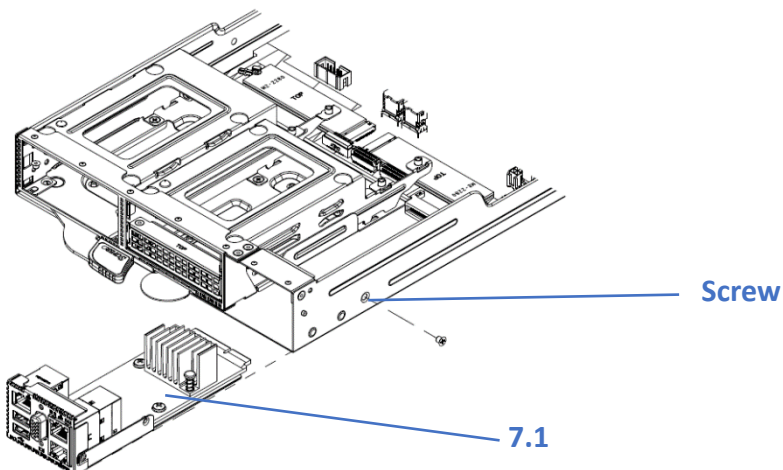
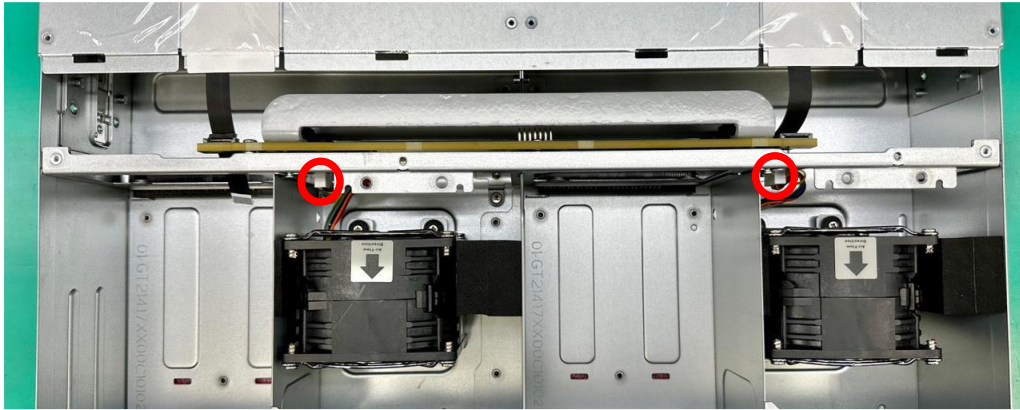| No.	Description
7.1	I/O Card

8. Removing Fan

1. Disconnect the chassis fan from the midplane as shown below.

2. Use a screwdriver to unscrew the 4 screws for each fan from the chassis.
3. Lift the fan housing up and out of the chassis for each fan.

One Fan Cooling Node A and B

8.1

One Fan Cooling Node C and D
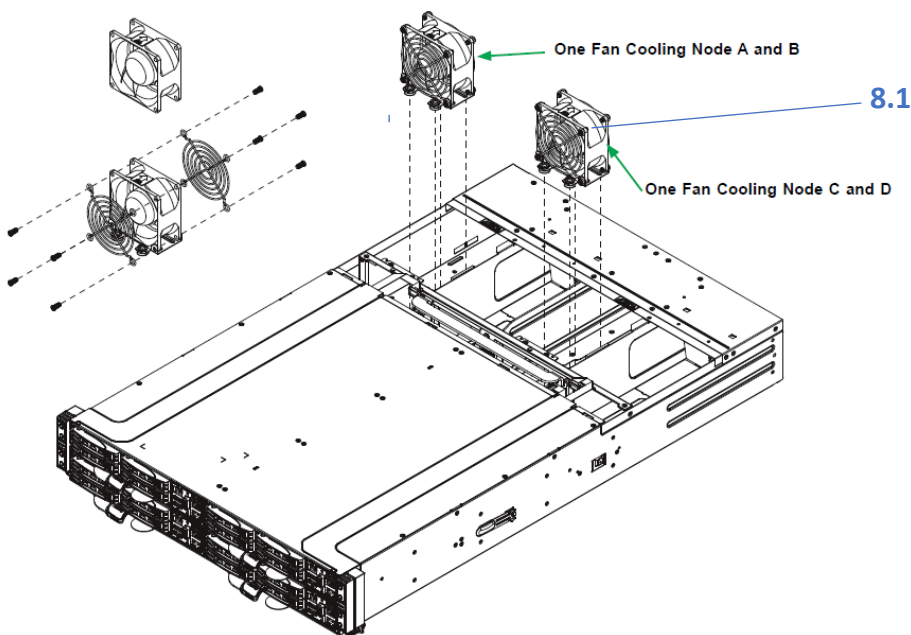
No.	Description
8.1	Cooling Fans

9. Removing Backplane

1. Ensure all cables are unplugged from the backplane.

2. Use a screwdriver to remove the three screws holding the backplane in place, then lift the backplane out of the system.
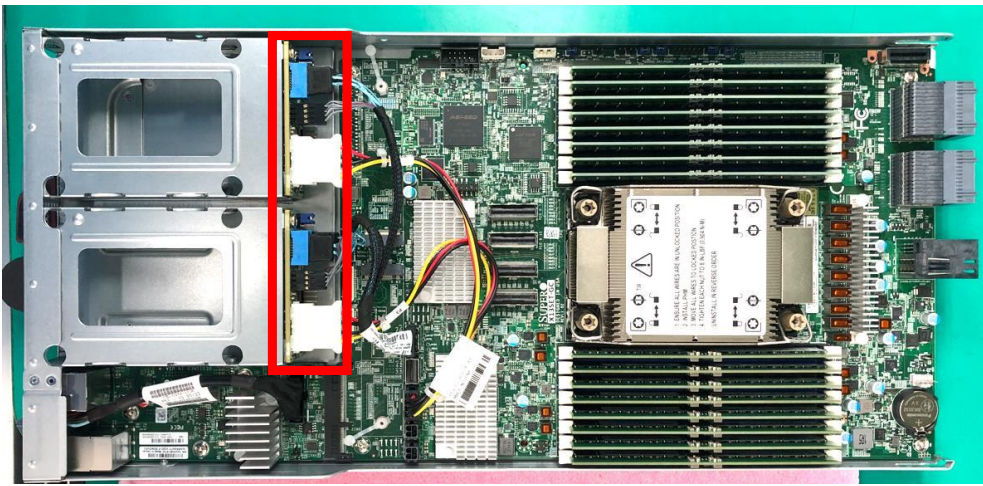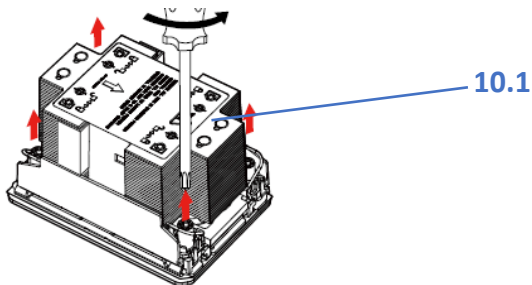

9.1

No.	Description
9.1	Backplane

10. Removing Processor

1. Removing the PHM (Processor Heatsink Module) from the motherboard, first shut down the system and unplug the AC power cord from all power supplies

2. Use a T30 Torx-bit screwdriver to loosen the four screws in a diagonal pattern on the heatsink as shown in the picture below:
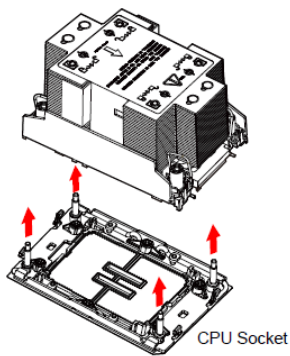

10.1

3. Press the four rotating wires inwards to unlatch the heatsink from the socket.
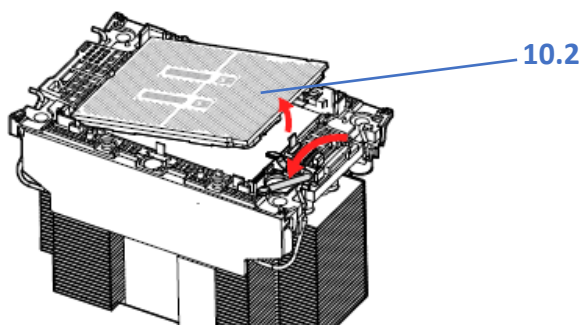

Press the four rotating wires inwards to unlatch the PHM.

14
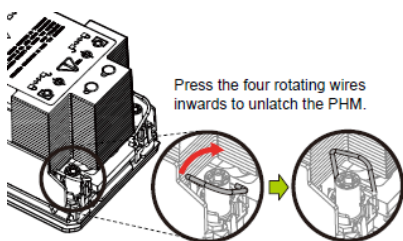
4. Lift the heatsink from the socket.
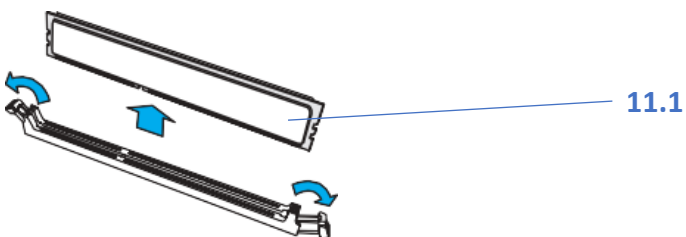

CPU Socket

5. Move the lever to its unlocked position and gently remove the CPU.

10.2

Note: Please handle the processor with care to avoid damaging it or its pins

No.	Description
10.1	Heat Sink
10.2	Processor

11. Removing DIMM

11.1

1. Hand press both release tabs on the ends of the DIMM module to unlock it

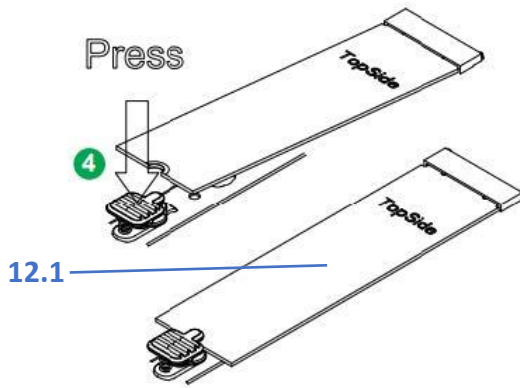2. Once the DIMM module is loose, remove it from the memory slot

No.	Description
11.1	DIMM

12. Removing the M.2 from the Motherboard

1. Locate the M.2 on the motherboard near the JMD1 and JMD2 connections and press down on the clip holding the M.2 in place.

2. Turn the clip and release the M.2.
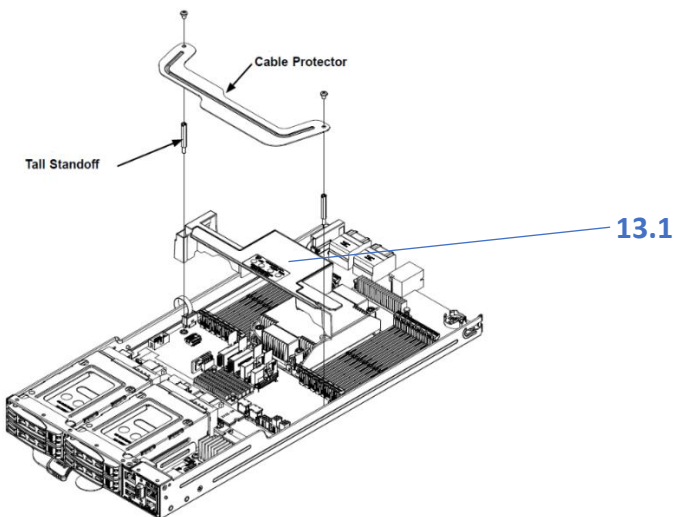
2. Gently pull the M.2 out of the socket.

M.2 Connections

Press

12.1

No.	Description
12.1	M.2

13. Removing the Air Shroud

1. Remove the Cable protector and tall standoffs from the node using a screwdriver as shown below.

Cable Protector

Tall Standoff

13.1

2. Lift and remove the air shroud from the node.

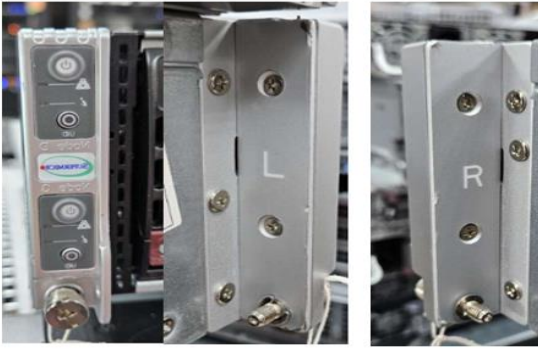| No.	Description
13.1	Air Shroud

14. Removing Motherboard

1. Unscrew the screws (circled in red) on the motherboard and lift the motherboard out of the chassis.

2. Push aside the small clamp that covers the edge of the battery. When the battery is released, lift it out of the holder.
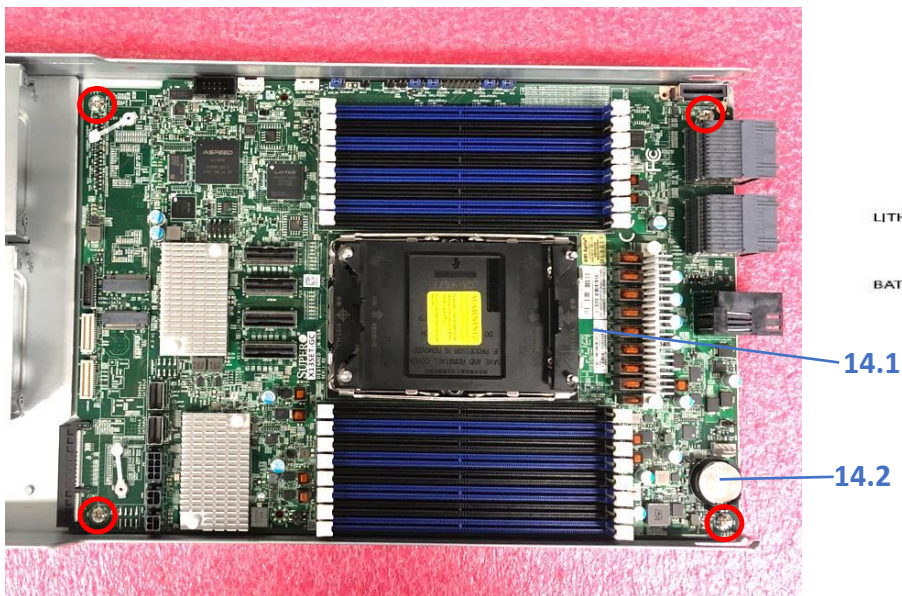
No.	Description
14.1	Motherboard
14.2	Battery

15. Removing Control Panel

Remove control panel screw (R and L) from the chassis.

15.1

15.2

Remove backet screw and hand screw (R and L) from control panel and used hand remove backet mylar.

No.	Description
15.1	Control Panel Cover L & R
15.2	MYLAR_L & R

When the all the steps are complete, the chassis enclosure can be recycled.