WEEE DISASSEMBLY INSTRUCTIONS

SUPERMICRO SYS-512B-WR ENCLOSURE

Abstract

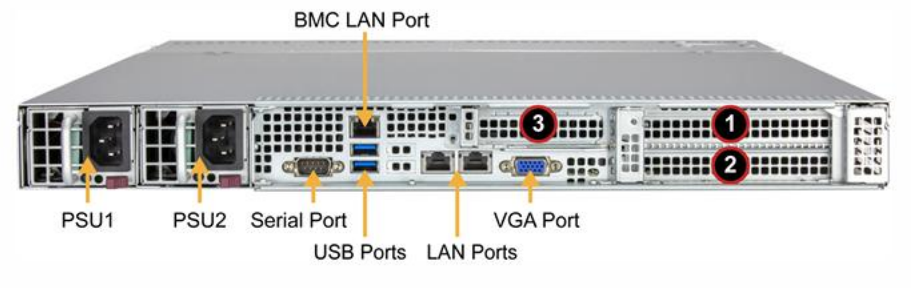
This document provides clear guidance for end-of-life recyclers on how to identify and disassemble reportable materials in compliance with the Waste Electrical and Electronic Equipment (WEEE) directive.

Table of Contents

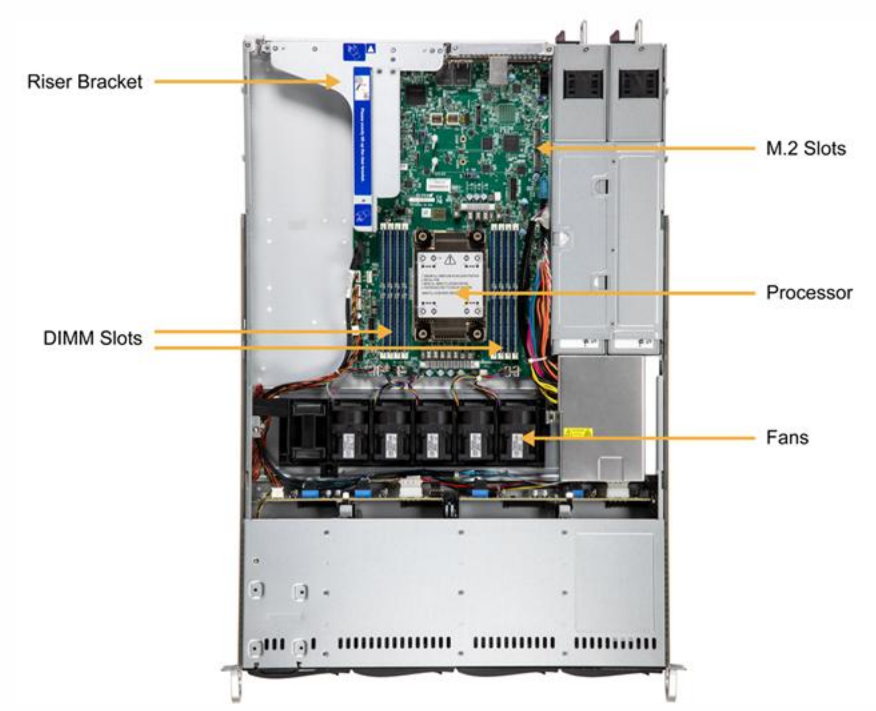
1. Product Views

Front view

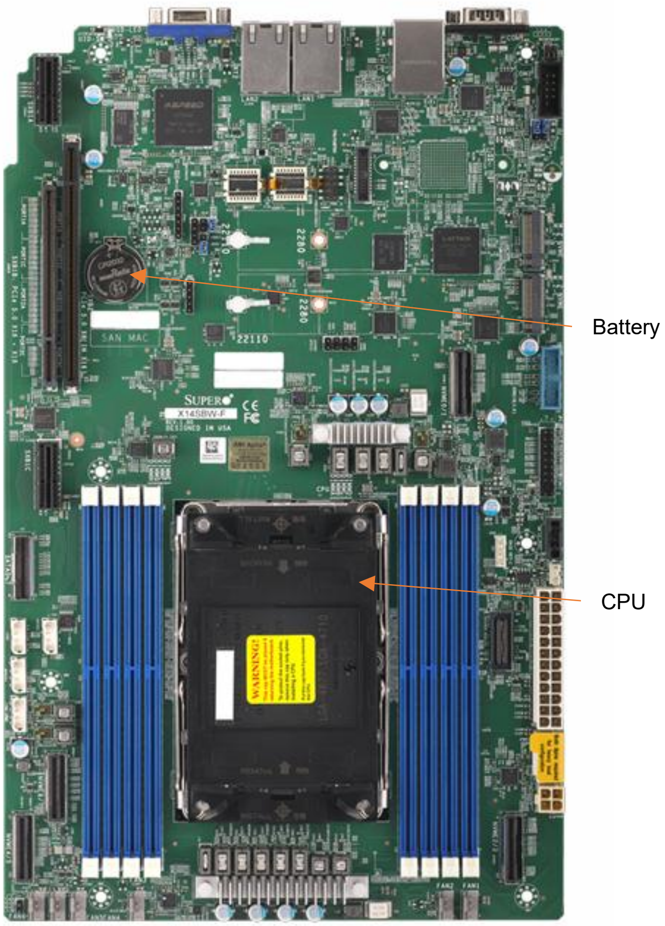
Rear view



Main Components



Motherboard Layout


Battery
CPU

2. Reportable Materials on SYS-512B-WR

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 (Depending on the configuration)	2.4, 3.2, 4.1, 6.2, 6.3, 7.2, 8.1, 9.1, 10.1	22
Batteries	All types, including standard alkaline and lithium coin or button style batteries	10.2	1
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)	2.5	2
External electrical cables and cords		1.1	2
Gas Discharge Lamps			
Plastics containing Brominated Flame Retardants			
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			

＊Quantities vary by configuration.

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.

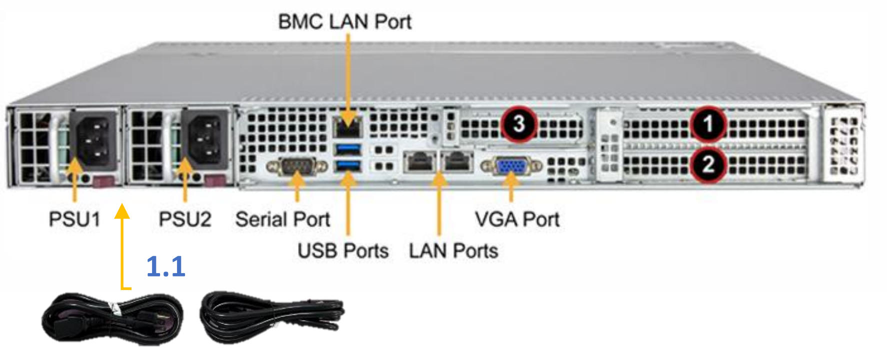
3.1 Recommended Disassembly Tools

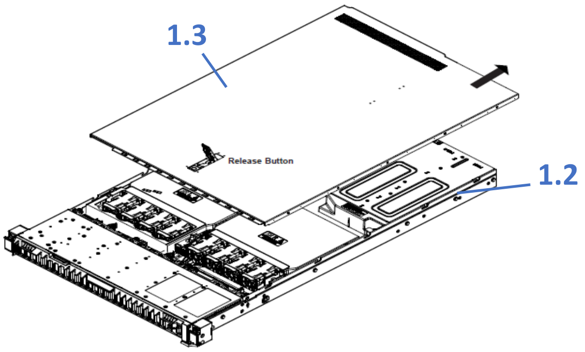
Disassembly tool	T20 torque driver	
	Cross screwdriver	
	Flathead screwdriver	

3.2 Step-by-Step Disassembly Instructions

1. Removing Power Cable and Chassis Top Cover

1. Use the operating system to power down the system
2. After the system has completely shut down, disconnect power cords from the power supply modules
3. Remove all cables/ units from the server IO port
4. Press the release button and slide the cover toward the rear, lift the top cover up.

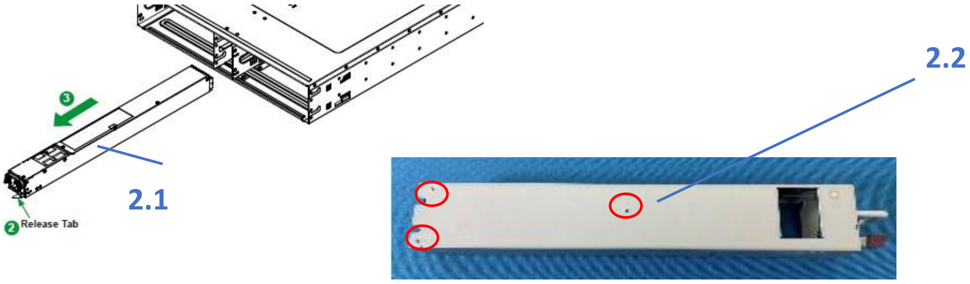




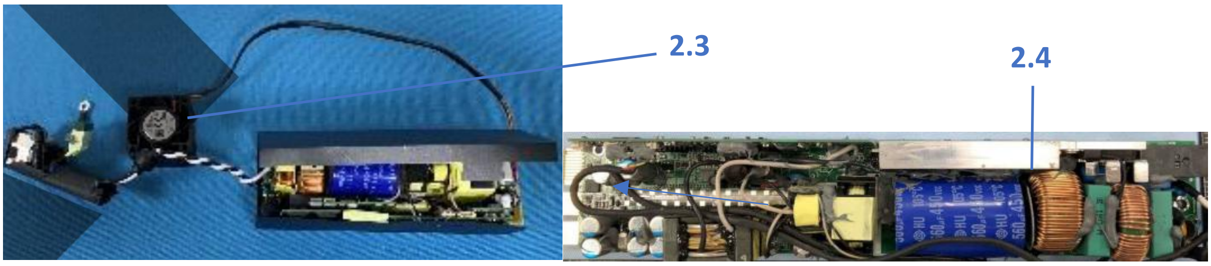
No.	Description
1.1	Power Cable
1.2	Chassis
1.3	Top Cover

2. Removing Power Supply

1. Press the release tab on the failed power supply
2. Use the handle to gently slide the power supply out the back of the chassis
3. Remove the screw from the enclosure



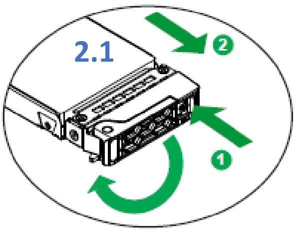
4. Disconnected to the fan and lift the main board from the chassis by hand
5. Use flathead screwdriver cutting capacitor adhesive

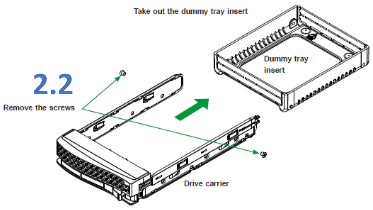


No.	Description
2.1	Power Supply
2.2	Power Enclosure
2.3	Fan
2.4	Power Module PCB
2.5	Capacitor

3. Removing Hard Disk Drive (HDD)/ Solid State Drive (SSD)

1. Press the release button on the drive carrier, which will extend the drive carrier handle
2. Use the drive carrier handle to pull the drive out of the chassis
3. Remove the dummy tray insert by first removing two screws, then pull out the dummy tray





No.	Description
3.1	Dummy Tray
3.2	HDD/ SSD

4. Removing Backplane

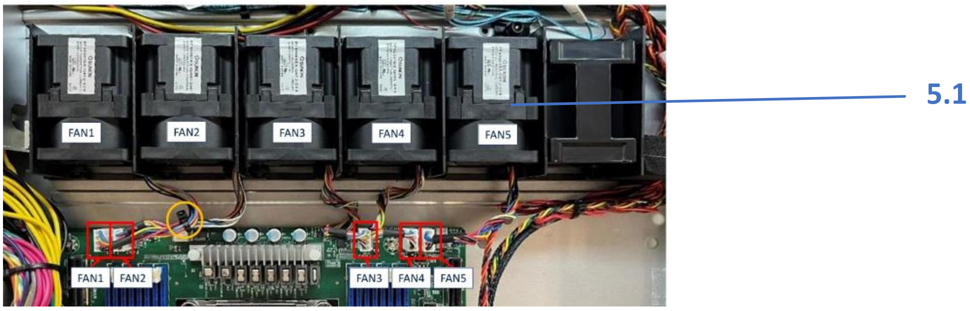
1. Disconnect JPW1 and JPW2 cable (red)

2. Loosen screws(red), then lift the backplane out

No.	Description
4.1	Backplane

5. Removing Fan

1. Disconnect fan cable fan1-5 and squeeze the fan tabs and lift the fan housing up and out

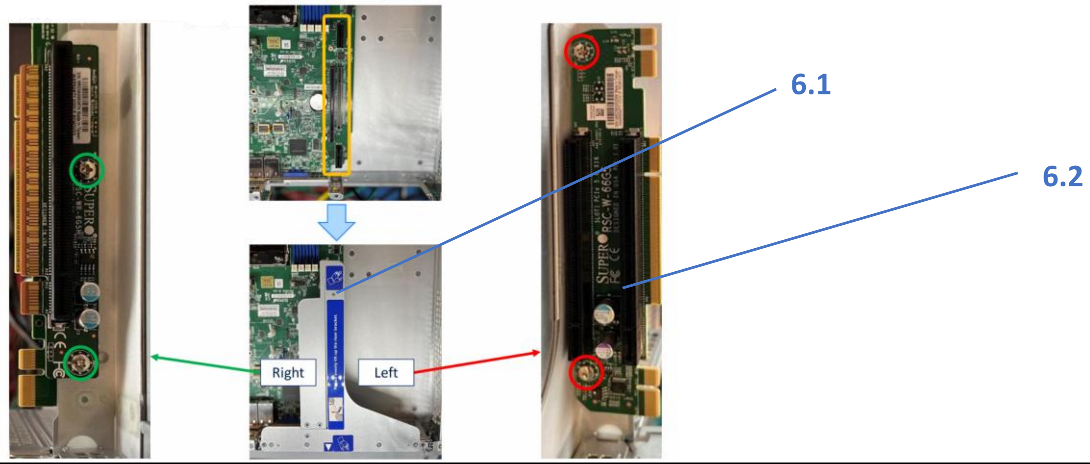


No.	Description
5.1	Cooling Fan

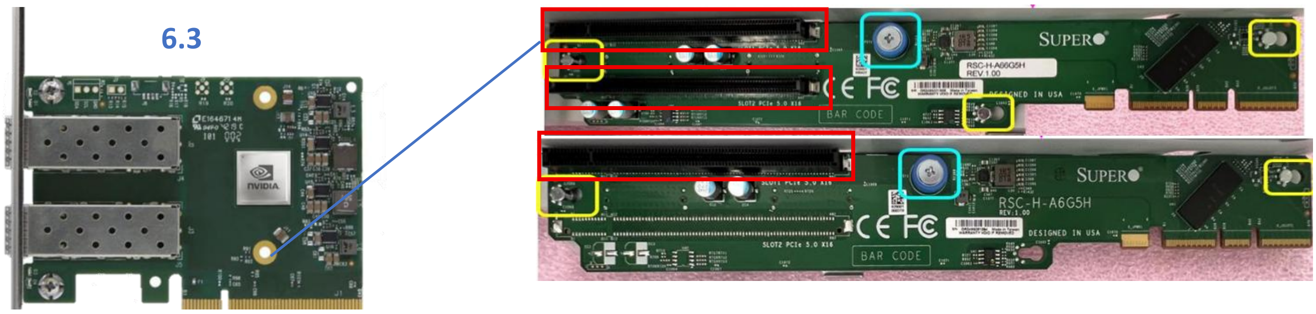
6. Removing Riser Card and Add on Card

1. Unlock bracket (yellow)

2. Loosen the screw (green(left), red(right)), remove the assembly from the chassis



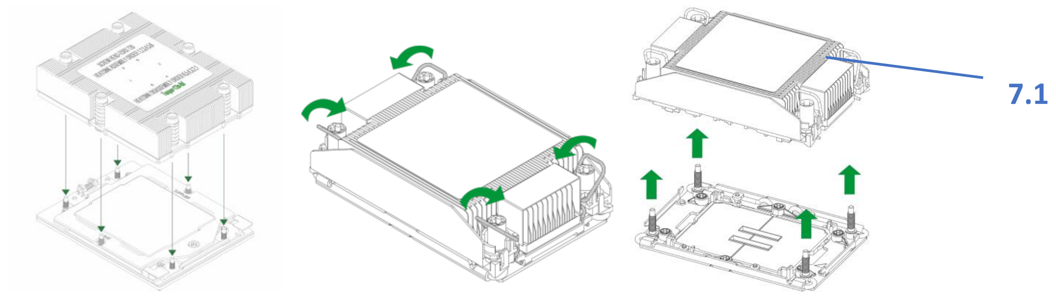
3. Removed add on card from riser card (red).



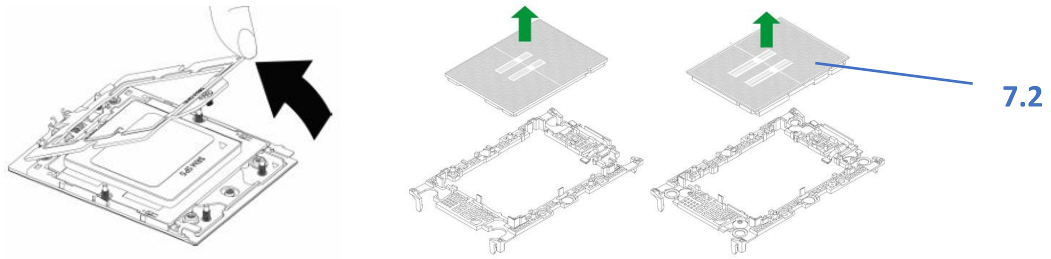
No.	Description
6.1	Bracket
6.2	Riser Card
6.3	Add on Card

7. Removing Processor

1. Remove the screws holding the heatsink and gently work it loose.
2. Unscrew the plate and lift the force frame to the vertical position.
3. Gently pull the PHM upwards to remove it from the CPU socket



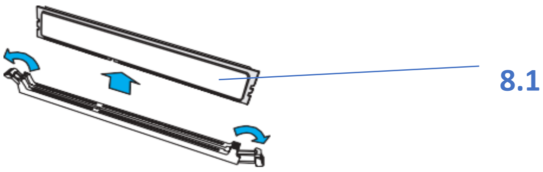
4. lift force frame and lift carrier frame to remove CPU



No.	Description
7.1	Heat Sink
7.2	Processor

8. Removing DIMM

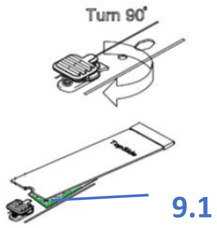
1. Hand press both release tabs on the ends of the DIMM module to unlock it
2. Once the DIMM module is loose, remove it from the memory slot



No.	Description
8.1	DIMM

9. Removing M.2

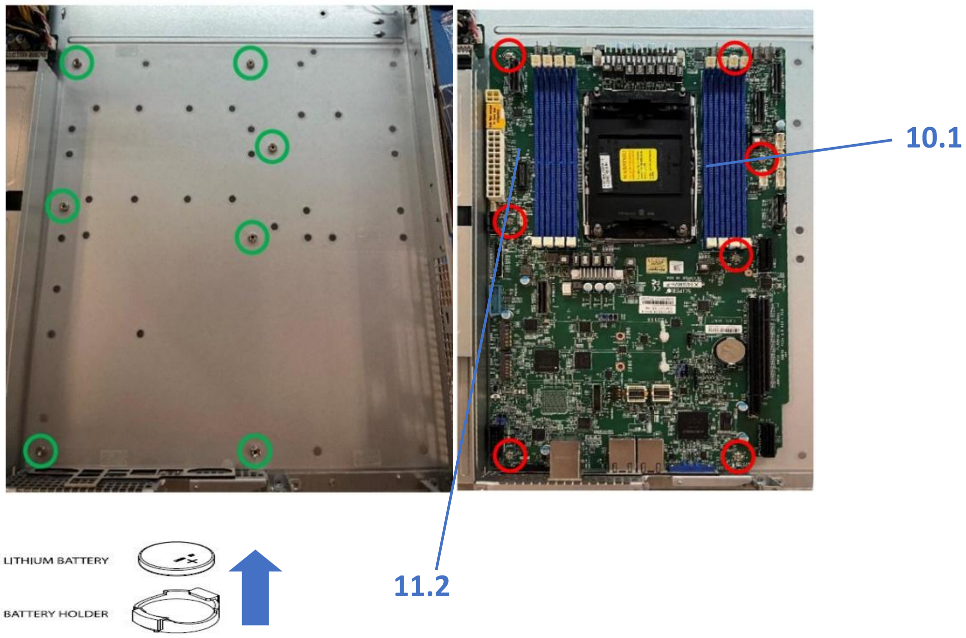
1. Refer to its layout image and locate the M.2 slot, remove the plastic clip from the hole the M.2 slot form the motherboard
2. Turn the plastic clip by 90° degrees, pick the M.2 up from the connector



No.	Description
9.1	M.2

10. Removing Motherboard

1. Unscrew motherboard screw and lift it from chassis.
2. Lift battery from battery holder.



Reusable thumb screw (retained for reassembly)

No.	Description
10.1	Motherboard
10.2	Battery

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