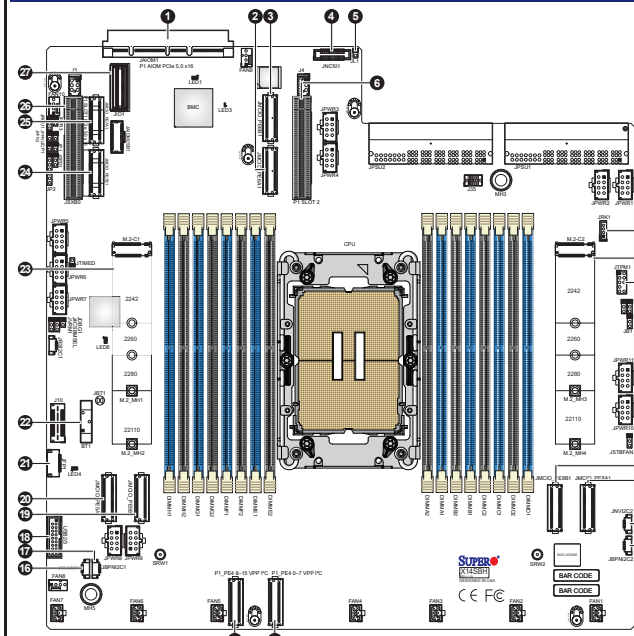


SUPERMICR® SuperServer SYS-212H-TN Quick Reference Guide

Board Layout



Item	Description	Item	Description
1	JAIOM1: PCIe 5.0 x16 AIOM Slot Connector	15	P1_NVME 2/3: PCIe 5.0 x8 M.2 Connector (P1_PE4 8-15)
2	P1_NVME 12/13: PCIe 5.0 x8 M.2 Connector (P1_PE6 0-7)	16	JNVPC1: NVMe I2C Header Channel 1
3	P1_NVME 14/15: PCIe 5.0 x8 M.2 Connector (P1_PE6 8-15)	17	JBPNC1: BPN I2C Header Channel 1
4	JNC5H1: NC-SI Header	18	USB2/3: USB 3.2 Gen1 Header
5	JL1: Intrusion Header	19	P1_NVME 6/7: PCIe 5.0 x8 M.2 Connector (P1_PE5 8-15)
6	P1_SLOT2: PCIe 5.0 x16 4C Slot Connector	20	P1_NVME 4/5: PCIe 5.0 x8 M.2 Connector (P1_PE7 0-7)
7	JRK1: Intel VROC RAID Key Header	21	JFP1: Front Control Panel Header
8	M.2-C2: M.2 PCIe 5.0 Interface (M-key 25110/22110/2280)	22	BT1: Onboard CMOS Battery
9	JTPM1: TPM Connector	23	M.2-C1: M.2 PCIe 5.0 Interface (M-key 25110/22110/2280)
10	P1_NVME 18/19: PCIe 5.0 x8 M.2 Connector (P1_PE8 8-15)	24	P1_NVME 10/11: PCIe 5.0 x8 M.2 Connector (P1_PE7 8-15)
11	P1_NVME 16/17: PCIe 5.0 x8 M.2 Connector (P1_PE8 0-7)	25	P1_NVME 8/9: PCIe 5.0 x8 M.2 Connector (P1_PE7 0-7)
12	JNVPC2: NVMe I2C Header Channel 2	26	P1_SLOT1: PCIe 5.0 x16 4C Slot Connector
13	JBPNC2: BPN I2C Header Channel 2	27	JIO1: System I/O Board Connector (VGA, USB, BMC NIC)
14	P1_NVME 0/1: PCIe 5.0 x8 M.2 Connector (P1_PE4 0-7)		

Memory Support

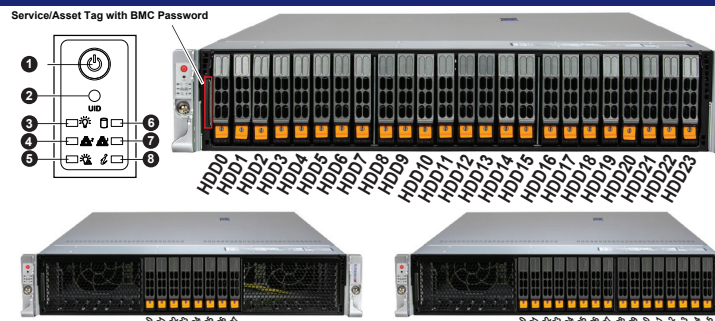
DIMM Population Guide

Type	Channel															
	H1	H2	G1	G2	F1	F2	E1	E2	CPU							
1 DIMM									V	V						
4 DIMMs			V				V		V	V	V	V	V	V	V	V
8 DIMMs	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V
16 DIMMs	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V

Note: Please refer to user manual for memory module [rank] and [DRAM density] requirements when using Intel® Xeon® 6 CPU.

Front View & Interface

Item	Description
1	Power Button
2	UID Button
3	Power LED
4	NIC2 LED
5	Power Fail LED
6	HDD LED
7	NIC1 LED
8	Information LED



Rear View



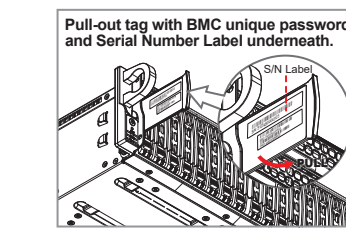
Item	Description
1	Power Supply 1
2	Power Supply 2
3	BMC LAN Port
4	USB Ports
5	VGA Port
6	UID Button

Description
 Power Supply LED Solid Green: A valid power source is connected to the PSU, and the PSU is operational.
 Power Supply LED Blinking Green: PSU is in standby state (12VSB standby power only).
 Power Supply LED Solid Green: 1. Power source to the PSU is disconnected or invalid but a second PSU is operational. 2. PSU failure, and the PSU is not operational.
 Power Supply LED Blinking Green: A PSU warning event occurred, but the PSU is still operational.

Slot Description
 1 Slot 1 location (FH, 10.5" L")
 2 Slot 2 location (FH, 10.5" L")
 3 Slot 3 location (FH, 10.5" L")
 4 Slot 4 location (FH, 10.5" L")
 5 Slot 5 location (FH, 12.3" L")
 6 Slot 6 location (FH, 12.3" L")
 7 Slot 7 location (FH, 12.3" L")
 8 Slot 8 location (FH, 12.3" L")

Power supply full redundancy based on configuration and application load. *Slot availability depends on system configuration.

System Information



Each system comes with a unique default password for the ADMIN user. This can be found on a sticker on the motherboard and a sticker underneath the service tag on chassis. If necessary, the password can be reset by the Supermicro IPMICFG tool. For more information, please visit <https://www.supermicro.com/en/solutions/management-software/bmc-resources>.

Caution and Product Resources

SAFETY INFORMATION:
 IMPORTANT: See installation instructions and safety warning before connecting system to power supply. http://www.supermicro.com/about/policies/safety_information.cfm

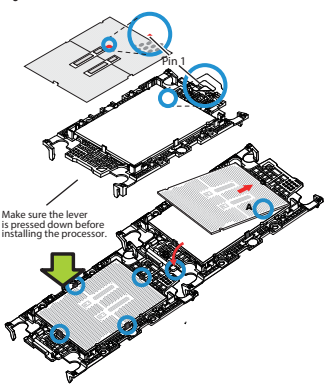
CAUTION:
 Always be sure all power supplies for this system have the same power output. If mixed power supplies are installed, the system will not operate.

WARNING:
 To reduce risk of electric shock/damage to equipment, disconnect power from server by disconnecting all power cords from electrical outlets. If any CPU socket empty, install protective plastic CPU cap.

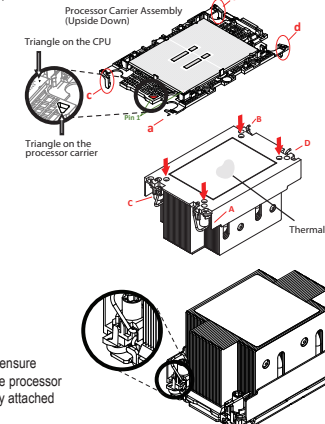
PRODUCT RESOURCES:
 For more information go to: <http://www.supermicro.com/support>

CPU Installation, supporting a single Intel® Xeon® 6 Processor (LGA 4710)

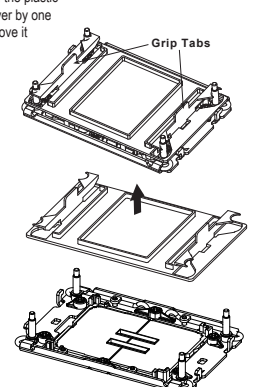
A. Creating the Intel Xeon 6 CPU Carrier Assembly
 1. Locate small gold triangle (Pin 1) on processor and corresponding hollowed triangle on carrier.
 2. Using the triangles as a guide, carefully align and place Point A of the processor into the carrier. Gently snap into place to fasten onto Point B.



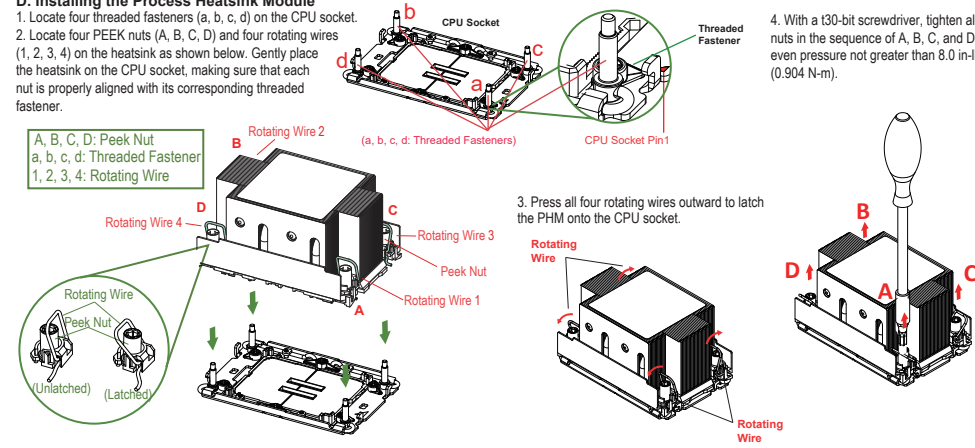
B. Assembling the Processor Heatsink Module (PHM)
 1. If it is a new heatsink, the thermal grease has been preapplied. Otherwise, apply the proper amount of thermal grease.
 2. Hold the processor carrier assembly so the processor's gold contacts are facing up, then align the holes of the processor carrier assembly with the holes on the heatsink. Press the processor carrier assembly down until it snaps into place. The plastic clips of the processor carrier assembly will lock at the four corners.
 3. Examine all corners to ensure that the plastic clips on the processor carrier assembly are firmly attached to the heatsink.



C. Preparing the CPU Socket for Installation
 Gently pull off the plastic protective cover by one corner to remove it from the CPU socket.

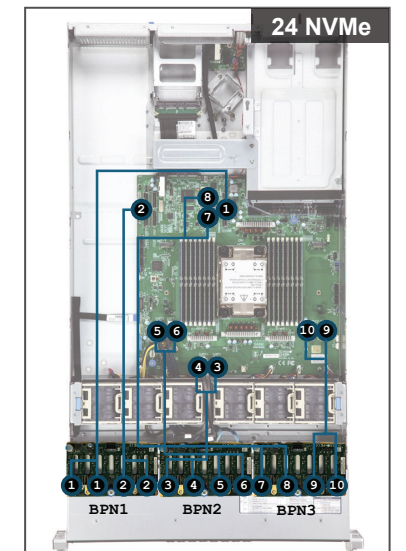


D. Installing the Process Heatsink Module
 1. Locate four threaded fasteners (a, b, c, d) on the CPU socket.
 2. Locate four PEEK nuts (A, B, C, D) and four rotating wires (1, 2, 3, 4) on the heatsink as shown below. Gently place the heatsink on the CPU socket, making sure that each nut is properly aligned with its corresponding threaded fastener.

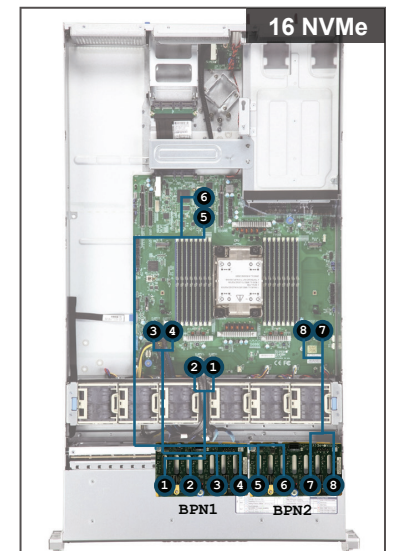


3. Press all four rotating wires outward to latch the PHM onto the CPU socket.
 4. With a t30-bit screwdriver, tighten all PEEK nuts in the sequence of A, B, C, and D with even pressure not greater than 8.0 in-lbf. (0.904 N-m).

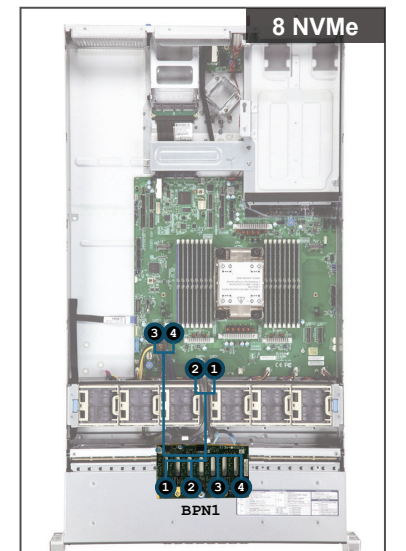
NVMe Drive Cable Routing



Connector on Board/Cable	Backplane/Drive and Port	Drive Bay	SBC Cable Pin
P1_NVME2	BPN1 NVME4 (BPN NVME4-H212N-SB)	0-3	0BL-MC10-1219A-100
P1_NVME3	BPN1 NVME5 (BPN NVME5-H212N-SB)	4-7	0BL-MC10-1219A-100
P1_NVME4	BPN1 NVME6 (BPN NVME6-H212N-SB)	8-11	0BL-MC10-1219A-100
P1_NVME5	BPN1 NVME7 (BPN NVME7-H212N-SB)	12-15	0BL-MC10-1219A-100
P1_NVME6	BPN1 NVME8 (BPN NVME8-H212N-SB)	16-19	0BL-MC10-1219A-100
P1_NVME7	BPN1 NVME9 (BPN NVME9-H212N-SB)	20-23	0BL-MC10-1219A-100

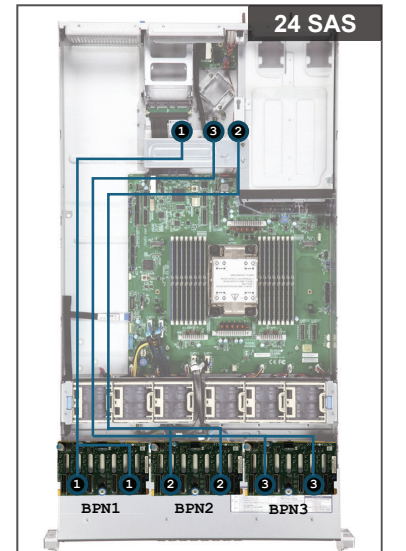


Connector on Board/Cable	Backplane/Drive and Port	Drive Bay	SBC Cable Pin
P1_NVME2	BPN1 NVME4 (BPN NVME4-H212N-SB)	0-3	0BL-MC10-1219A-100
P1_NVME3	BPN1 NVME5 (BPN NVME5-H212N-SB)	4-7	0BL-MC10-1219A-100
P1_NVME4	BPN1 NVME6 (BPN NVME6-H212N-SB)	8-11	0BL-MC10-1219A-100
P1_NVME5	BPN1 NVME7 (BPN NVME7-H212N-SB)	12-15	0BL-MC10-1219A-100
P1_NVME6	BPN1 NVME8 (BPN NVME8-H212N-SB)	16-19	0BL-MC10-1219A-100
P1_NVME7	BPN1 NVME9 (BPN NVME9-H212N-SB)	20-23	0BL-MC10-1219A-100

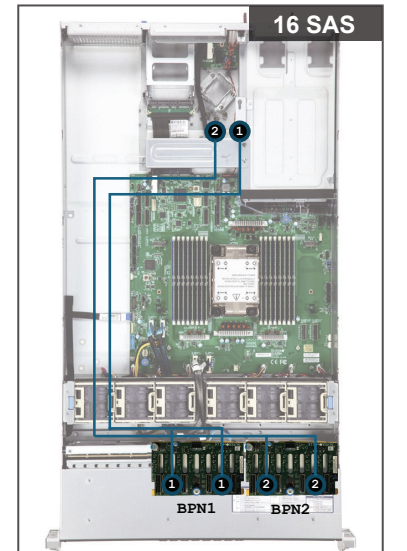


Connector on Board/Cable	Backplane/Drive and Port	Drive Bay	SBC Cable Pin
P1_NVME2	BPN1 NVME4 (BPN NVME4-H212N-SB)	0-3	0BL-MC10-1219A-100
P1_NVME3	BPN1 NVME5 (BPN NVME5-H212N-SB)	4-7	0BL-MC10-1219A-100
P1_NVME4	BPN1 NVME6 (BPN NVME6-H212N-SB)	8-11	0BL-MC10-1219A-100
P1_NVME5	BPN1 NVME7 (BPN NVME7-H212N-SB)	12-15	0BL-MC10-1219A-100

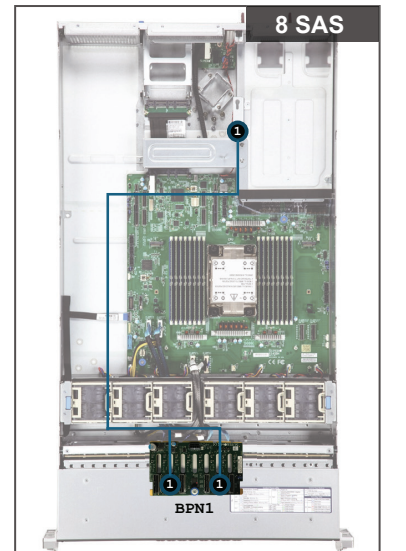
Storage AOC Drive Cable Routing



Connector on Board/Cable	Backplane/Drive and Port	Drive Bay	SBC Cable Pin
SAS AOC1 CN1	BPN1 CN1 & CN2 (BPN NVME4-H212N-SB)	0-7	0BL-SAS1-1294F-100
SAS AOC1 CN1	BPN2 CN1 & CN2 (BPN NVME5-H212N-SB)	8-15	0BL-SAS1-1294F-100
SAS AOC1 CN1	BPN3 CN1 & CN2 (BPN NVME6-H212N-SB)	16-23	0BL-SAS1-1294F-100



Connector on Board/Cable	Backplane/Drive and Port	Drive Bay	SBC Cable Pin
SAS AOC1 CN1	BPN1 CN1 & CN2 (BPN NVME4-H212N-SB)	0-7	0BL-SAS1-1294F-100
SAS AOC1 CN1	BPN2 CN1 & CN2 (BPN NVME5-H212N-SB)	8-15	0BL-SAS1-1294F-100



Connector on Board/Cable	Backplane/Drive and Port	Drive Bay	SBC Cable Pin
SAS AOC1 CN1	BPN1 CN1 & CN2 (BPN NVME4-H212N-SB)	0-7	0BL-SAS1-1294F-100