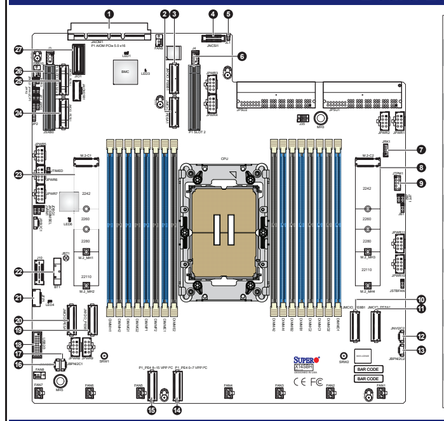
SUPERMICRO® SuperServer SYS-112H-TN Quick Reference Guide

Board Layout



Item	Description
1	**JAIOM1**: PCIe 5.0 x16 AIOM Slot Connector
2	**P1_NVME 12/13**: PCIe 5.0 x8 MCIO Connector (P1_PE6 0-7)
3	**P1_NVME 14/15**: PCIe 5.0 x8 MCIO Connector (P1_PE6 8-15)
4	**JNCSI1**: NC-SI Header
5	**JL1**: Intrusion Header
6	**P1 SLOT2**: PCIe 5.0 x16 4C Slot Connector
7	**JRK1**: Intel VROC RAID Key Header
8	**M.2-C2**: M.2 PCIe 5.0 Interface (M-key 25110/22110/2280)
9	**JTPM1**: TPM Connector
10	**P1_NVME 18/19**: PCIe 5.0 x8 MCIO Connector (P1_PE8 8-15)
11	**P1_NVME 16/17**: PCIe 5.0 x8 MCIO Connector (P1_PE8 0-7)
12	**JNVI²C2**: NVMe I2C Header Channel 2
13	**JBPNI²C2**: BPN I2C Header Channel 2
14	**P1_NVME 0/1**: PCIe 5.0 x8 MCIO Connector (P1_PE4 0-7)

Item	Description
15	**P1_NVME 2/3**: PCIe 5.0 x8 MCIO Connector (P1_PE4 8-15)
16	**JNVI²C1**: NVMe I2C Header Channel 1
17	**JBPNI²C1**: BPN I2C Header Channel 1
18	**USB2/3**: USB 3.2 Gen1 Header
19	**P1_NVME 6/7**: PCIe 5.0 x8 MCIO Connector (P1_PE5 8-15)
20	**P1_NVME 4/5**: PCIe 5.0 x8 MCIO Connector (P1_PE5 0-7)
21	**JFP1**: Front Control Panel Header
22	**BT1**: Onboard CMOS Battery
23	**M.2-C1**: M.2 PCIe 5.0 Interface (M-key 25110/22110/2280)
24	**P1_NVME 10/11**: PCIe 5.0 x8 MCIO Connector (P1_PE7 8-15)
25	**P1_NVME 8/9**: PCIe 5.0 x8 MCIO Connector (P1_PE7 0-7)
26	**P1 SLOT1**: PCIe 5.0 x16 4C Slot Connector
27	**JIO1**: System I/O Board Connector (VGA, USB, BMC NIC)

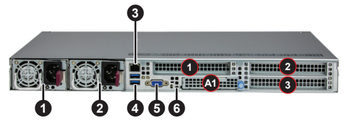
Memory Support

DIMM Population Guide

Type	Channel															
	H1	H2	G1	G2	F1	F2	E1	E2	CPU	A2	A1	B2	B1	C2	C1	D2	D1
1 DIMM											V						
4 DIMMs			V				V				V				V		
8 DIMMs	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.

Rear View

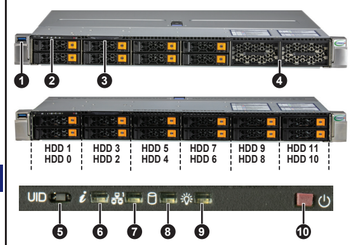


Item	Description
1	Power Supply 1
2	Power Supply 2
3	Dedicated BMC LAN Port
4	Two USB 3.2 Gen1 Ports
5	VGA Port
6	UID Button

Item	Slot Description
A1	PCIe 5.0 x16 AIOM Slot
1	PCIe 5.0 x16 Slot (FH, 6.6" L)
2	PCIe 5.0 x16 Slot (FH, 12.3" L)
3	Slot 3 location (FH, 12.3" L)*

* Slot availability depends on system configuration.

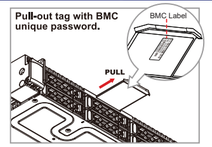
Front View & Interface



Item	Description
1	USB 3.0 Port
2	Front Control Panel
3	Service/Asset Tag with BMC Password Reset
4	Storage I/O Bays

Item	Description
5	UID Button / BMC Reset
6	Information LED
7	NIC LED
8	HDD LED
9	Power LED
10	Power Button

System Information



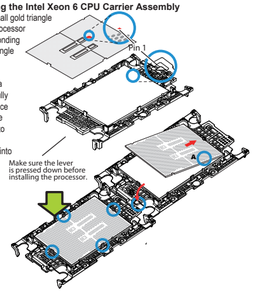
Each system comes with a unique default password for the ADMIN user. This can be found on a sticker on the motherboard and a sticker underneath the service tag on chassis.
If necessary, the password can be reset by the Supermicro IPMICFG tool.

For more information, please visit https://www.supermicro.com/en/solutions/management-software/bmc-resources

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

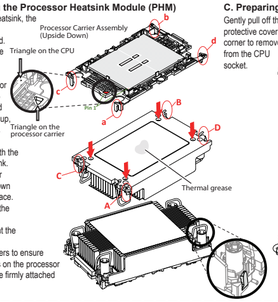
A. Creating the Intel Xeon 6 CPU Carrier Assembly

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.



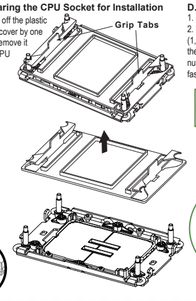
B. Assembling the Processor Heatsink Module (PHM)

1. If this 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.



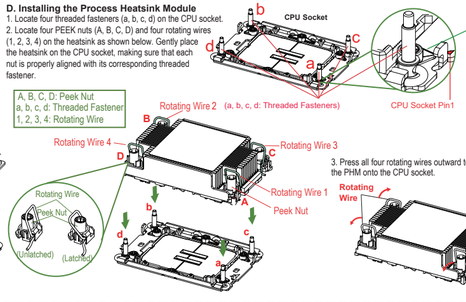
C. Preparing the CPU Socket for Installation

Gently pull off the plastic protective cover by one corner to remove it from the CPU socket.

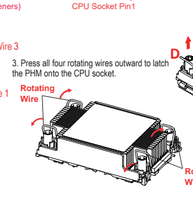


D. Installing the Process Heatsink Module

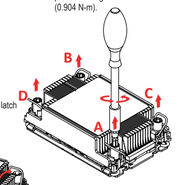
1. Locate four threaded fasteners (a, b, c, d) on the CPU socket.
2. Locate four PEEK nuts (A, B, C, D) and four rotating wires (1, 2, 3, 4) on the heatsink as shown below. Gently place the heatsink on the CPU socket, making sure that each nut is properly aligned with its corresponding threaded fastener.



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).



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

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.

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.

CAUTION:

This unit has redundant power sources. Please disconnect all the power cords before servicing.

PRODUCT RESOURCES:

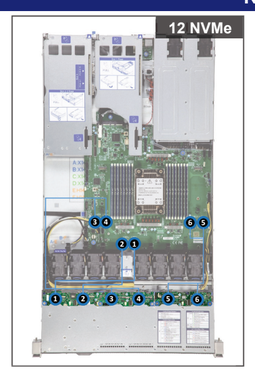
For more information go to:
http://www.supermicro.com/support

LBL-2758-T-QRG

Rev. 1.0a

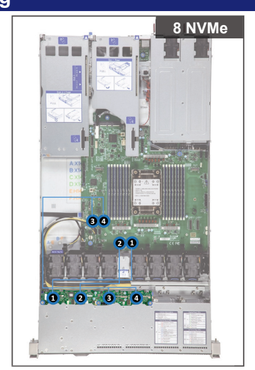
NVMe Drive Cable Routing

12 NVMe



Connector on Board/Card	Backplane/Riser and Port	Drive Bay	SMC Cable P/N
P1_ NVME0/1	CN1 (BPN-NVME5-HS119N-S8L)	0-1	CBL-MCIO-1330M5L
P1_ NVME2/3	CN2 (BPN-NVME5-HS119N-S8L)	2-3	CBL-MCIO-1330M5L
P1_ NVME4/5	CN3 (BPN-NVME5-HS119N-S8L)	4-5	CBL-MCIO-1464M5FRFB-J
P1_ NVME6/7	CN4 (BPN-NVME5-HS119N-S8L)	6-7	
P1_ NVME16/17	CN1 (BPN-NVME5-HS119N-S4R)	8-9	CBL-MCIO-1439M5FRFB
P1_ NVME18/19	CN2 (BPN-NVME5-HS119N-S4R)	10-11	

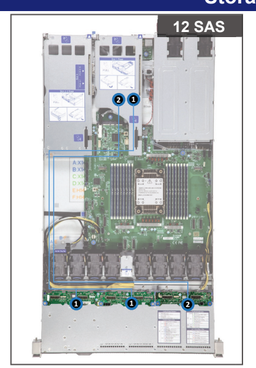
8 NVMe



Connector on Board/Card	Backplane/Riser and Port	Drive Bay	SMC Cable P/N
P1_ NVME0/1	CN1 (BPN-NVME5-HS119N-S8L)	0-1	CBL-MCIO-1330M5L
P1_ NVME2/3	CN2 (BPN-NVME5-HS119N-S8L)	2-3	CBL-MCIO-1330M5L
P1_ NVME4/5	CN3 (BPN-NVME5-HS119N-S8L)	4-5	CBL-MCIO-1464M5FRFB-J
P1_ NVME6/7	CN4 (BPN-NVME5-HS119N-S8L)	6-7	

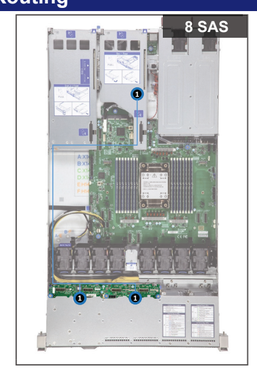
Storage AOC Drive Cable Routing

12 SAS



Connector on Board/Card	Backplane/Riser and Port	Drive Bay	SMC Cable P/N
SAS AOC CN1	JSM1/JSM2 (BPN-NVME5-HS119N-S8L)	0-7	CBL-SAST-1273LP-100
SAS AOC CN2	JSM1 (BPN-NVME5-HS119N-S4R)	8-11	CBL-SAST-1262LP-100

8 SAS



Connector on Board/Card	Backplane/Riser and Port	Drive Bay	SMC Cable P/N
SAS AOC CN1	JSM1/JSM2 (BPN-NVME5-HS119N-S8L)	0-7	CBL-SAST-1273LP-100

LBL-2758-B-QRG
http://www.supermicro.com

Rev. 1.0a