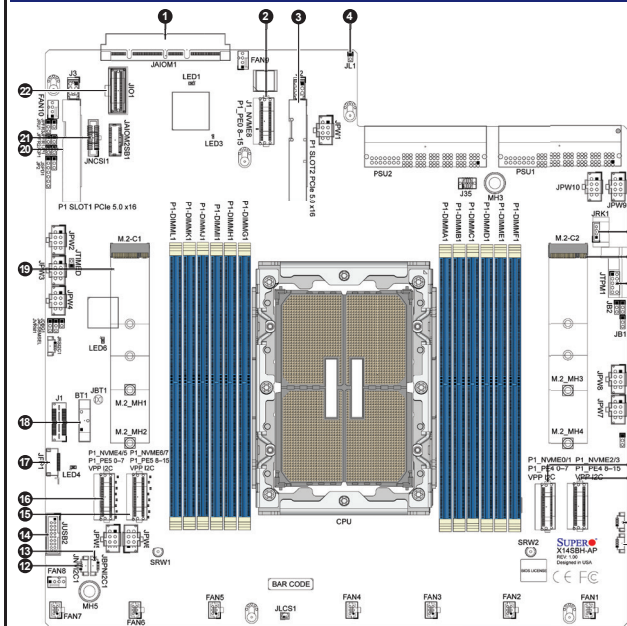


# SUPERMICR® SuperServer SYS-112HA-TN Quick Reference Guide

## Board Layout



Item	Description	Item	Description
1	JAIOM1: PCIe 5.0 x16 AIOM Slot Connector	12	JNVPC1: NVMe I2C Header Channel 1
2	P1_NVME 8: PCIe 5.0 x8 M.2 PCIe Connector (P1_PE0 8-15)	13	JBNPC1: BPN I2C Header Channel 1
3	P1_SLOT2: PCIe 5.0 x16 4C Slot Connector	14	JUSB2: USB 3.2 Gen1 Header
4	JL1: Intrusion Header	15	P1_NVME 6/7: PCIe 5.0 x8 M.2 PCIe Connector (P1_PE4 8-15)
5	JRK1: Intel VROC RAID Key Header	16	P1_NVME 4/5: PCIe 5.0 x8 M.2 PCIe Connector (P1_PE4 0-7)
6	M.2-C2: M.2 PCIe 5.0 Interface (M-key 25110/22110/2280)	17	JFP1: Front Control Panel Header
7	JTPM1: TPM Connector	18	BT1: Onboard CMOS Battery
8	P1_NVME 0/1: PCIe 5.0 x8 M.2 PCIe Connector (P1_PE4 0-7)	19	M.2-C1: M.2 PCIe 5.0 Interface (M-key 25110/22110/2280)
9	P1_NVME 2/3: PCIe 5.0 x8 M.2 PCIe Connector (P1_PE4 8-15)	20	P1_SLOT1: PCIe 5.0 x16 4C Slot Connector
10	JNVPC2: NVMe I2C Header Channel 2	21	JNCSI1: NC-SI Header
11	JBNPC2: BPN I2C Header Channel 2	22	JIO1: System I/O Board Connector (VGA, USB, BMC NIC)

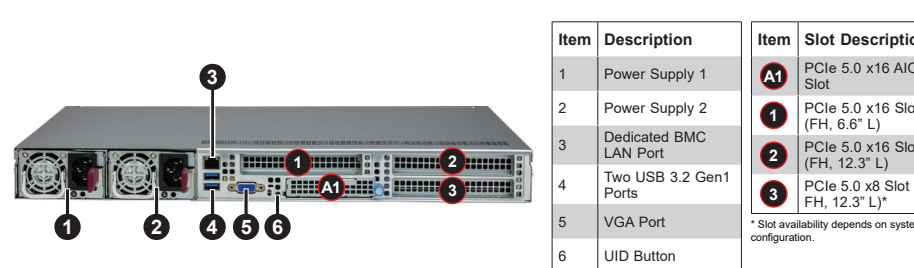
## Memory Support

### DIMM Population Guide

Type	Channel											
	L1	K1	J1	I1	H1	G1	CPU					
1 DIMM							A1	B1	C1	D1	E1	F1
8 DIMMs		V	V		V	V	V	V		V	V	
12 DIMMs	V	V	V	V	V	V	V	V	V	V	V	V

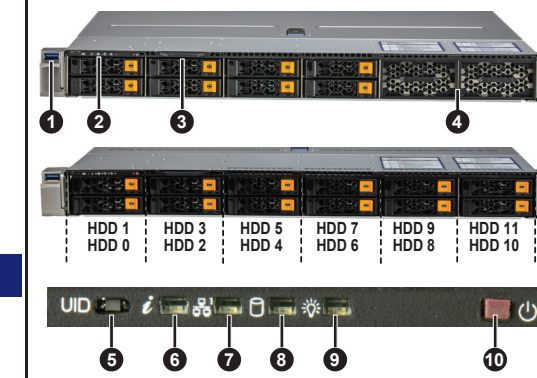
Note: Please refer to user manual for memory module [rank] and [DRAM density] requirements when using Intel® Xeon® 6 CPU.

### Rear View



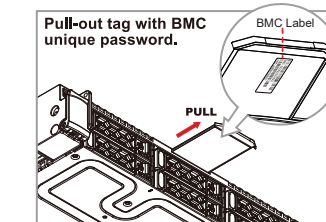
Item	Description	Item	Slot Description
1	Power Supply 1	A1	PCIe 5.0 x16 AIOM Slot
2	Power Supply 2	1	PCIe 5.0 x16 Slot (FH, 6.6" L)
3	Dedicated BMC LAN Port	2	PCIe 5.0 x16 Slot (FH, 12.3" L)
4	Two USB 3.2 Gen1 Ports	3	PCIe 5.0 x8 Slot (FH, 12.3" L)*
5	VGA Port	* Slot availability depends on system configuration.	
6	UID Button		

## Front View & Interface



Item	Description
1	USB 3.2 Gen1 Port
2	Front Control Panel
3	Service/Asset Tag with BMC Password Reset
4	Storage I/O Bays
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>

## 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](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.

**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-4037-T-QRG Rev. 1.0

## CPU Installation, supporting a single Intel® Xeon® 6 Processor (Socket BR)

**A. Creating the Intel Xeon 6 CPU Carrier Assembly**

- With the processor gold contacts facing down, locate small gold triangle (Pin 1) on processor and corresponding hollowed triangle on carrier.
- While ensuring that the Pin 1 triangles point in the same direction, flip over the processor and processor carrier. Use the latches on the processor carrier to secure the processor onto the processor carrier.

**B. Assembling the Processor Heatsink Module (PHM)**

- If this is a new heatsink, the thermal grease has been preapplied. Otherwise, apply the proper amount of thermal grease.
- 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.
- 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**

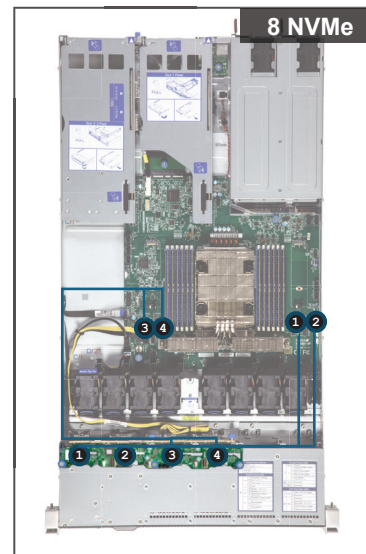
Gently pull off the plastic protective cover by one corner to remove it from the CPU socket.

**D. Installing the Process Heatsink Module**

- Locate four threaded fasteners (a, b, c, d) on the CPU socket.
- 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.
- Press all four rotating wires outward to latch the PHM onto the CPU socket.
- 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).

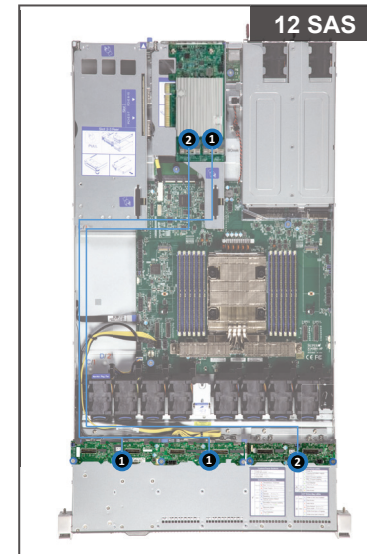
5. With a T30 bit torque driver set to a force of 2.6 in-lbf (0.294 N-m), tighten the remote screws in the following order: 1-2.

## NVMe Drive Cable Routing

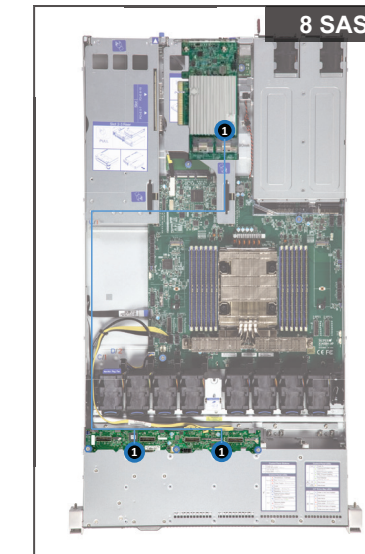


Connector on Board/Card	Backplane/Riser and Port	Drive Bay	SMC Cable P/N
P1_NVME0/1	CN1 (BPN-NVME5-HS119N-S8L)	0-1	CBL-MCIO-1255MSREL
P1_NVME2/3	CN2 (BPN-NVME5-HS119N-S8L)	2-3	CBL-MCIO-1255MSREL
P1_NVME4/5	CN3 (BPN-NVME5-HS119N-S8L)	4-5	CBL-MCIO-1464M5FRB-J
P1_NVME6/7	CN4 (BPN-NVME5-HS119N-S8L)	6-7	

## Storage AOC Drive Cable Routing



Connector on Board/Card	Backplane/Riser and Port	Drive Bay	SMC Cable P/N
SAS AOC CN1	JSM1JSM2 (BPN-NVME5-HS119N-S8L)	0-7	CBL-SAST-1273LP-100
SAS AOC CN2	JSM1 (BPN-NVME5-HS119N-S4R)	8-11	CBL-SAST-1262LP-100



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

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<http://www.supermicro.com>