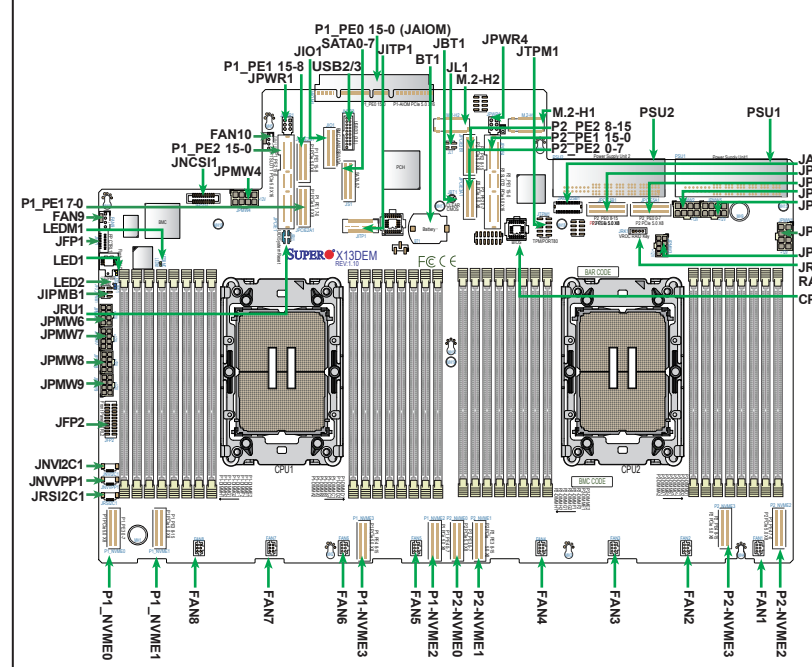


SUPERMICRO® SuperServer 121H-TNR Quick Reference Guide

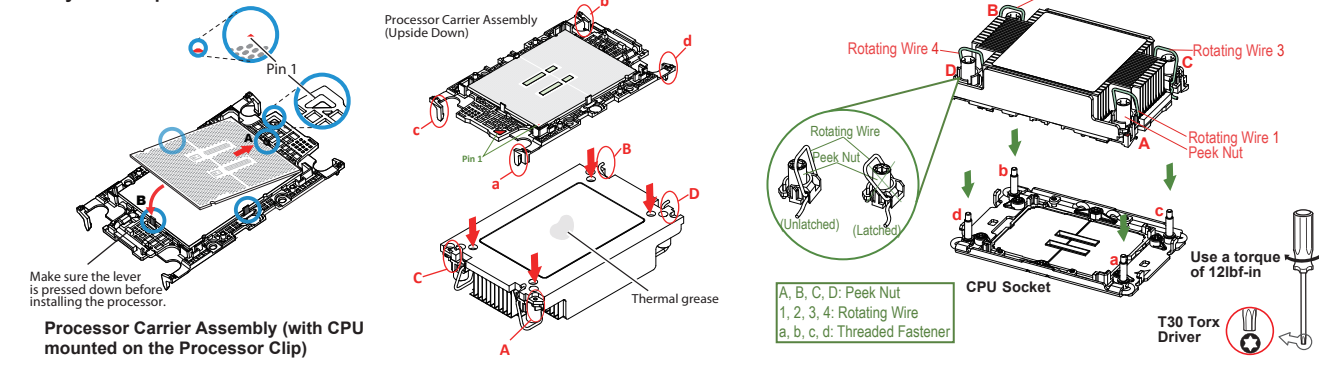
Board Layout



Jumper	Description	Default Setting
JBT1	CMOS Clear	Open (Normal)
Connector	Description	
Battery (BT1)	Onboard battery	
BMC LAN/USB/VGA (J101)	Low-profile (LP) Slim SAS I/O connector used for dedicated BMC LAN/USB/VGA connections	
FAN1-FAN8, FAN9, FAN10	Eight 6-pin cooling fan headers (FAN1-FAN 8) and two 4-pin cooling fan headers (FAN9-FAN10)	
J10M2SB1	Supernano Advanced Input/Output Module (AIOM) PCIe 5.0 x16 connector for rear I/O support	
JPCIEA1	Supernano Advanced Input/Output Module (AIOM2) sideband connector	
JFP1	Front Control Panel header	
JFP2	Front Control Panel header with USB and VGA support	
JPMW1-JPMW6	412V power connectors 1-9	
JPMW1 and JPMW4	6-pin power connectors	
JPMW3	Power Supply Unit/Power Supply Unit2 for system power use (See Note 1 below)	
J1	Chassis Intrusion header	
JNVCC1	NVMe SMBus i2C header used for PCIe SMBus clock and data connections with hot-plug support	
JNVVP1	NVMe VPP SMBus (System Management Bus) with hot-plug support	
JTPM1	Trusted Platform Module/Port 80 connector	
M.2-H1/M.2-H2	PCIe 3.0 x2/SATA3 Hybrid M.2 slots (with support of Key 2280, and 22110)	
P1_NVME 0-3	(P1) PCIe 5.0 x8 M.2 connectors supported by CPU1 with four NVMe connections (0/1/2/3)	
P2_NVME 0-3	(P2) PCIe 5.0 x8 M.2 connectors supported by CPU2 with four NVMe connections (0/1/2/3)	
P1_PE10 (AIOM1)	PCIe 5.0 x16 AIOM (OCPS3-compliant) slot supported by CPU1	
P1_PE10 (JPCIEA1)	(P1) PCIe 5.0 x8 M.2 connector	
P1_PE15 (JPCIEB1)	(P1) PCIe 5.0 x8 M.2 connector support by CPU1	
P1_PE15 (JPCIE1)	(P1-SLOT1) PCIe 5.0 x16 slot supported by CPU1	
P2_PE15 (JPCIEA1)	(P2) PCIe 5.0 x8 M.2 connector supported by CPU2	
P2_PE15 (JPCIE1)	(P2) PCIe 5.0 x8 M.2 connector supported by CPU2	
P2_PE15 (JPCIEB1)	(P2-SLOT2) PCIe 5.0 x16 slot supported by CPU2	
P2_PE15 (JPCIEA1)	(P2) PCIe 5.0 x8 M.2 connector supported by CPU2	
P2_PE15 (JPCIE1)	(P2) PCIe 5.0 x8 M.2 connector supported by CPU2	
P2_PE15 (JPCIEB1)	(P2) PCIe 5.0 x8 M.2 connector supported by CPU2	
SATA 0-7 (J1)	SlimSAS LP (M.2) connector with support of eight Intel® PCH SATA 3.0 connectors (RAID 0, RAID 1, RAID 5, and RAID 10 supported)	
USB2/3 (J2)	Rear USB header with support for two USB 3.2 Gen1 ports	
VROC RAID Key (JRK1)	Intel VROC RAID key header for NVMe RAID support (See the note below.)	

CPU Installation

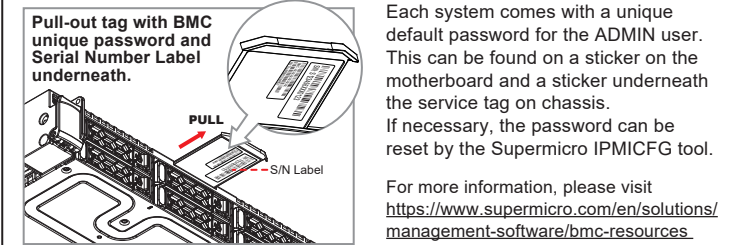
- Put processor into bracket—attention to the lineup Pin and key on both processor and carrier.
- Put processor carrier module into HS. Processor Carrier Assembly
- Put processor heatsink module into MB.



Memory Support

2 CPUs: (Recommended)	Memory Population Sequence
2 CPUs & 2 DIMMs	CPU1: P1-DIMMA1, CPU2: P2-DIMMA1 CPU1: P1-DIMME1, CPU2: P2-DIMME1 CPU1: P1-DIMMB1, CPU2: P2-DIMMB1 CPU1: P1-DIMMF1, CPU2: P2-DIMMF1
2 CPUs & 4 DIMMs	CPU1: P1-DIMMA1/P1-DIMMG1, CPU2: P2-DIMMA1/P2-DIMMG1 CPU1: P1-DIMMC1/P1-DIMME1, CPU2: P2-DIMMC1/P2-DIMME1
2 CPUs & 8 DIMMs	CPU1: P1-DIMMA1/P1-DIMMC1/P1-DIMMD1/P1-DIMME1/P1-DIMMF1/P1-DIMMH1 CPU2: P2-DIMMA1/P2-DIMMC1/P2-DIMMD1/P2-DIMME1/P2-DIMMF1/P2-DIMMH1
2 CPUs & 10 DIMMs	CPU1: P1-DIMMA1/P1-DIMMC1/P1-DIMMD1/P1-DIMME1/P1-DIMMF1/P1-DIMMH1 CPU2: P2-DIMMA1/P2-DIMMC1/P2-DIMMD1/P2-DIMME1/P2-DIMMF1/P2-DIMMH1
2 CPUs & 12 DIMMs	CPU1: P1-DIMMA1/P1-DIMMC1/P1-DIMMD1/P1-DIMME1/P1-DIMMF1/P1-DIMMH1 CPU2: P2-DIMMA1/P2-DIMMC1/P2-DIMMD1/P2-DIMME1/P2-DIMMF1/P2-DIMMH1
2 CPUs & 16 DIMMs	CPU1: P1-DIMMA1/P1-DIMMC1/P1-DIMMD1/P1-DIMME1/P1-DIMMF1/P1-DIMMH1 CPU2: P2-DIMMA1/P2-DIMMC1/P2-DIMMD1/P2-DIMME1/P2-DIMMF1/P2-DIMMH1
2 CPUs & 22 DIMMs	CPU1: P1-DIMMA1/P1-DIMMC1/P1-DIMMD1/P1-DIMME1/P1-DIMMF1/P1-DIMMH1/P1-DIMMD2/P1-DIMME2/P1-DIMMF2/P1-DIMMH2 CPU2: P2-DIMMA1/P2-DIMMC1/P2-DIMMD1/P2-DIMME1/P2-DIMMF1/P2-DIMMH1/P2-DIMMD2/P2-DIMME2/P2-DIMMF2/P2-DIMMH2
2 CPUs & 24 DIMMs	CPU1: P1-DIMMA1/P1-DIMMC1/P1-DIMMD1/P1-DIMME1/P1-DIMMF1/P1-DIMMH1/P1-DIMMD2/P1-DIMME2/P1-DIMMF2/P1-DIMMH2 CPU2: P2-DIMMA1/P2-DIMMC1/P2-DIMMD1/P2-DIMME1/P2-DIMMF1/P2-DIMMH1/P2-DIMMD2/P2-DIMME2/P2-DIMMF2/P2-DIMMH2
2 CPUs & 32 DIMMs	CPU1: P1-DIMMA1/P1-DIMMC1/P1-DIMMD1/P1-DIMME1/P1-DIMMF1/P1-DIMMH1/P1-DIMMD2/P1-DIMME2/P1-DIMMF2/P1-DIMMH2 CPU2: P2-DIMMA1/P2-DIMMC1/P2-DIMMD1/P2-DIMME1/P2-DIMMF1/P2-DIMMH1/P2-DIMMD2/P2-DIMME2/P2-DIMMF2/P2-DIMMH2

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

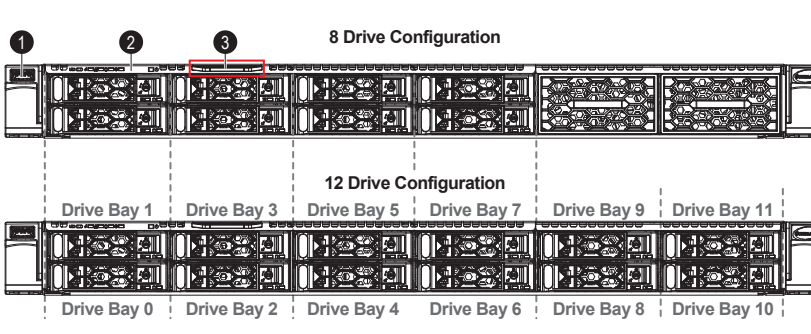
CAUTION:
Always be sure all power supplies for this system have the same power output. If mixed power supplies are installed, the system will not operate.

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

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.

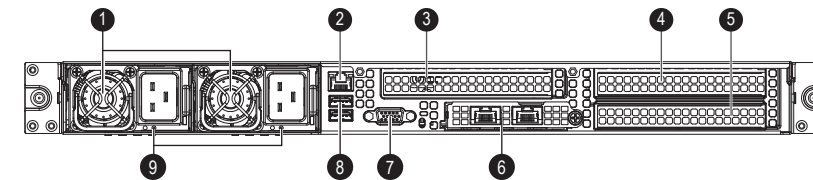
PRODUCT RESOURCES:
For more information go to: <http://www.supermicro.com/support>

Front View



No.	Description
1	USB 3.0 Port
2	Front Control Panel
3	Service/Asset Tag with System Serial Number and BMC Unique Password

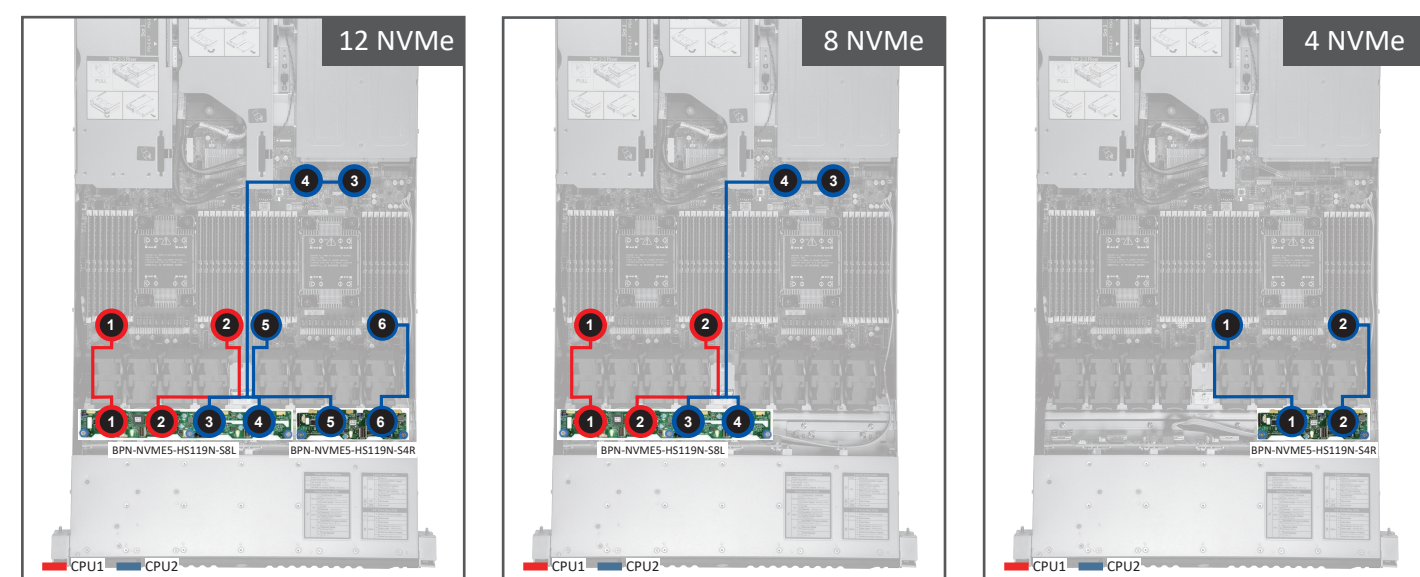
Rear View



No.	Description	Description
1	Redundant Power Supplies	
2	Dedicated BMC LAN Port	
3	Slot 1, PCI-E 5.0 x16 Slot (CPU2)	
4	Slot 2, PCI-E 5.0 x16 Slot (CPU1)	
5	Slot 3, PCI-E 5.0 x16 Slot (CPU2)	
6	Slot A1, AIOM/OCPC 3.0 Networking Slot (CPU1)	
7	VGA port	
8	2x USB 2.0 Ports	
9	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	(Scenario 1) Power source to the PSU is disconnected or invalid but a second PSU is operational. (Scenario 2) PSU failure and the PSU is not operational.
	Power Supply LED Blinking Green	A PSU warning event occurred and the PSU is still operational.

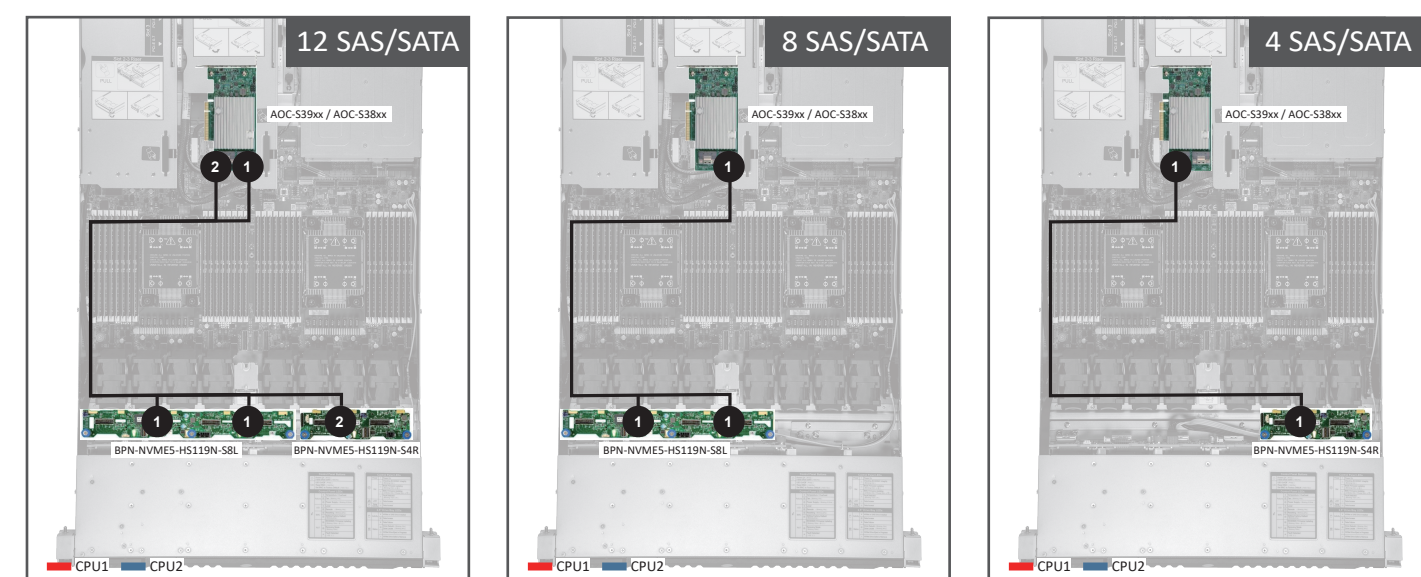
LBL-2508-T-QRG Rev 1.0a

NVMe Drive Bay Cable Routing



#	Description	SMC Part Number
1	NVMe	CBL-MCIO-1216M5FD1
2	NVMe	CBL-MCIO-1220M5FD2
3	NVMe	CBL-MCIO-1244M5FD3
4	NVMe	CBL-MCIO-1239M5FD4
5	NVMe	CBL-MCIO-1233M5FF5
6	NVMe	CBL-MCIO-1225M5FF6

Storage AOC Drive Bay Cable Routing



#	Description	SMC Part Number
1	SAS	CBL-SAST-1273LP-100
2	SAS	CBL-SAST-1262LP-100

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