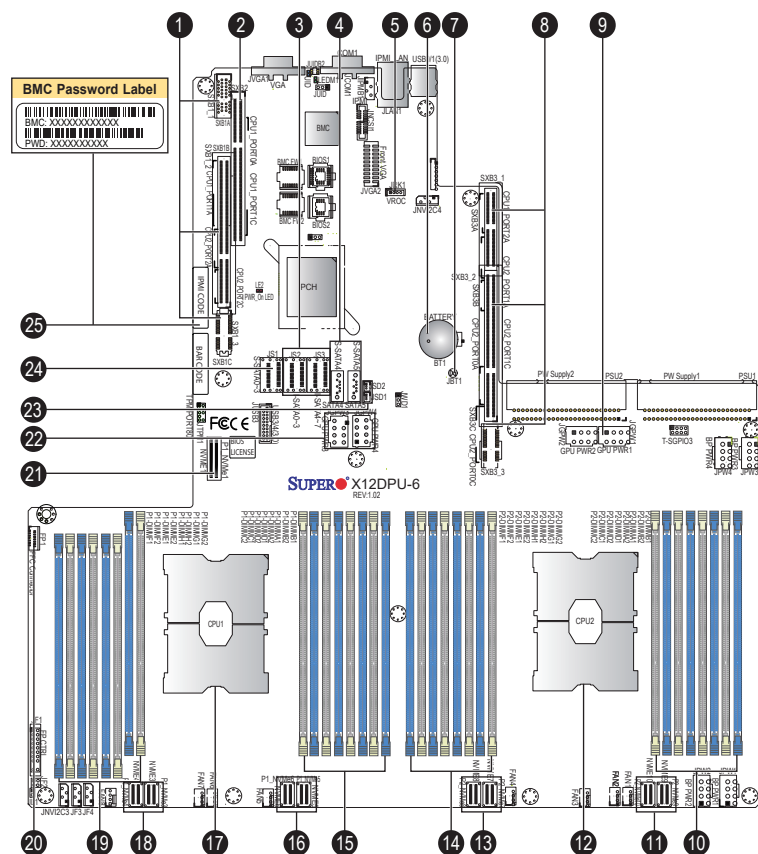


SUPERMICRO® SuperServer 120U-TNR Quick Reference Guide

Board Layout



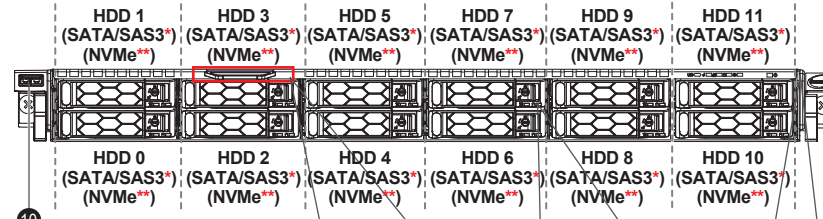
No.	Description
1	SXB1A/1B/1C: Proprietary PCI-e Slot used for WIO-Left Devices (x16 From CPU1, x16 From CPU2)
2	SXB2: Proprietary PCI-e Slot for WIO-Right Devices (x16 From CPU1)
3	I-SATA0~3, I-SATA4~7: SATA 3.0 Ports (Intel PCH)
4	S-SATA 4, 5: SATA 3.0 Ports (Intel SCU)
5	VROC : Intel VROC Key Header for NVMe RAID
6	BT1 : Onboard CMOS battery
7	JBT1: CMOS Clear
8	SXB3A/3B/3C: Proprietary PCI-e Slot for Ultra Riser Devices (x8 From CPU1, x32 From CPU2)
9	JGPW1/JGPW2: GPU 8-pin power connectors
10	P2-DIMMA1/B1/C1/D1(Blue) and P2-DIMMA2/B2/C2/D2(Black)
11	P2-NVMe 9/10: PCI-E 4.0 x8 NVMe ports
12	CPU2
13	P2-NVMe 7/8: PCI-E 4.0 x8 NVMe ports
14	P2-DIMMG2/G1/H2/H1(Blue) and P2-DIMME2/E1/F2/F1(Black)
15	P1-DIMMB1/B2/A1/A2(Blue) and P1-DIMMD1/D2/C1/C2(Black)
16	P1-NVMe 5/6: PCI-E 4.0 x8 NVMe ports
17	CPU1 (Install CPU1 first)
18	P1-NVMe 3/4: PCI-E 4.0 x8 NVMe ports
19	P1-DIMMG2/G1/H2/H1(Blue) and P1-DIMME2/E1/F2/F1(Black)
20	FP1: FFC (Flat Flexible Cable) connector
21	P1-NVMe1: PCI-E 4.0 x8 NVMe ports
22	JGPW1/JGPW2: GPU 8-pin power connectors
23	JSD1/JSD2: SATA DOM (Device_on_Module) Power Connectors
24	S-SATA0~3: SATA 3.0 Ports (Intel SCU)
25	BMC Password Label

Memory Support

CPU/DIMMs	Memory Population Sequence	* Unbalanced, not recommended.
2 CPUs & 2 DIMMs	CPU1: P1-DIMMA1 CPU2: P2-DIMMA1	
2 CPUs & 4 DIMMs	CPU1: P1-DIMMA1/P1-DIMME1 CPU2: P2-DIMMA1/P2-DIMME1	
2 CPUs & 6 DIMMs*	CPU1: P1-DIMMA1/P1-DIMME1/P1-DIMMC1/P1-DIMMG1 CPU2: P2-DIMMA1/P2-DIMME1	
2 CPUs & 8 DIMMs	CPU1: P1-DIMMA1/P1-DIMME1/P1-DIMMC1/P1-DIMMG1 CPU2: P2-DIMMA1/P2-DIMME1/P2-DIMMC1/P2-DIMMG1	
2 CPUs & 10 DIMMs*	CPU1: P1-DIMMA1/P1-DIMME1/P1-DIMMC1/P1-DIMMG1/P1-DIMMB1/P1-DIMMF1 CPU2: P2-DIMMA1/P2-DIMME1/P2-DIMMC1/P2-DIMMG1	
2 CPUs & 12 DIMMs	CPU1: P1-DIMMA1/P1-DIMME1/P1-DIMMC1/P1-DIMMG1/P1-DIMMB1/P1-DIMMF1 CPU2: P2-DIMMA1/P2-DIMME1/P2-DIMMC1/P2-DIMMG1/P2-DIMMB1/P2-DIMMF1	
2 CPUs & 14 DIMMs*	CPU1: P1-DIMMA1/P1-DIMME1/P1-DIMMC1/P1-DIMMG1/P1-DIMMB1/P1-DIMMF1/P1-DIMMD1/P1-DIMMH1 CPU2: P2-DIMMA1/P2-DIMME1/P2-DIMMC1/P2-DIMMG1/P2-DIMMB1/P2-DIMMF1	
2 CPUs & 16 DIMMs	CPU1: P1-DIMMA1/P1-DIMME1/P1-DIMMC1/P1-DIMMG1/P1-DIMMB1/P1-DIMMF1/P1-DIMMD1/P1-DIMMH1 CPU2: P2-DIMMA1/P2-DIMME1/P2-DIMMC1/P2-DIMMG1/P2-DIMMB1/P2-DIMMF1/P2-DIMMD1/P2-DIMMH1	
2 CPUs & 18 DIMMs*	CPU1: P1-DIMMA1/P1-DIMME1/P1-DIMMC1/P1-DIMMG1/P1-DIMMB1/P1-DIMMF1/P1-DIMMD1/P1-DIMMH1/P1-DIMMA2/ P1-DIMME2/P1-DIMMC2/P1-DIMMG2 CPU2: P2-DIMMA1/P2-DIMME1/P2-DIMMC1/P2-DIMMG1/P2-DIMMB1/P2-DIMMF1	
2 CPUs & 20 DIMMs*	CPU1: P1-DIMMA1/P1-DIMME1/P1-DIMMC1/P1-DIMMG1/P1-DIMMB1/P1-DIMMF1/P1-DIMMD1/P1-DIMMH1/P1-DIMMA2/ P1-DIMME2/P1-DIMMC2/P1-DIMMG2 CPU2: P2-DIMMA1/P2-DIMME1/P2-DIMMC1/P2-DIMMG1/P2-DIMMB1/P2-DIMMF1/P2-DIMMD1/P2-DIMMH1	
2 CPUs & 22 DIMMs*	CPU1: P1-DIMMA1/P1-DIMME1/P1-DIMMC1/P1-DIMMG1/P1-DIMMB1/P1-DIMMF1/P1-DIMMD1/P1-DIMMH1/P1-DIMMA2/ P1-DIMME2/P1-DIMMC2/P1-DIMMG2/P1-DIMMB2/P1-DIMMF2/P1-DIMMD2/P1-DIMMH2 CPU2: P2-DIMMA1/P2-DIMME1/P2-DIMMC1/P2-DIMMG1/P2-DIMMB1/P2-DIMMF1	
2 CPUs & 24 DIMMs	CPU1: P1-DIMMA1/P1-DIMME1/P1-DIMMC1/P1-DIMMG1/P1-DIMMB1/P1-DIMMF1/P1-DIMMD1/P1-DIMMH1/P1-DIMMA2/ P1-DIMME2/P1-DIMMC2/P1-DIMMG2/P1-DIMMB2/P1-DIMMF2/P1-DIMMD2/P1-DIMMH2 CPU2: P2-DIMMA1/P2-DIMME1/P2-DIMMC1/P2-DIMMG1/P2-DIMMB1/P2-DIMMF1/P2-DIMMD1/P2-DIMMH1	
2 CPUs & 28 DIMMs*	CPU1: P1-DIMMA1/P1-DIMME1/P1-DIMMC1/P1-DIMMG1/P1-DIMMB1/P1-DIMMF1/P1-DIMMD1/P1-DIMMH1/P1-DIMMA2/ P1-DIMME2/P1-DIMMC2/P1-DIMMG2/P1-DIMMB2/P1-DIMMF2/P1-DIMMD2/P1-DIMMH2 CPU2: P2-DIMMA1/P2-DIMME1/P2-DIMMC1/P2-DIMMG1/P2-DIMMB1/P2-DIMMF1/P2-DIMMD1/P2-DIMMH1	
2 CPUs & 32 DIMMs	CPU1: P1-DIMMA1/P1-DIMME1/P1-DIMMC1/P1-DIMMG1/P1-DIMMB1/P1-DIMMF1/P1-DIMMD1/P1-DIMMH1/P1-DIMMA2/ P1-DIMME2/P1-DIMMC2/P1-DIMMG2/P1-DIMMB2/P1-DIMMF2/P1-DIMMD2/P1-DIMMH2 CPU2: P2-DIMMA1/P2-DIMME1/P2-DIMMC1/P2-DIMMG1/P2-DIMMB1/P2-DIMMF1/P2-DIMMD1/P2-DIMMH1	

Note: Numbers of DIMM not listed are not supported

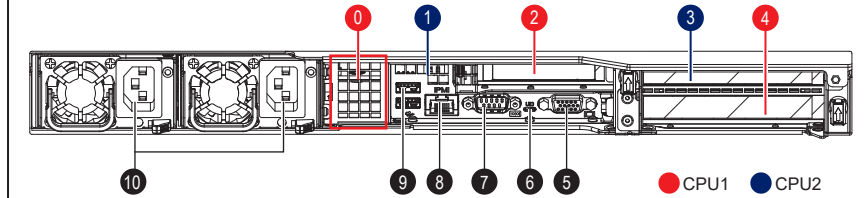
Front view



No.	Description
1	UID Button/BMC Reset
2	Universal Information LED
3	LAN1 LED
4	HDD Activity LED
5	Power LED
6	Power Button
7	Service/Asset Tag with System Serial Number and BMC Unique Password
8	Drive Device Activity LED
9	Drive Device Status LED
10	USB 3.0 Port

* SAS3 support available with additional parts; see optional part list
 ** NVMe support available with additional parts; see optional part list.
 0-5 NVMe from CPU1, 6-11 NVMe from CPU2

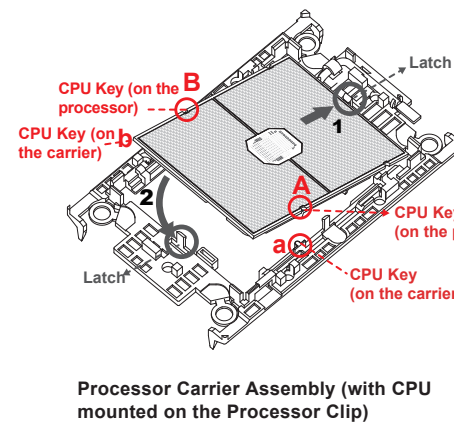
Rear View



No.	Description
0	Ultra Riser Networking Slot
1	PCI-E 4.0 x16 Slot (Internal LP)
2	PCI-E 4.0 x16 Slot (LP)
3	PCI-E 4.0 x16 Slot (FH, 10.5" L)
4	PCI-E 4.0 x16 Slot (FH, 10.5" L)
5	VGA port
6	UID Button (Unit Identifier Button)
7	Serial Port
8	Dedicated IPMI LAN Port
9	2x USB 3.0 Ports
10	Redundant 1200W Titanium Level Power Supplies

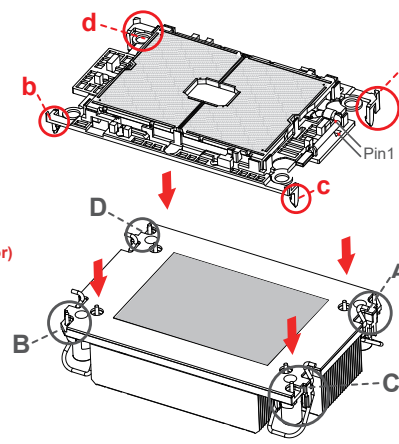
CPU Installation

1. Put processor into bracket – attention to the lineup Pin and key on both processor and carrier.



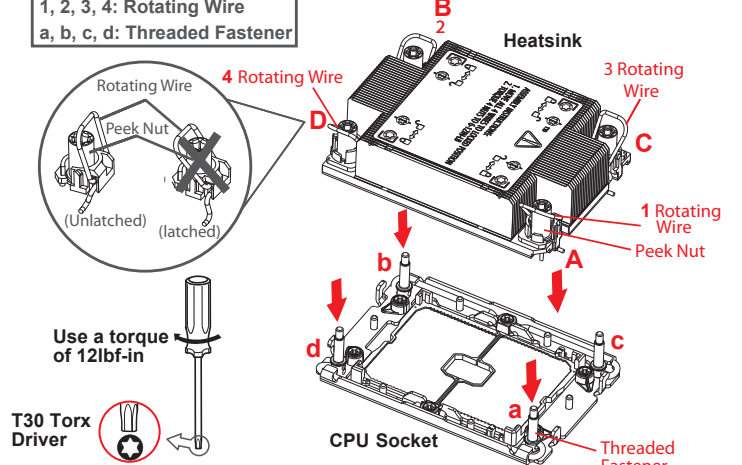
2. Put processor carrier module into HS.

Processor Carrier Assembly

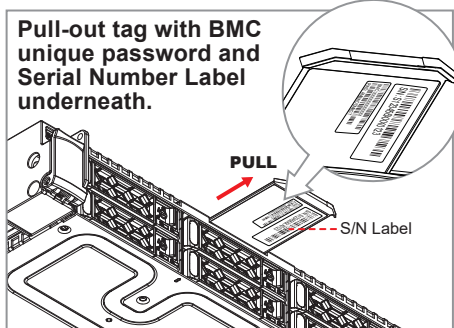


3. Put processor heatsink module into MB.

AB, C, D: Peek Nut
 1, 2, 3, 4: Rotating Wire
 a, b, c, d: Threaded Fastener



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.

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>

