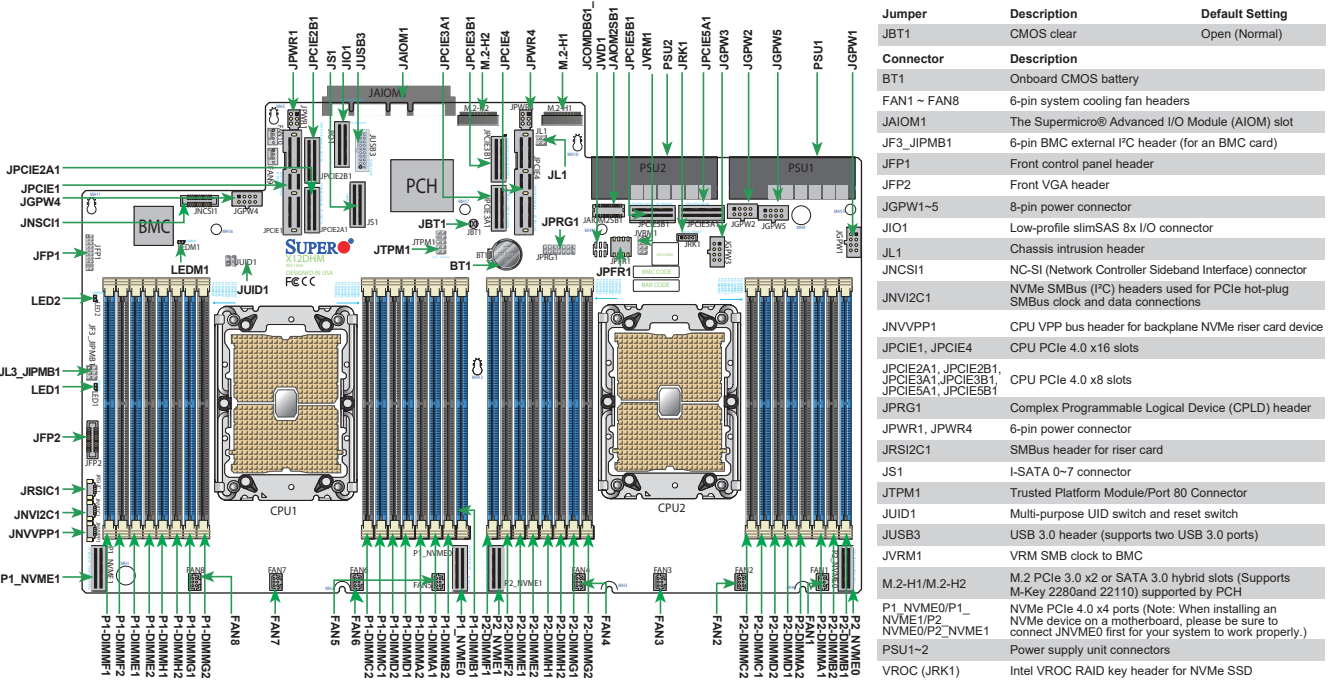


SUPERMICR SuperServer 620H-TN12R Quick Reference Guide

Board Layout



Jumper	Description	Default Setting
JBT1	CMOS clear	Open (Normal)
BT1	Onboard CMOS battery	
FAN1 ~ FAN8	6-pin system cooling fan headers	
JA10M1	The Supermicro Advanced I/O Module (AIOM) slot	
JF3_JIPMB1	6-pin BMC external I²C header (for an BMC card)	
JFP1	Front control panel header	
JFP2	Front VGA header	
JGPW1-5	8-pin power connector	
JIO1	Low-profile slimSAS 8x I/O connector	
JL1	Chassis intrusion header	
JNCS1	NC-SI (Network Controller Sideband Interface) connector	
JNV12C1	NVMe SMBus (I²C) headers used for PCIe hot-plug SMBus clock and data connections	
JNVVPP1	CPU VPP bus header for backplane NVMe riser card device	
JPCIE1, JPCIE4	CPU PCIe 4.0 x16 slots	
JPCIE2A1, JPCIE2B1, JPCIE3A1, JPCIE3B1, JPCIE4A1, JPCIE4B1	CPU PCIe 4.0 x8 slots	
JPRG1	Complex Programmable Logical Device (CPLD) header	
JPWR1, JPWR4	6-pin power connector	
JRS12C1	SMBus header for riser card	
JS1	I-SATA 0-7 connector	
JTPM1	Trusted Platform Module/Port 80 Connector	
JUID1	Multi-purpose UID switch and reset switch	
JUSB3	USB 3.0 header (supports two USB 3.0 ports)	
JVRM1	VRM SMB clock to BMC	
M.2-H1/M.2-H2	M.2 PCIe 3.0 x2 or SATA 3.0 hybrid slots (Supports M-Key 2280 and 22110 supported by PCH)	
P1_NVME0/P1_NVME1/P2_NVME0/P2_NVME1	NVMe device on a motherboard, please be sure to connect JNVME0 first for your system to work properly.)	
PSU1-2	Power supply unit connectors	
VROC (VRK1)	Intel VROC RAID key header for NVMe SSD	

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.

3. Put processor heatsink module into MB.

Memory Support

CPUs/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/P2-DIMMC1/P2-DIMMG1	
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/P2-DIMMB1/P2-DIMMF1	
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/P2-DIMMD1/P2-DIMMH1	
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/P2-DIMMD1/P2-DIMMH1	
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/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 & 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/P2-DIMMD1/P2-DIMMH1	
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

System Information

Pull-out tag with BMC unique password and Serial Number Label on the left side of service tag.

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.

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>

Front View

1	HDD2	HDD5	HDD8	HDD11
2	HDD1	HDD4	HDD7	HDD10
	HDD0	HDD3	HDD6	HDD9

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

Rear View

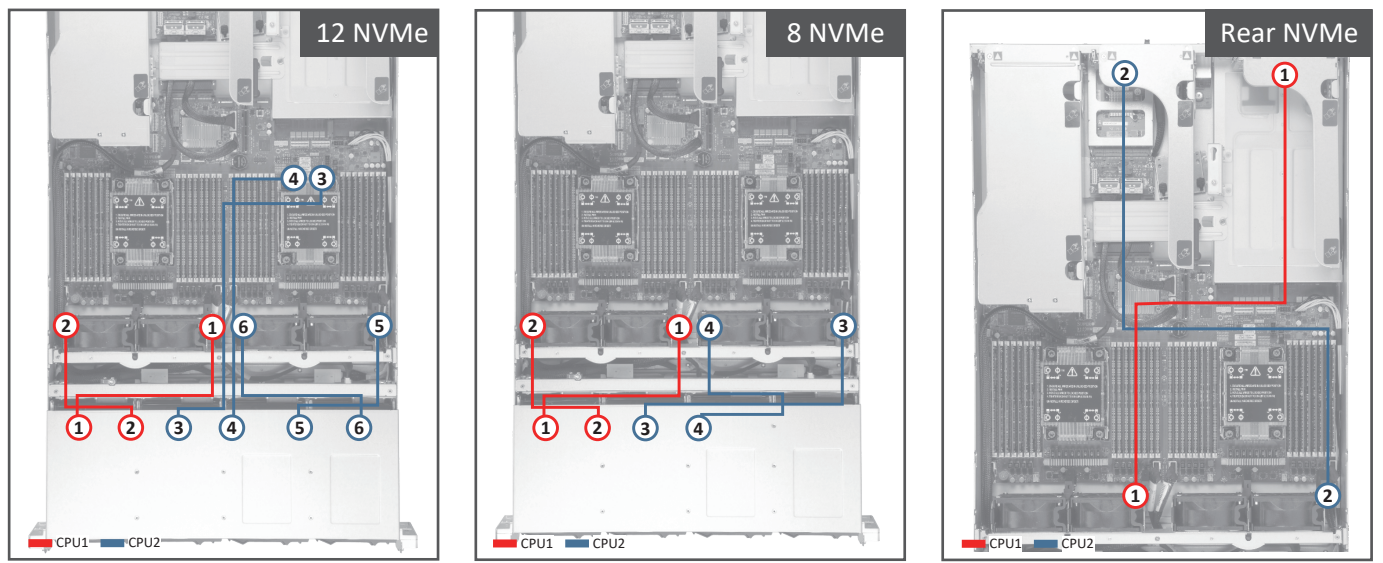
No.	Description
1	Slots 1-2: Optional 2 PCI-E slots or 2 NVMe drive bays
2	Slots 3-4: Optional 2 PCI-E slots or 2 NVMe drive bays
3	Slot 5, PCI-E 4.0 x8 or x16 Slot (CPU1)
4	Slot 6, PCI-E 4.0 x8 Slot (CPU1)*
5	Slot 7, PCI-E 4.0 x8 Slot (CPU1)

No.	Description
6	Slot 8, PCI-E 4.0 x8 Slot (CPU1)
7	Slot A1, AIOM/OCP 3.0 Networking Slot (CPU1)
8	Slot A2, AIOM/OCP 3.0 Networking Slot (CPU2)
9	VGA Port
10	2x USB 3.0 Ports
11	Dedicated BMC LAN Port
12	Redundant 1200W Titanium Power Supplies
13	Power Supply LED Solid Green

*Slot 6 is disabled if Slot 5 is configured as x16

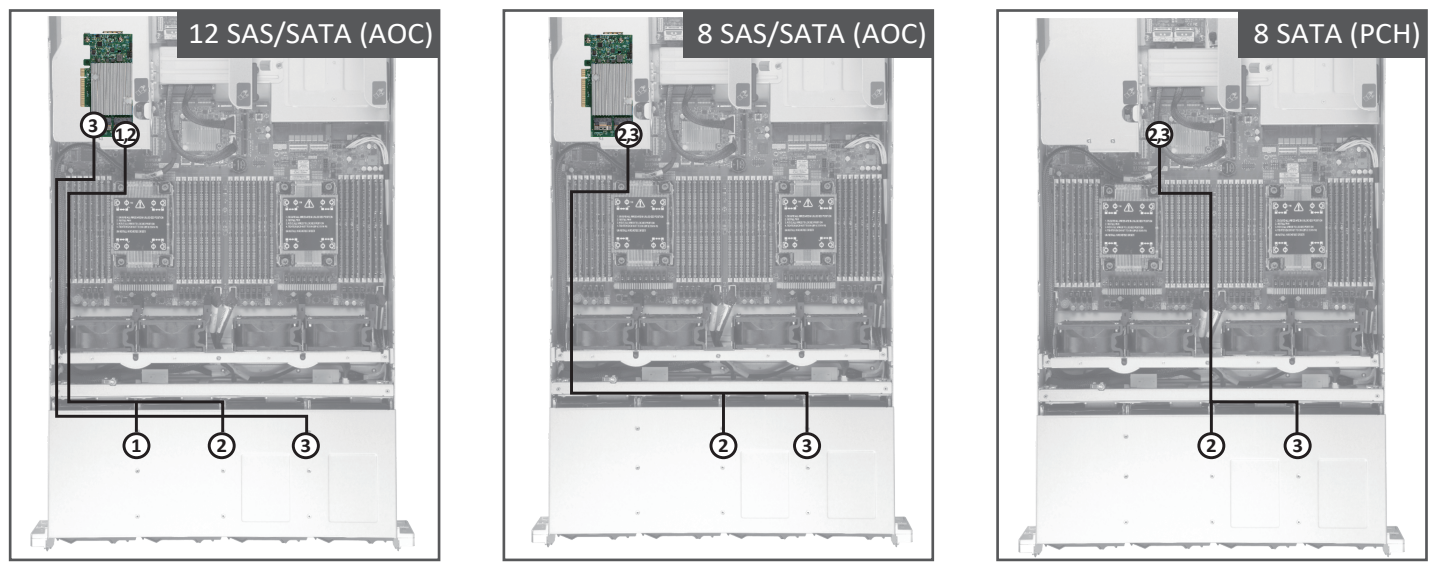
No.	Description
13	Power Supply LED Solid Green
	Power Supply LED Blinking Green
	Power Supply LED Solid Amber
	Power Supply LED Blinking Amber

NVMe Drive Bay Cable Routing



Drive Configuration	1 Drive Bay 0-1	2 Drive Bay 2-3	3 Drive Bay 4-5	4 Drive Bay 6-7	5 Drive Bay 8-9	6 Drive Bay 10-11
12 NVMe	CBL-SAST-1203LP-85	CBL-SAST-1204LP-85	CBL-SAST-1205LP-85	CBL-SAST-1205LP-85	CBL-SAST-1299LP-85	CBL-SAST-1298LP-85
4 NVMe	CBL-SAST-1203LP-85	CBL-SAST-1204LP-85	Not Used	Not Used	Not Used	Not Used
Rear NVMe	CBL-SAST-1205LP2-85	CBL-SAST-1205LP2-85	Not Used	Not Used	Not Used	Not Used

SAS/SATA Drive Bay Cable Routing



Drive Configuration	1 Drive Bay 0-3	2 Drive Bay 4-7	3 Drive Bay 8-11
12 SAS/SATA	CBL-SAST-1276F-100		CBL-SAST-1201F-100
8 SAS/SATA	Not Used	CBL-SAST-1296F-100	
8 SATA	Not Used	CBL-SAST-1258LP-100	