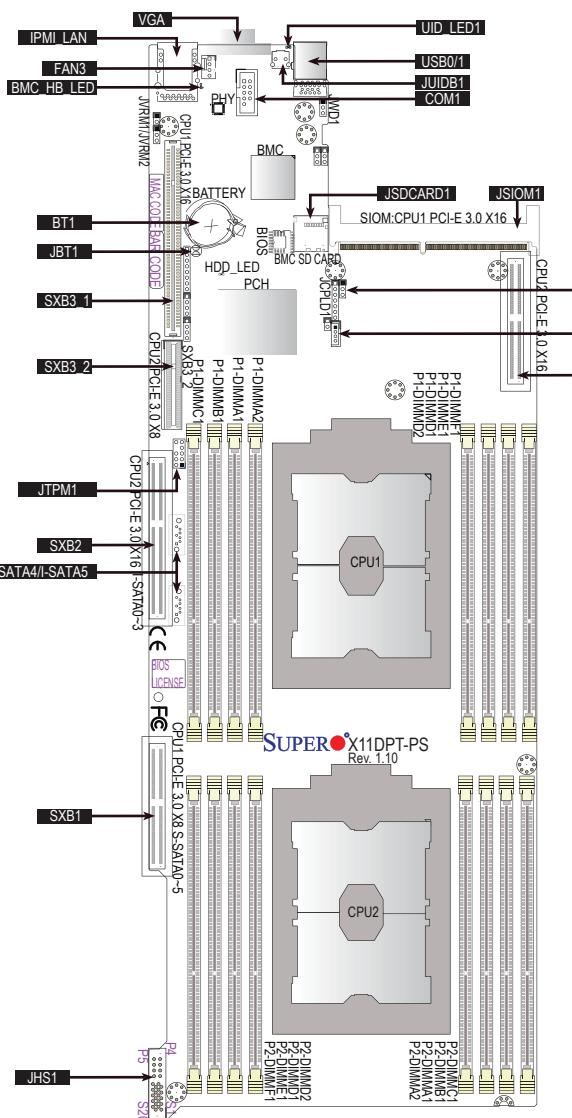


SUPERMICRO® SuperServer 2029TP-HTR/-HC1R/-HC0R Quick Reference Guide

Board Layout



Jumper	Description	Default Setting
JBT1	CMOS Clear	Open (Normal)
JPME1	Manufacturing Mode Select	Pins 1-2 (Normal)
Connector	Description	
BT1	Onboard battery	
COM 1	COM port (COM1) on the I/O backplane	
FAN 3	System cooling fan header	
IPMI_LAN	Dedicated IPMI LAN port (IPMI_LAN1)	
I-SATA4/I-SATA5	Intel® PCH SATA3.0 ports with power-pin built-in w/support of SuperDOM (Device-On Module)	
JHS1	SMCI-Proprietary Power supply header	
JRK1	RAID Key for onboard SATA devices	
JSDCARD1	BMC_SD card header	
JSIOM1	Super I/O Module used as CPU1 PCI-E 3.0 x16 slot	
JTPM1	Trusted Platform Module/Port 80 connector	
JUIDB1	UID (Unit Identifier) switch	
SXB1 (for S-SATA 0-5)	PCI-E 3.0 x8 slot supported by CPU1 for use of S-SATA 0-5 devices	
SXB2 (for I-SATA 0-3)	PCI-E 3.0 x16 slot supported by CPU2 for use of I-SATA 0-3 devices	
SXB3_1	PCI-E 3.0 x16 slot supported by CPU1	
SXB3_2	PCI-E 3.0 x8 slot supported by CPU2	
SXB4	PCI-E 3.0 x16 slot supported by CPU2	
USB0/1	Backplane Universal Serial Bus (USB) 3.0 ports 0/1	
VGA	VGA Port	
LED	Description	State: Status
BMC_HB_LED	BMC Heartbeat LED	Blinking Green: BMC Normal
UID_LED1	UID (Unit Identifier) LED	Solid Blue: Unit Identified

Memory Support

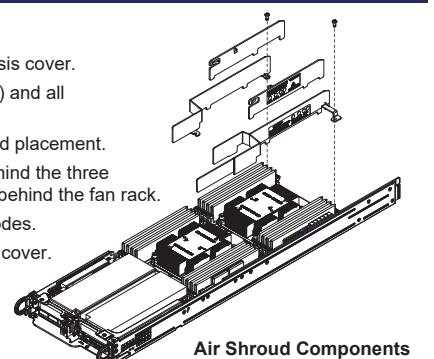
Memory Population Table

When 1 CPU is used	Memory Population Sequence
1 CPU & 1 DIMM	CPU1: P1-DIMMA1
1 CPU & 2 DIMMs	CPU1: P1-DIMMA1/P1-DIMMD1
1 CPU & 3 DIMMs	CPU1: P1-DIMMC1/P1-DIMMB1/P1-DIMMA1
1 CPU & 4 DIMMs	CPU1: P1-DIMMB1/P1-DIMMA1/P1-DIMMD1/P1-DIMME1
1 CPU & 5 DIMMs (Unbalanced: not recommended)	CPU1: P1-DIMMC1/P1-DIMMB1/P1-DIMMA1/P1-DIMMD1/P1-DIMME1
1 CPU & 6 DIMM	CPU1: P1-DIMMC1/P1-DIMMB1/P1-DIMMA1/P1-DIMMD1/P1-DIMME1/P1-DIMMF1
1 CPU & 7 DIMMs (Unbalanced: not recommended)	CPU1: P1-DIMMC1/P1-DIMMB1/P1-DIMMA1/P1-DIMMA2/P1-DIMMD1/P1-DIMME1/P1-DIMMF1
1 CPU & 8 DIMMs (Unbalanced: not recommended)	CPU1: P1-DIMMC1/P1-DIMMB1/P1-DIMMA1/P1-DIMMA2/P1-DIMMD2/P1-DIMMD1/P1-DIMME1/P1-DIMMF1
When 2 CPUs are used	Memory Population Sequence
2 CPUs & 2 DIMMs	CPU1: P1-DIMMA1 CPU2: P2-DIMMA1
2 CPUs & 4 DIMMs	CPU1: P1-DIMMA1/P1-DIMMD1 CPU2: P2-DIMMA1/P2-DIMMD1
2 CPUs & 6 DIMMs	CPU1: P1-DIMMC1/P1-DIMMB1/P1-DIMMA1 CPU2: P2-DIMMC1/P2-DIMMB1/P2-DIMMA1
2 CPUs & 8 DIMMs	CPU1: P1-DIMMB1/P1-DIMMA1/P1-DIMMD1/P1-DIMME1 CPU2: P2-DIMMB1/P2-DIMMA1/P2-DIMMD1/P2-DIMME1
2 CPUs & 10 DIMMs	CPU1: P1-DIMMC1/P1-DIMMB1/P1-DIMMA1/P1-DIMMD1/P1-DIMME1/P1-DIMMF1 CPU2: P2-DIMMB1/P2-DIMMA1/P2-DIMMD1/P2-DIMME1
2 CPUs & 12 DIMMs	CPU1: P1-DIMMC1/P1-DIMMB1/P1-DIMMA1/P1-DIMMD1/P1-DIMME1/P1-DIMMF1 CPU2: P2-DIMMC1/P2-DIMMB1/P2-DIMMA1/P2-DIMMD1/P2-DIMME1/P2-DIMMF1
2 CPUs & 14 DIMMs (Unbalanced: not recommended)	CPU1: P1-DIMMC1/P1-DIMMB1/P1-DIMMA1/P1-DIMMA2/P1-DIMMD1/P1-DIMME1/P1-DIMMF1 CPU2: P2-DIMMC1/P2-DIMMB1/P2-DIMMA1/P2-DIMMA2/P2-DIMMD1/P2-DIMME1/P2-DIMMF1
2 CPUs & 16 DIMMs (Unbalanced: not recommended)	CPU1: P1-DIMMC1/P1-DIMMB1/P1-DIMMA1/P1-DIMMA2/P1-DIMMD2/P1-DIMMD1/P1-DIMME1/P1-DIMMF1 CPU2: P2-DIMMC1/P2-DIMMB1/P2-DIMMA1/P2-DIMMA2/P2-DIMMD2/P2-DIMMD1/P2-DIMME1/P2-DIMMF1

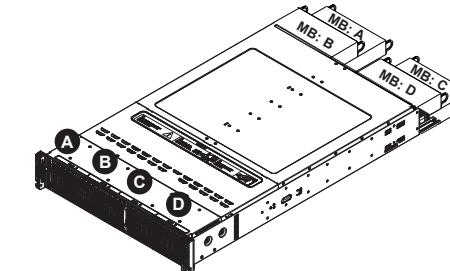
Air Shroud installation

Installing the Air Shroud

1. Lay the chassis on a flat, stable surface and remove the chassis cover.
2. Make sure that the motherboard expansion card (if applicable) and all components are properly installed in each motherboard node.
3. If necessary, move any cables that interfere with the air shroud placement.
4. Place the air shroud in the chassis. The air shroud fits just behind the three fans in the fan rack. Slide the air shroud into the grooves just behind the fan rack.
5. Repeat the procedure for the remaining three motherboard nodes.
6. Reroute any cables that were moved and replace the chassis cover.

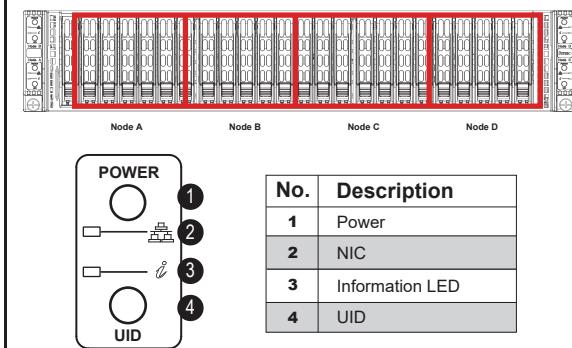


Nodes and Corresponding Hard Drives

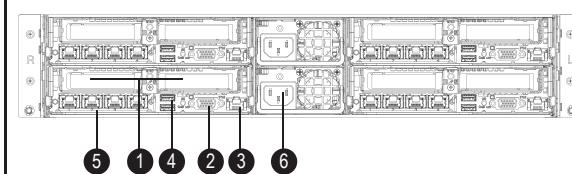


Drives Controlled by Nodes	
Motherboard B controls HDDs B0, B1, B2, B3, B4, and B5	Motherboard D controls HDDs D0, D1, D2, D3, D4, and D5
Motherboard A controls HDDs A0, A1, A2, A3, A4, and A5	Motherboard C controls HDDs C0, C1, C2, C3, C4, and C5

Front view & Interface



Rear View

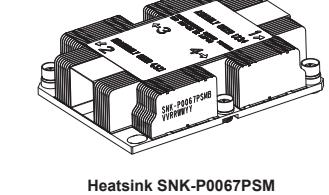
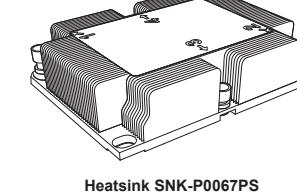


No.	Description
1	2 PCI-E 3.0 x16 Slots
2	VGA Port
3	IPMI_dedicated LAN Port
4	2 USB 3.0 Ports
5	SIOM Slot
6	Power Supply Module

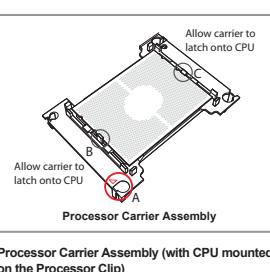
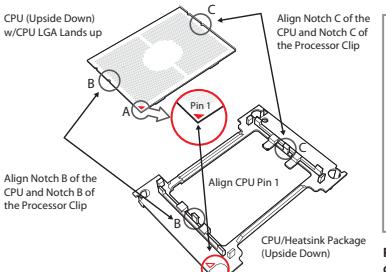
Beep Codes

BIOS Error Beep (POST) Codes		
Beep Code	Error Message	Description
1 short	Refresh	Circuits have been reset (Ready to power up)
5 short, 1 long	Memory Error	No memory detected in the system
5 long, 2 short	Display memory read/write error	Video adapter missing or with faulty memory
1 long continuous	System OH	System overheat condition

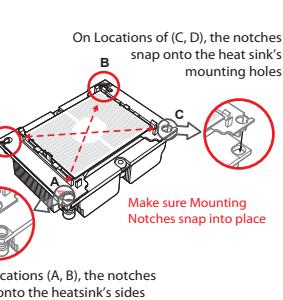
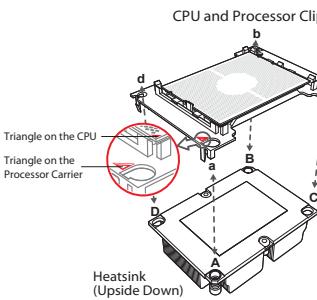
Heatsinks



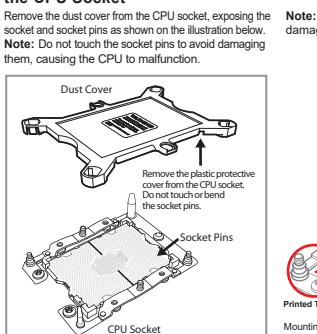
CPU Installation



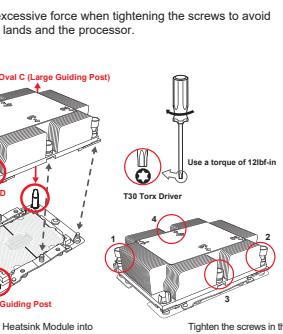
Attaching the Processor Carrier Assembly to the Heatsink to Form the Processor Heatsink Module (PHM)



Removing the Dust Cover from the CPU Socket



Installing the Processor Heatsink Module (PHM)



Caution

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

WARNING:

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

