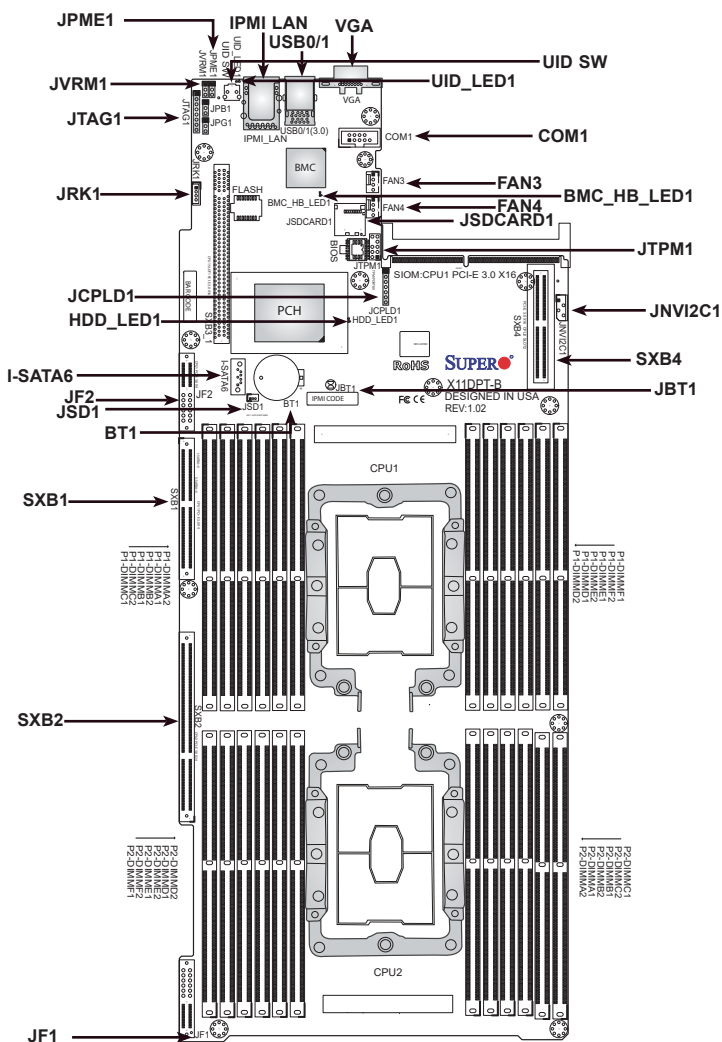


SUPERMICR® SuperServer 2029BT-HTR/-HNR/-HNC0R/-HNC1R/-HNTR Quick Reference Guide

Board Layout



Jumper	Description	Default Setting
JBT1	Clear CMOS	Open (Normal)
JPME1	ME Recovery	Pins 1-2 (Normal)
JVRM1	VRM SMB Clock (to BMC or PCH)	Pins 1-2 (BMC, Normal)

Connector	Description
Battery (BT1)	Onboard CMOS battery
COM 1	Front Panel COM Port 1
FAN 3/4	System cooling fan headers
IPMI_LAN	Dedicated IPMI LAN port
JF1	Front control panel header
JF2	PCI-E 3.0 x4 Slot (CPU1)
JNV1C1	NVMe PC headers
JRK1	RAID Key for onboard NVMe devices
JSD1	SATA DOM Power Connector
JSDCARD1	Micro SD Card slot
JTPM1	Trusted Platform Module (TPM) Port 80 connector
SIOM	CPU1 PCI-E 3.0 x16 slot for proprietary add-on module use
SXB1	PCI-E 3.0 (x4 + x4) slot supported by CPU1 and SATA connections (I-SATA0-5 & S-SATA0-5)
SXB2	PCI-E 3.0 x24 slot supported by CPU2
SXB3	PCI-E 3.0 x16 Left Hand Riser slot supported by CPU1
SXB4	PCI-E 3.0 x16 Right Hand Riser slot supported by CPU2
I-SATA6	SATA DOM with power-pin connector
UID-SW	UID Switch
USB0/1	Back panel USB 3.0 ports
VGA	Back panel VGA port

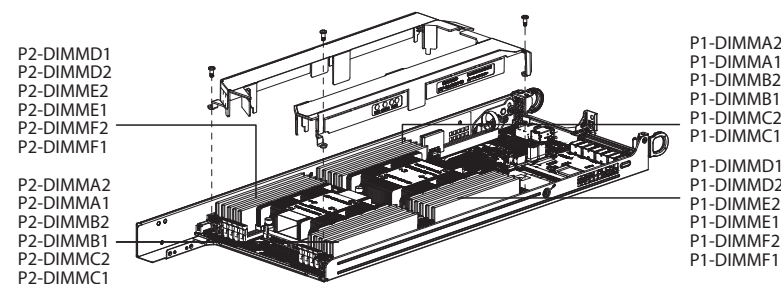
LED	Description	State	Status
BMC_HB_LED1	BMC Heartbeat LED	Green: Blinking	BMC Normal
HDD_LED1	HDD Activity LED	Green: Blinking	HDD Normal
UID_LED1	Rear UID LED	Blue: On	Unit Identified

Memory Support

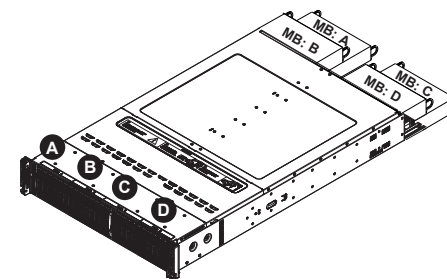
Memory Population Table

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-DIMMC1/P2-DIMMB1/P2-DIMMA1/P2-DIMMD1/P2-DIMME1/P2-DIMMF1
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	CPU1: P1-DIMMB1/P1-DIMMB2/P1-DIMMA1/P1-DIMMA2/P1-DIMMD2/P1-DIMMD1/ P1-DIMME2/P1-DIMME1 CPU2: P2-DIMMB1/P2-DIMMB2/P2-DIMMA1/P2-DIMMA2/P2-DIMMD2/P2-DIMMD1/ P2-DIMME2/P2-DIMME1
2 CPUs & 16 DIMMs	CPU1: P1-DIMMB1/P1-DIMMB2/P1-DIMMA1/P1-DIMMA2/P1-DIMMD2/P1-DIMMD1/ P1-DIMME2/P1-DIMME1 CPU2: P2-DIMMB1/P2-DIMMB2/P2-DIMMA1/P2-DIMMA2/P2-DIMMD2/P2-DIMMD1/ P2-DIMME2/P2-DIMME1
2 CPUs & 18 DIMMs	CPU1: P1-DIMMC1/P1-DIMMC2/P1-DIMMB1/P1-DIMMB2/P1-DIMMA1/P1-DIMMA2/ P1-DIMMD2/P1-DIMMD1/P1-DIMME2/P1-DIMME1/P1-DIMMF2/P1-DIMMF1 CPU2: P2-DIMMC1/P2-DIMMC2/P2-DIMMB1/P2-DIMMB2/P2-DIMMA1/P2-DIMMA2/ P2-DIMMD2/P2-DIMMD1/P2-DIMME2/P2-DIMME1/P2-DIMMF2/P2-DIMMF1
2 CPUs & 20 DIMMs	CPU1: P1-DIMMC1/P1-DIMMC2/P1-DIMMB1/P1-DIMMB2/P1-DIMMA1/P1-DIMMA2/ P1-DIMMD2/P1-DIMMD1/P1-DIMME2/P1-DIMME1/P1-DIMMF2/P1-DIMMF1 CPU2: P2-DIMMC1/P2-DIMMC2/P2-DIMMB1/P2-DIMMB2/P2-DIMMA1/P2-DIMMA2/ P2-DIMMD2/P2-DIMMD1/P2-DIMME2/P2-DIMME1/P2-DIMMF2/P2-DIMMF1
2 CPUs & 22 DIMMs (Unbalanced: not recommended)	CPU1: P1-DIMMC1/P1-DIMMC2/P1-DIMMB1/P1-DIMMB2/P1-DIMMA1/P1-DIMMA2/ P1-DIMMD2/P1-DIMMD1/P1-DIMME2/P1-DIMME1/P1-DIMMF2/P1-DIMMF1 CPU2: P2-DIMMC1/P2-DIMMC2/P2-DIMMB1/P2-DIMMB2/P2-DIMMA1/P2-DIMMA2/ P2-DIMMD2/P2-DIMMD1/P2-DIMME2/P2-DIMME1/P2-DIMMF2/P2-DIMMF1
2 CPUs & 24 DIMMs	CPU1: P1-DIMMC1/P1-DIMMC2/P1-DIMMB1/P1-DIMMB2/P1-DIMMA1/P1-DIMMA2/ P1-DIMMD2/P1-DIMMD1/P1-DIMME2/P1-DIMME1/P1-DIMMF2/P1-DIMMF1 CPU2: P2-DIMMC1/P2-DIMMC2/P2-DIMMB1/P2-DIMMB2/P2-DIMMA1/P2-DIMMA2/ P2-DIMMD2/P2-DIMMD1/P2-DIMME2/P2-DIMME1/P2-DIMMF2/P2-DIMMF1

Air Shroud installation

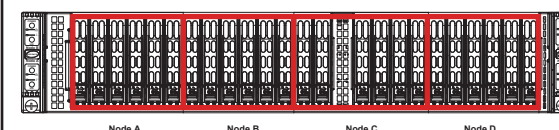


Nodes and Corresponding Hard Drives



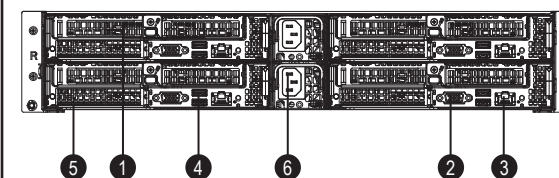
Drives Controlled by Nodes	
Motherboard B controls HDDs B0, B1, B2, B3, B4, and B5	Motherboard D controls HDDs D0, D1, D2, D3, D4, and D5
Motherboard A controls HDDs A0, A1, A2, A3, A4, and A5	Motherboard C controls HDDs C0, C1, C2, C3, C4, and C5

Front view & Interface



No.	Description
1	Power
2	NIC
3	Information LED
4	UID

Rear View

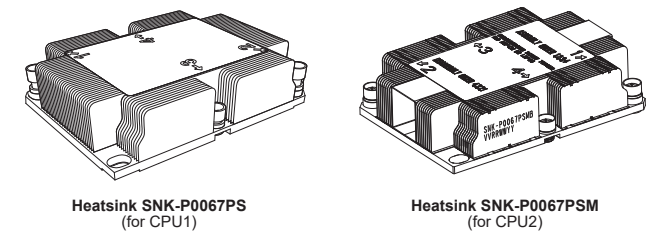


No.	Description
1	2 PCI-E x16 Slots
2	VGA Connector
3	IPMI_dedicated LAN
4	USB Ports
5	SIOM Slot
6	Power Supply Module

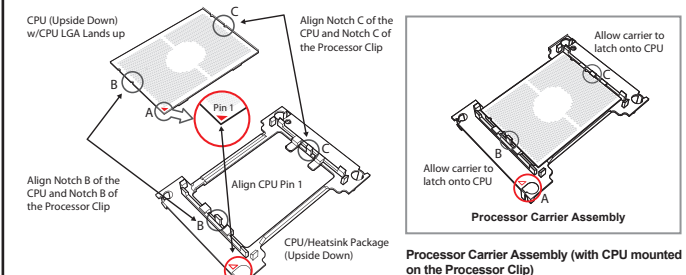
Beep Codes

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

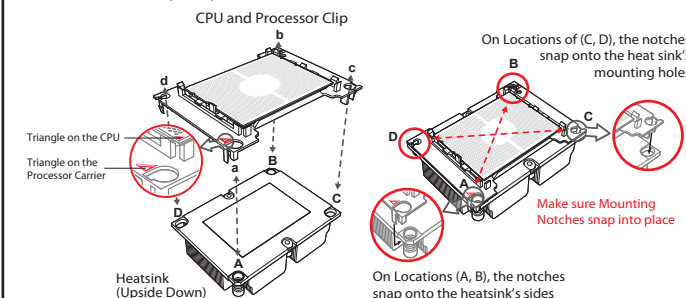
Heatsinks



CPU Installation

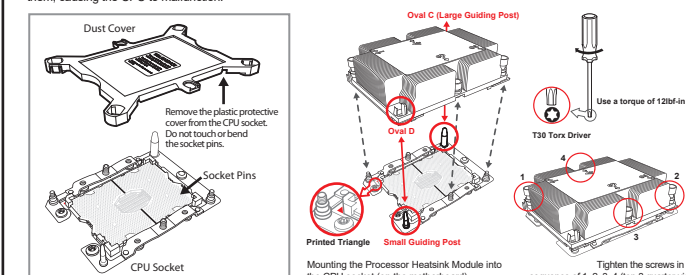


Attaching the Processor Carrier Assembly to the Heatsink to Form the Processor Heatsink Module (PHM)



Removing the Dust Cover from the CPU Socket

Remove the dust cover from the CPU socket, exposing the socket and socket pins as shown on the illustration below.
Note: Do not touch the socket pins to avoid damaging them, causing the CPU to malfunction.



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>

