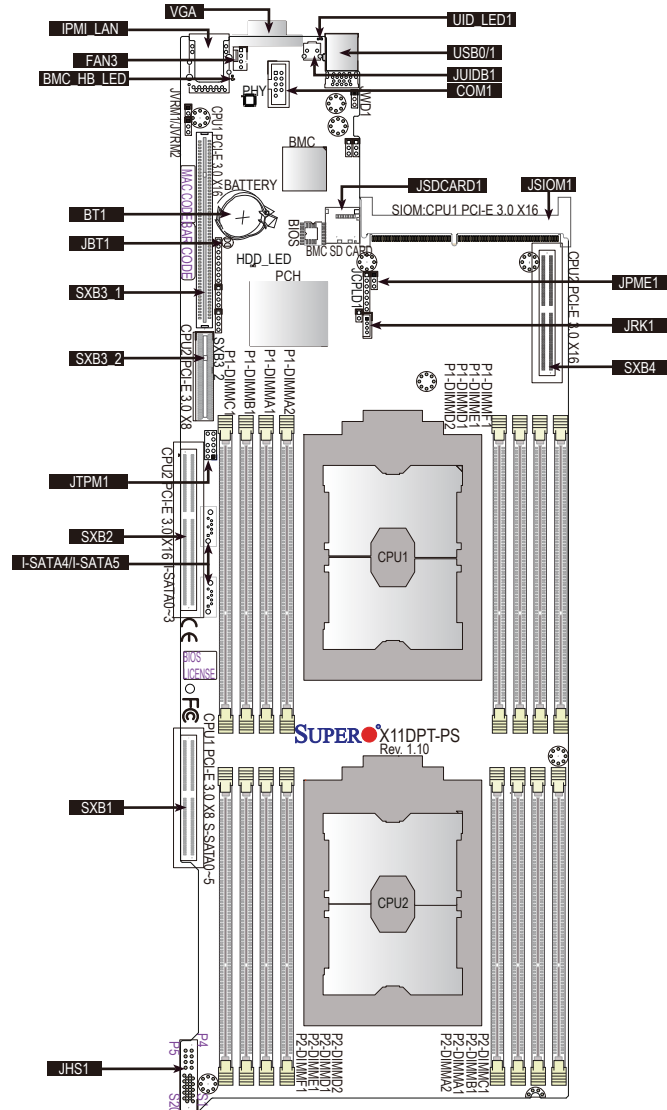


# SUPERMICR<sup>®</sup> SuperServer 6029TP-HTR/-HC1R/-HC0R Quick Reference Guide

## 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

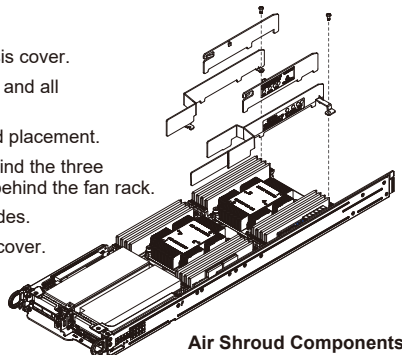
### Memory Population Table

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

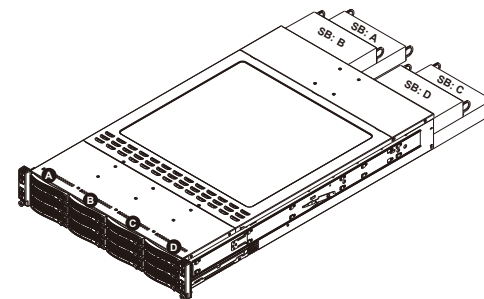
### Installing the Air Shroud

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.



Air Shroud Components

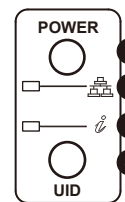
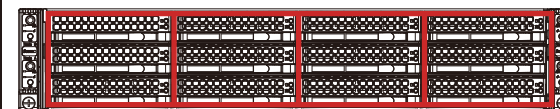
## Nodes and Corresponding Hard Drives



### Drives Controlled by Nodes

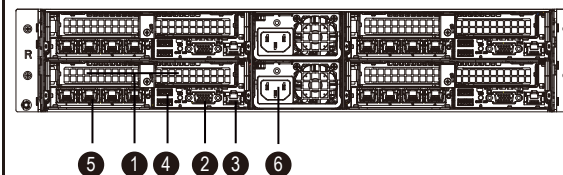
Motherboard B controls HDDs B0, B1, B2, B3, B4, and B5	Motherboard D controls HDDs D0, D1, D2, D3, D4, and D5
Motherboard A controls HDDs A0, A1, A2, A3, A4, and A5	Motherboard C controls HDDs C0, C1, C2, C3, C4, and C5

## Front view & Interface



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

## Rear View

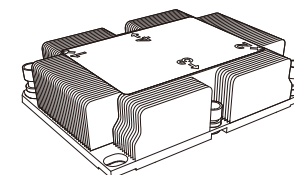


No.	Description
1	2 PCI-E 3.0 x16 Slots
2	VGA Port
3	IPMI_dedicated LAN Port
4	2 USB 3.0 Ports
5	SIOM Slot
6	Power Supply Module

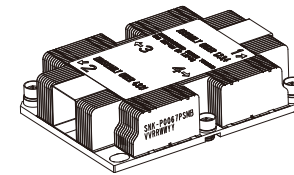
## Beep Codes

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

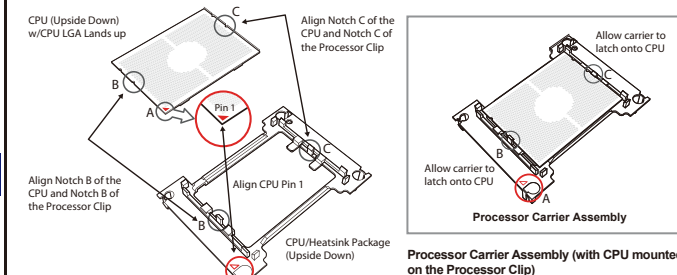


Heatsink SNK-P0067PS  
(for CPU1)

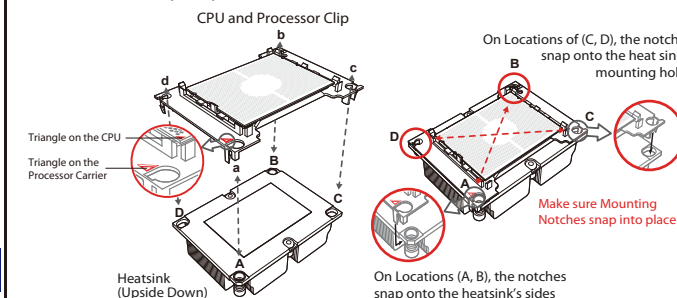


Heatsink SNK-P0067PSM  
(for CPU2)

## CPU Installation

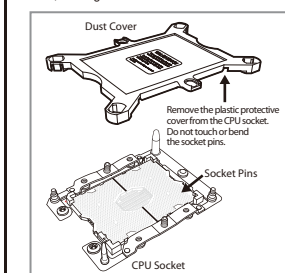


### Attaching the Processor Carrier Assembly to the Heatsink to Form the Processor Heatsink Module (PHM)



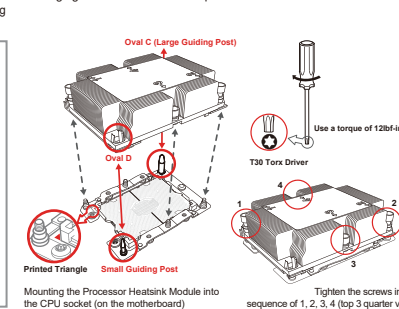
### Removing the Dust Cover from the CPU Socket

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.



### Installing the Processor Heatsink Module (PHM)

**Note:** Do not use excessive force when tightening the screws to avoid damaging the LGA lands and the processor.



## 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](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>

