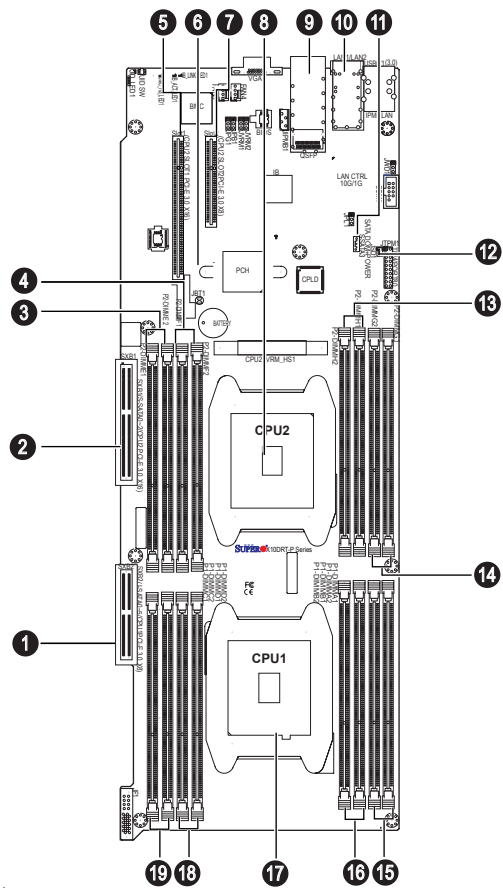


# SUPERMICR® SuperServer 1028TP-DTR/DTTR/DTFR Quick Reference Guide

## Board Layout



**Note:**  
1. Install CPU1 first  
2. In order to support PCI-e and Zero slots, two CPUs must be installed.

No.	Description
1	SXB2: I-SATA 0-5/PCI-E 3.0 x8 Slot supported by CPU1
2	SXB1: S-SATA 0-2/PCI-E 3.0 x16 Slot supported by CPU2
3	P2-DIMME1/P2-DIMME2 slot
4	P2-DIMMF1/P2-DIMMF2 slot
5	Slot1: CPU2 Slot1 PCI-E 3.0 x16
6	JBT1: CMOS Clear
7	Slot2: CPU2 Slot2 PCI-E 3.0 x8
8	CPU2
9	InfiniBand (FDR) Connector (1028TP-DTFR only)
10	Gigabit LAN1/LAN2 or 10G Base-T Connector (1028TP-DTTR only)
11	S-SATA3: SATA DOM (Disk_On_Module) with Power-pin Connector
12	JSD1: SATA DOM (Device_on_Module) Power Connector
13	P2-DIMMH1/P2-DIMMH2 slot
14	P2-DIMMG1/P1-DIMMG2 slot
15	P1-DIMMA1/P1-DIMMA2 slot
16	P1-DIMMB1/P1-DIMMB2 slot
17	CPU1 (Install CPU1 first)
18	P1-DIMMD1/P1-DIMMD2 slot
19	P1-DIMMC1/P1-DIMMC2 slot

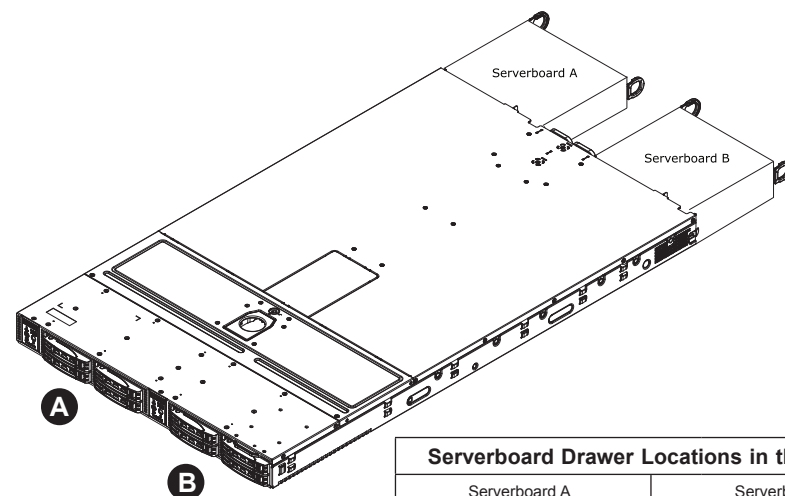
## Memory

Processors and their Corresponding Memory Modules								
CPU#	Corresponding DIMM Modules							
CPU 1	P1-DIMMA1	P1-DIMMB1	P1-DIMMC1	P1-DIMMD1	P1-DIMMA2	P1-DIMMB2	P1-DIMMC2	P1-DIMMD2
CPU 2	P2-DIMME1	P2-DIMMF1	P2-DIMMG1	P2-DIMMH1	P2-DIMME2	P2-DIMMF2	P2-DIMMG2	P2-DIMMH2

Processors and Memory Module Population for Optimal Performance	
Number of CPUs + DIMMs	CPU and Memory Population Configuration Table (For memory to work properly, follow the instructions below)
1 CPU & 2 DIMMs	CPU1: P1-DIMMA1/P1-DIMMB1
1 CPU & 4 DIMMs	CPU1: P1-DIMMA1/P1-DIMMB1, P1-DIMMC1/P1-DIMMD1
1 CPU & 5-8 DIMMs	CPU1: P1-DIMMA1/P1-DIMMB1, P1-DIMMC1/P1-DIMMD1 + Any memory pairs in P1-DIMMA2/P1-DIMMB2/P1-DIMMC2/P1-DIMMD2 slot
2 CPUs & 4 DIMMs	CPU1 + CPU2: P1-DIMMA1/P1-DIMMB1, P2-DIMME1/P2-DIMMF1
2 CPUs & 6 DIMMs	CPU1 + CPU2: P1-DIMMA1/P1-DIMMB1/P1-DIMMC1/P1-DIMMD1, P2-DIMME1/P2-DIMMF1
2 CPUs & 8 DIMMs	CPU1 + CPU2: P1-DIMMA1/P1-DIMMB1/P1-DIMMC1/P1-DIMMD1, P2-DIMME1/P2-DIMMF1/P2-DIMMG1/P2-DIMMH1
2 CPUs & 8-16 DIMMs	CPU1 + CPU2: P1-DIMMA1/P1-DIMMB1/P1-DIMMC1/P1-DIMMD1, P2-DIMME1/P2-DIMMF1/P2-DIMMG1/P2-DIMMH1 + Any memory pairs in P1, P2 DIMM slots
2 CPUs & 16 DIMMs	CPU1 + CPU2: P1-DIMMA1/P1-DIMMB1/P1-DIMMC1/P1-DIMMD1, P1-DIMMA2/P1-DIMMB2/P1-DIMMC2/P1-DIMMD2, P2-DIMME2/P2-DIMMF2/P2-DIMMG2/P2-DIMMH2

Populating RDIMM/LRDIMM DDR4 Memory Modules							
Type	Ranks Per DIMM and Data Width	DIMM Capacity (GB)	Speed (MT/s); Voltage (V); Slots per Channel (SPC) and DIMMs per Channel (DPC)				
			2 Slots per Channel				
			1 DPC		2 DPC		
				E5-2600 V3	E5-2600 V4	E5-2600 V3	E5-2600 V4
RDIMM	SRx4	8 GB	16 GB	2133	2400	1866	2133
RDIMM	SRx8	4 GB	8 GB	2133	2400	1866	2133
RDIMM	DRx8	8 GB	16 GB	2133	2400	1866	2133
RDIMM	DRx4	16 GB	32 GB	2133	2400	1866	2133
LRDIMM	QRx4	32 GB	64 GB	2133	2400	2133	2400
LRDIMM 3DS	8Rx4	64 GB	128 GB	2133	2400	2133	2400

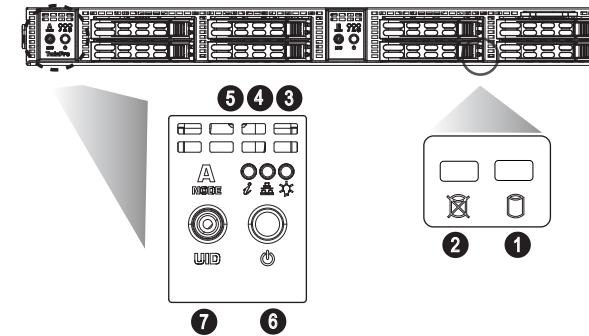
## Nodes and Corresponding Hard Drives



Serverboard Drawer Locations in the Chassis

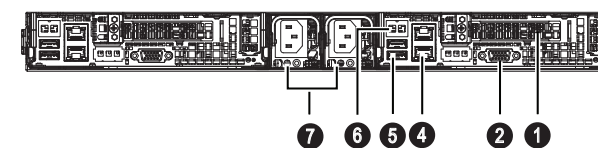
Serverboard A	Serverboard B
Controls HDDs A1 through A4	Controls HDDs B1 through B4

## Front view & Interface



No.	Description
1	Hard Drive Signal
2	Hard Drive Fail
3	Power LED
4	LAN LED
5	Information LED
6	Power Button
7	UID Button

## Rear View

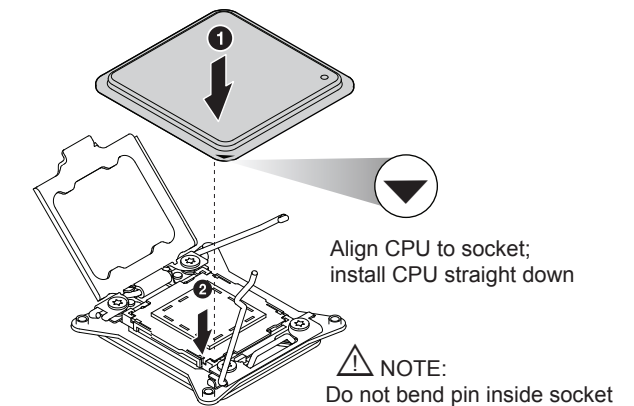


No.	Description
1	Low-Profile PCI-E Slot (1x16)
2	VGA Connector
3	InfiniBand Port (1028TP-DTFR only)
4	G_LAN or 10G Base-T Connector (1028TP-DTTR only)
5	USB Ports
6	IPMI LAN Port
7	Power Supply Module

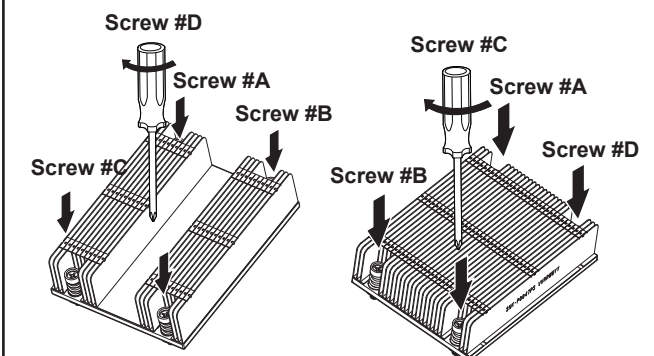
## Beep Codes

BIOS Beep Codes		
Beep Code/LED	Message	Description
1 beep	Refresh	Circuits have been reset. (Ready to power up)
5 short beeps + 1 long beep	Memory Error	No memory detected
5 beeps and 2 short beeps	Display memory read/write error	Video adapter missing or with faulty memory
1 continuous beep	System Overheat	System Overheat

## CPU Installation



## Heatsink Installation



SNK-P0047PSM for CPU1      SNK-P0057PS for CPU2

- Place the heatsink on top of the installed CPU.
- Align the four screws to the socket.
- Holding the heatsink in place, screw down as shown (cross pattern, in order: D, A, B, C).
- Note: Only use 6-8 lb/ft of torque; otherwise, hand-tighten each screw to avoid damaging the CPU.

## 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

**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.

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

