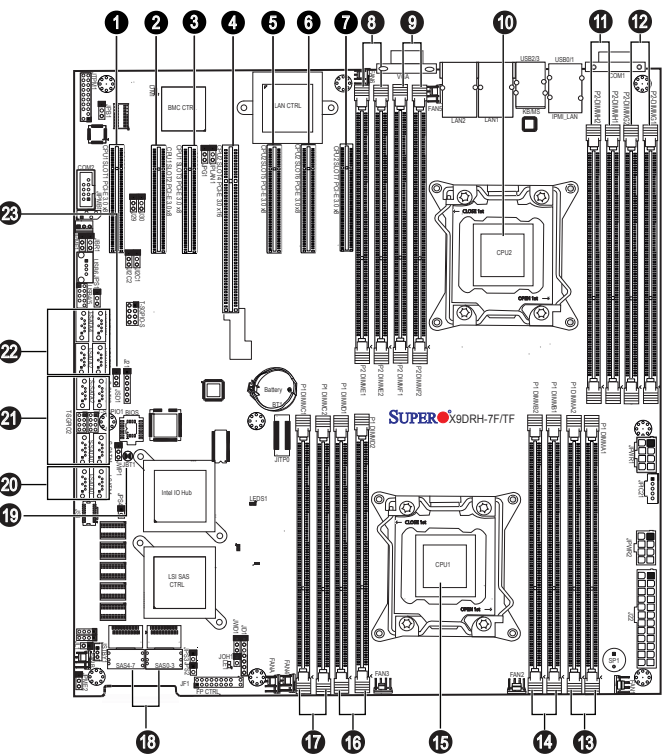


SUPERMICR SuperServer 6027R-72RF/72RFT Quick Reference Guide

Board Layout



No.	Description
1	CPU1 Slot1 PCI-E 3.0 x8
2	CPU1 Slot2 PCI-E 3.0 x8
3	CPU1 Slot3 PCI-E 3.0 x8
4	CPU2 Slot4 PCI-E 3.0 x16
5	CPU2 Slot5 PCI-E 3.0 x8
6	CPU2 Slot6 PCI-E 3.0 x8
7	CPU2 Slot7 PCI-E 3.0 x8
8	P2-DIMME1(Blue)/P2-DIMME2 slot
9	P2-DIMMF1(Blue)/P2-DIMMF2 slot
10	CPU2 slot
11	P2-DIMMH1(Blue)/P2-DIMMH2 slot
12	P2-DIMMG1(Blue)/P2-DIMMG2 slot
13	P1-DIMMA1(Blue)/P1-DIMMA2 slot
14	P1-DIMMB1(Blue)/P1-DIMMB2 slot
15	CPU1 (Install CPU1 first)
16	P1-DIMMD1(Blue)/P1-DIMMD2 slot
17	P1-DIMMC1(Blue)/P1-DIMMC2 slot
18	SAS 0~3, 4~7 ports
19	JBT1 = Clear CMOS
20	(I-)SATA 0/1 SATA 3.0 Connectors 0/1 (Available for RAID 0, RAID 1 only, used in conjunction with T-SGPIO1)
21	(S-)SATA 0/3 SATA 2.0 Ports 0~3 from SCU (Available for RAID 0, 1, 5, 10 used in conjunction with T-SGPIO-S)
22	(I-)SATA 2/5 Intel SB SATA 2.0 Connectors: 2/4 (T-SGPIO1); 4/5 (T-SGPIO2) (Available for RAID 0, 1, 5, 10)
23	JSD1 = SATA Device Power Connector

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
CPU2	P2-DIMME1	P2-DIMMF1	P2-DIMMG1	P2-DIMMH1	P2-DIMME2	P2-DIMMF2	P2-DIMMG2	P2-DIMMH2

Populating Memory for Optimal Performance	
Number of CPUs+DIMMs	CPU and Memory Population Configuration Table
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 slots
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 & 10~16 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, P2-DIMME1/P2-DIMMF1/P2-DIMMG1/P2-DIMMH1, P1-DIMMA2/P1-DIMMB2/P1-DIMMC2/P1-DIMMD2, P2-DIMME2/P2-DIMMF2/P2-DIMMG2/P2-DIMMH2

UDIMM Memory Support				
Ranks Per DIMM & Data Width		Memory Capacity Per DIMM (Note 1)		
SRx8 Non-ECC		1GB	2GB	4GB
DRx8 Non-ECC		2GB	4GB	8GB
SRx16 Non-ECC		512MB	1GB	2GB
SRx8 ECC		1GB	2GB	4GB
DRx8 ECC		2GB	4GB	8GB

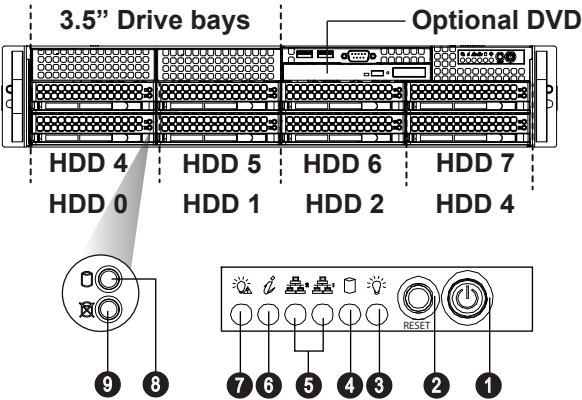
Notes:  
1. 1Gb/2Gb/4Gb DRAMs are supported; however, only 2Gb and 4Gb DRAMs are validated.

RDIMM Memory Support				
Ranks Per DIMM & Data Width		Memory Capacity Per DIMM (Note 1)		
SRx8		1GB	2GB	4GB
DRx8		2GB	4GB	8GB
SRx4		2GB	4GB	8GB
DRx4		4GB	8GB	16GB
QRx4		8GB	16GB	32GB
QRx8		4GB	8GB	16GB

Notes:  
1. 1Gb/2Gb/4Gb DRAMs are supported; however, only 2Gb and 4Gb DRAMs are validated.  
2. QR RDIMMs are supported but not validated. Memory testing is limited to system level testing. Signal integrity testing in interoperability testing are not performed. The passing QR RDIMMs will be posted on the website.

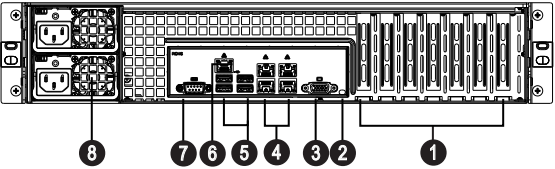
- Notes
- For optimal memory performance, please install DIMMs in pairs (with an even number of DIMMs installed).
  - All channels in a system will run at the fastest common frequency.

Front View & Interface



No.	Description
1	Power Button
2	Reset Button
3	Power LED
4	Device Activity LED
5	LAN1 LED & LAN2 LED
6	Information LED
7	Power Fail LED
8	Hard Drive Signal
9	Hard Drive Fail

Rear View

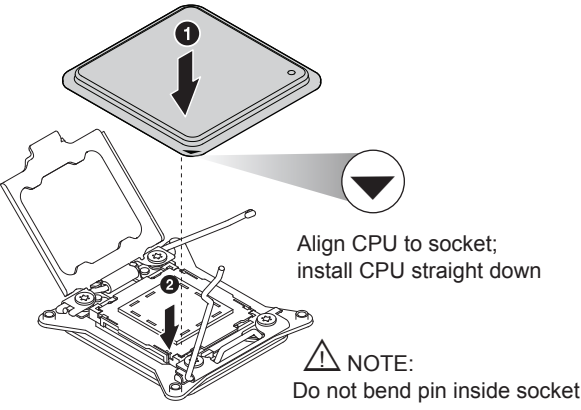


No.	Description	No.	Description
1	PCI Expansion Slots	5	USB 0/1/2/3 Ports
2	UID Button	6	Dedicated LAN for IPMI
3	VGA Port	7	COM Port
4	LAN 1/2 Ports	8	Redundant Power Supply Module

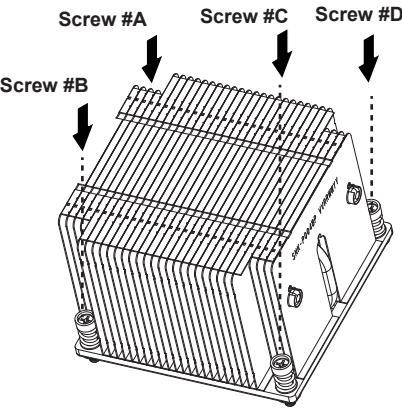
Beep Codes

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	No memory detected
5 long beeps + 2 short beeps	Display memory read/write status	Video adapter missing or with faulty memory
1 continuous beep	System	System overheat

CPU Installation



Heatsink Installation



- Place heatsink on top of installed CPU
- Line up the four screws to socket
- Push down heatsink and screw down as shown (cross pattern, in order: A, C, B, D)
- NOTE: Only use 6-8 lb/f of torque; otherwise, hand-tighten each screw, to avoid damaging the system

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>

