

SUPERMICRO® 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-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-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-DIMMH2							

UDIMM Memory Support		LRDIMM Memory Support					
Ranks Per DIMM & Data Width	Memory Capacity Per DIMM (Note 1)			Ranks Per DIMM & Data Width (Note 1)	Memory Capacity Per DIMM (Note 2)		
SRx8 Non-ECC	1GB	2GB	4GB	QRx4 (DDP) (Note 4)	16GB	32GB	
DRx8 Non-ECC	2GB	4GB	8GB	QRx8 (P) (Note 5)	8GB	16GB	
SRx16 Non-ECC	512MB	1GB	2GB				
SRx8 ECC	1GB	2GB	4GB				
DRx8 ECC	2GB	4GB	8GB				

Notes:

- Physical Rank is used to calculate DIMM capacity.
- Only 2Gb/4Gb DRAMs are supported and validated.
- The speeds listed are estimated only and will be verified through simulation.
- DDP is for Dual Die Package DRAM stacking.
- "P" Means "Planar Monolithic DRAM Die."

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:

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

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 overheated

CPU Installation

Align CPU to socket; install CPU straight down

NOTE:
Do not bend pin inside socket

Heatsink Installation

Screw #A Screw #C Screw #D

Screw #B

- 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

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>

<http://www.supermicro.com>

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