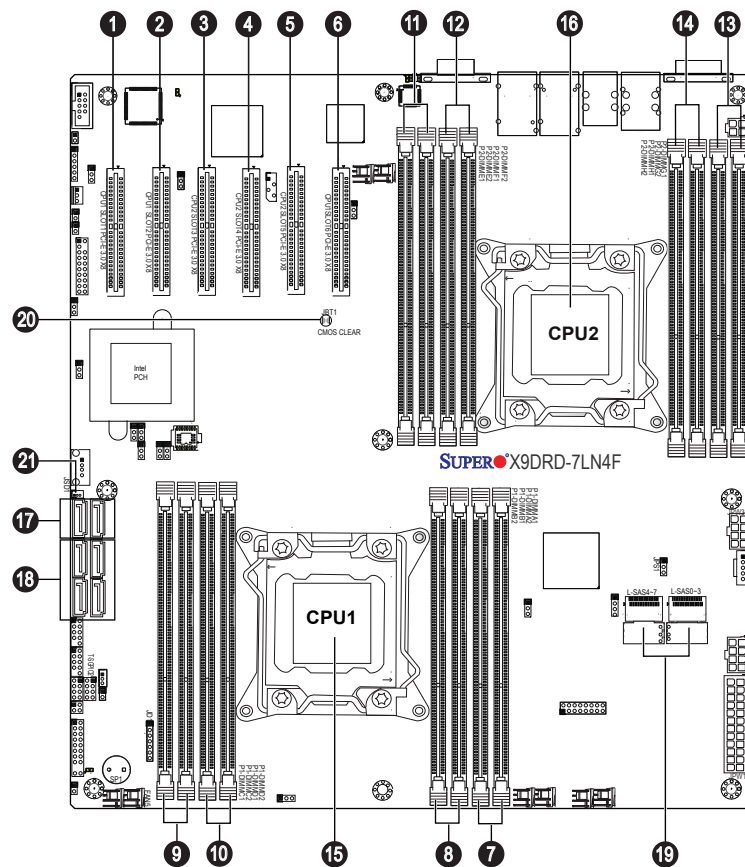


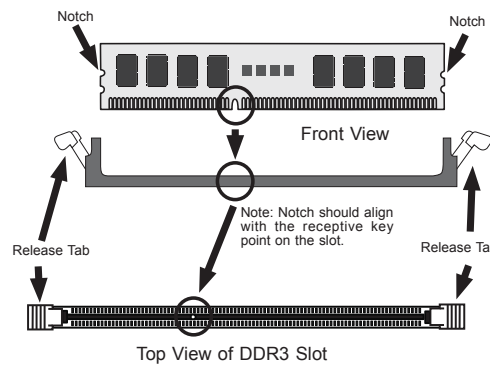
# SUPERMICR<sup>®</sup> SuperServer 1027R-73DBRF Quick Reference Guide

## Board Layout



No.	Description
1	CPU1 Slot1 PCI-E 3.0 x8
2	CPU1 Slot2 PCI-E 3.0 x8
3	CPU2 Slot3 PCI-E 3.0 x8
4	CPU2 Slot4 PCI-E 3.0 x8
5	CPU2 Slot5 PCI-E 3.0 x8
6	CPU1 Slot6 PCI-E 3.0 x8
7	DIMMA1(Blue)/DIMMA2 slot
8	DIMMB1 (Blue)/DIMMB2 slot
9	DIMMC1 (Blue)/DIMMC2 slot
10	DIMMD1 (Blue)/DIMMD2 slot
11	DIMME1 (Blue)/DIMME2 slot
12	DIMMF1 (Blue)/DIMM F2 slot
13	DIMMG1 (Blue)/DIMM G2 slot
14	DIMMH1 (Blue)/DIMM H2 slot
15	CPU1 (it must be installed on it first)
16	CPU2
17	SATA 3 Ports 0~1 (from Intel PCH)
18	SATA 2 Ports 2~5 (from Intel PCH)
19	SAS 2.0 ports 0~3, 4~7 (from LSI SAS 2308 Controller)
20	JBT1 = CMOS Reset
21	SATA DOM Power

## 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 & 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

### Installing UDIMM (ECC/non-ECC) Memory

Intel E5-2600 Series Processor UDIMM Memory Support								
Ranks per DIMM & Data Width	Memory Capacity Per DIMM (See the Note below)	Speed (MT/s) and Voltage Validated by Slot per Channel (SPC) and DIMM Per Channel (DPC)						
		1 Slot Per Channel				2 Slots Per Channel		
		1DPC		1DPC		2DPC		2DPC
		1.35V	1.5V	1.35V	1.5V	1.35V	1.5V	1.5V
SRx8 Non-ECC	1GB 2GB 4GB	NA	1066, 1333, 1600	NA	1066, 1333	NA	1066, 1333	1066, 1333
DRx8 Non-ECC	2GB 4GB 8GB	NA	1066, 1333, 1600	NA	1066, 1333	NA	1066, 1333	1066, 1333
SRx16 Non-ECC	512MB 1GB 2GB	NA	1066, 1333, 1600	NA	1066, 1333	NA	1066, 1333	1066, 1333
SRx8 ECC	1GB 2GB 4GB	1066, 1333	1066, 1333, 1600	1066, 1333	1066, 1333	1066, 1333	1066, 1333	1066, 1333
DRx8 ECC	2GB 4GB 8GB	1066, 1333	1066, 1333, 1600	1066, 1333	1066, 1333	1066, 1333	1066, 1333	1066, 1333

### Installing RDIMM (ECC) Memory

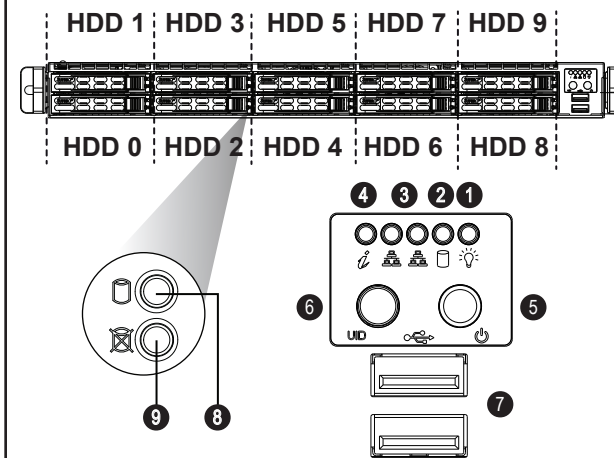
Intel E5-2600 Series Processor RDIMM Memory Support									
Ranks per DIMM & Data Width	Memory Capacity Per DIMM (See the Note below)	Speed (MT/s) and Voltage Validated by Slot per Channel (SPC) and DIMM Per Channel (DPC)							
		1 Slot Per Channel				2 Slots Per Channel			
		1DPC		1DPC		2DPC		2DPC	
		1.35V	1.5V	1.35V	1.5V	1.35V	1.5V	1.35V	1.5V
SRx8	1GB 2GB 4GB	1066, 1333	1066, 1333, 1600	1066, 1333	1066, 1333, 1600	1066, 1333	1066, 1333, 1600	1066, 1333	1066, 1333, 1600
DRx8	2GB 4GB 8GB	1066, 1333	1066, 1333, 1600	1066, 1333	1066, 1333, 1600	1066, 1333	1066, 1333, 1600	1066, 1333	1066, 1333, 1600
SRx4	2GB 4GB 8GB	1066, 1333	1066, 1333, 1600	1066, 1333	1066, 1333, 1600	1066, 1333	1066, 1333, 1600	1066, 1333	1066, 1333, 1600
DRx4	4GB 8GB 16GB	1066, 1333	1066, 1333, 1600	1066, 1333	1066, 1333, 1600	1066, 1333	1066, 1333, 1600	1066, 1333	1066, 1333, 1600
QRx4	8GB 16GB 32GB	800	1066	800	1066	800	1066	800	1066
QRx8	4GB 8GB 16GB	800	1066	800	1066	800	1066	800	1066

### Installing LRDIMM (ECC) Memory

Intel E5-2600 Series Processor LRDIMM Memory Support									
Ranks per DIMM & Data Width	Memory Capacity Per DIMM (See the Note below)	Speed (MT/s) and Voltage Validated by Slot per Channel (SPC) and DIMM Per Channel (DPC)							
		1 Slot Per Channel				2 Slots Per Channel			
		1DPC		1DPC		2DPC		2DPC	
		1.35V	1.5V	1.35V	1.5V	1.35V	1.5V	1.35V	1.5V
QRx4 (DDP)	16GB 32GB	1066, 1333	1066, 1333	1066	1066, 1333	1066	1066, 1333	1066	1066, 1333
QRx8 (P)	8GB 16GB	1066, 1333	1066, 1333	1066	1066, 1333	1066	1066, 1333	1066	1066, 1333

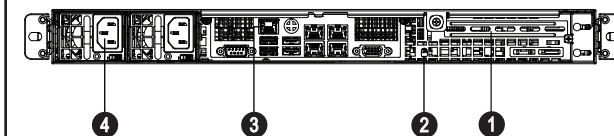
**Note:** For detailed information on memory support and updates, please refer to the SMC Recommended Memory List posted on our website at <http://www.supermicro.com/support/resources/mem.cfm>.

## Front View & Interface



No.	Description
1	Power LED
2	Device Activity LED
3	LAN1 LED & LAN2 LED
4	Information LED
5	Power Button
6	UID Button
7	USB 2.0 Ports
8	Hard Drive Signal
9	Hard Drive Fail

## Rear View

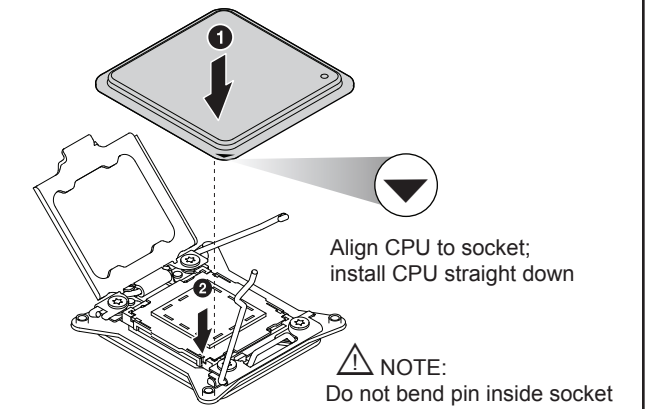


No.	Description
1	PCI Expansion Slot
2	UID Button
3	Dedicated LAN for IPMI
4	Redundant Power Supply Module

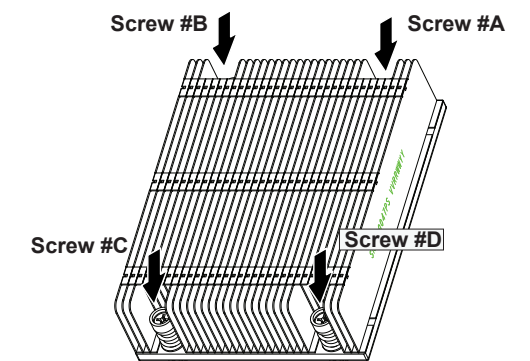
## Beep Codes

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>

