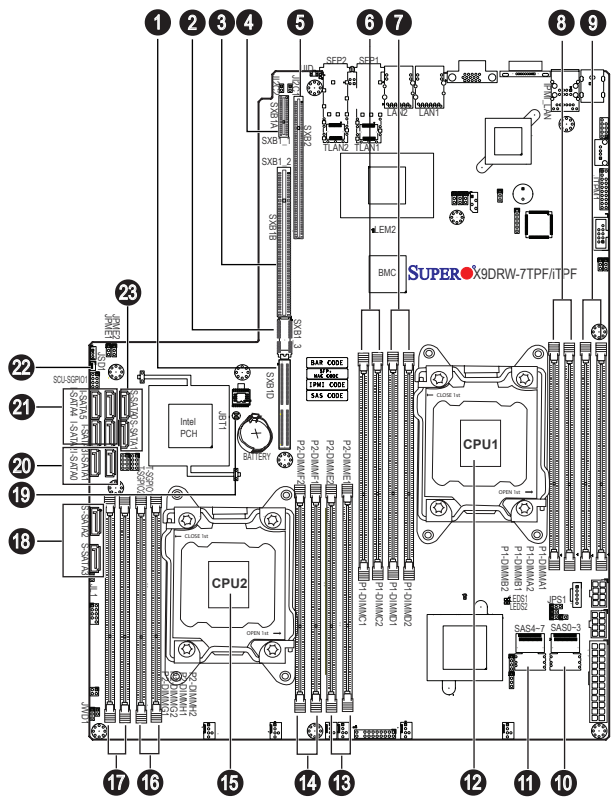


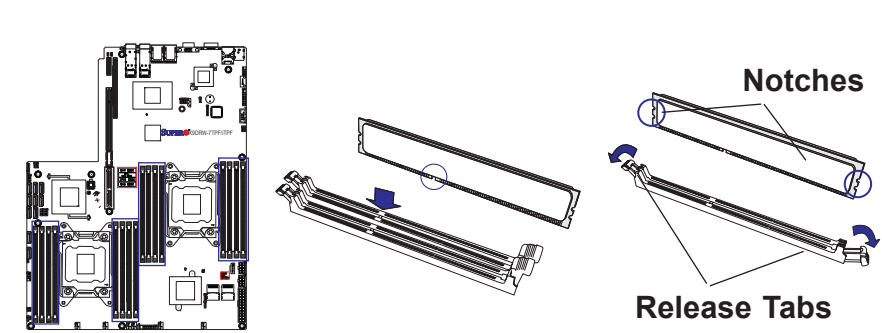
SUPERMICR[®] SuperServer 1027R-72BRFTP Quick Reference Guide

Board Layout



No.	Description
1	SXB1D: SMC-Proprietary WIO_L (Left) Riser Card (x48) slot
2	SXB1C : SMC-Proprietary WIO_L (Left) Riser Card (x48) slot
3	SXB1B: SMC-Proprietary WIO_L (Left) Riser Card (x48) slot
4	SXB1A: SMC-Proprietary WIO_L (Left) Riser Card (x48) slot
5	SXB2: SMC-Proprietary WIO_R (Right) Riser Card (x16) slot
6	P2-DIMMC1(Blue)/P2-DIMMC2 slot
7	P2-DIMMD1(Blue)/P2-DIMMD2 slot
8	P2-DIMMB1(Blue)/P2-DIMMB2 slot
9	P2-DIMMA1(Blue)/P2-DIMMA2 slot
10	SAS0~3: LSI 2208 SAS2 HW RAID Connectors 0~3
11	SAS4~7: LSI 2208 SAS2 HW RAID Connectors 4~7
12	CPU1 (Install CPU1 first)
13	P2-DIMME1(Blue)/P2-DIMME2 slot
14	P2-DIMMF1(Blue)/P2-DIMMF2 slot
15	CPU2
16	P2-DIMMH1(Blue)/P2-DIMMH2 slot
17	P2-DIMMG1(Blue)/P2-DIMMG2 slot
18	S-SATA2~3: Intel SATA 2.0 Connectors 2~3 (from Intel SCU)
19	JBT1 = CMOS Clear
20	I-SATA0~1: Intel SATA 3.0 Connectors 0/1 (from Intel AHCI)
21	I-SATA2~5: Intel SATA 2.0 Connectors 2~5 (from Intel AHCI)
22	JSD1 = SATA DOM Power
23	S-SATA0~1: Intel SATA 2.0 Connectors 0~1 (from Intel SCU)

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
CPU 2	P2-DIMME1	P2-DIMMF1	P2-DIMMG1	P2-DIMMH1	P2-DIMME2	P2-DIMMF2	P2-DIMMG2

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	
				1.35V	1.5V	1.35V	1.5V	1.35V	1.5V
SRx8 Non-ECC	1GB	2GB	4GB	NA	1066, 1333, 1600	NA	1066, 1333	NA	1066, 1333
DRx8 Non-ECC	2GB	4GB	8GB	NA	1066, 1333, 1600	NA	1066, 1333	NA	1066, 1333
SRx16 Non-ECC	512MB	1GB	2GB	NA	1066, 1333, 1600	NA	1066, 1333	NA	1066, 1333
SRx8 ECC	1GB	2GB	4GB	1066, 1333	1066, 1333, 1600	1066, 1333	1066, 1333	1066	1066, 1333
DRx8 ECC	2GB	4GB	8GB	1066, 1333	1066, 1333, 1600	1066, 1333	1066, 1333	1066	1066, 1333

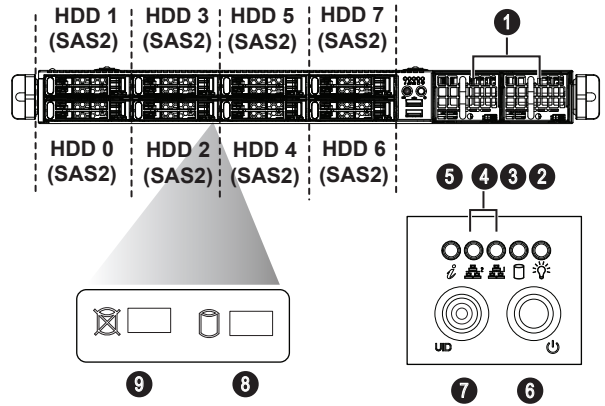
Installing RDIMM (ECC) Memory

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	
				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
DRx8	2GB	4GB	8GB	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
DRx4	4GB	8GB	16GB	1066, 1333	1066, 1333, 1600	1066, 1333	1066, 1333, 1600	1066, 1333	1066, 1333, 1600
QRx4	8GB	16GB	32GB	800	1066	800	1066	800	800
QRx8	4GB	8GB	16GB	800	1066	800	1066	800	800

Installing LRDIMM (ECC) Memory

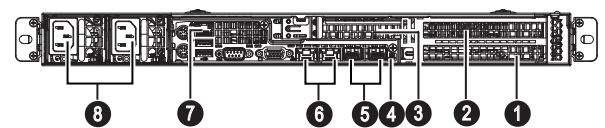
Intel E5-2600 Series Processor LRDIMM Memory Support								
Ranks per DIMM & Data Width	Memory Capacity Per DIMM (See the Note below)		Speed (MT/s) and Voltage Validated by Slot per Channel (SPC) and DIMM Per Channel (DPC)					
			1 Slot Per Channel		2 Slots Per Channel			
			1DPC		1DPC		2DPC	
			1.35V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

Front view & Interface



No.	Description
1	Redundant Battery Backup Power (BBP) Modules
2	Power LED
3	Device Activity LED
4	LAN1 LED & LAN2 LED
5	Information LED
6	Power Button
7	Reset Button
8	Hard Drive Signal
9	Hard Drive Fail

Rear View

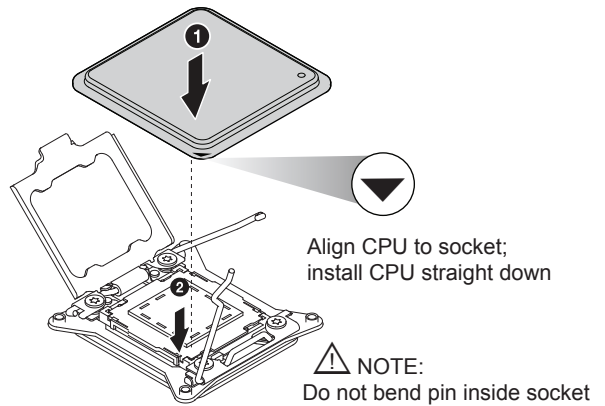


No.	Description
1	PCI-E 3.0 x16 Expansion Slot (FH, 6.6"L)
2	PCI-E 3.0 x16 Expansion Slot (FH, 10"L)
3	PCI-E 3.0 x8 Expansion Slot (LP, 6.6"L)
4	UID Button (Unit Identifier Button)
5	LAN3 & LAN4 (10GbE SFP+ Port)
6	LAN1 & LAN2 (1GbE)
7	Dedicated LAN for IPMI
8	Redundant Power Supply Modules

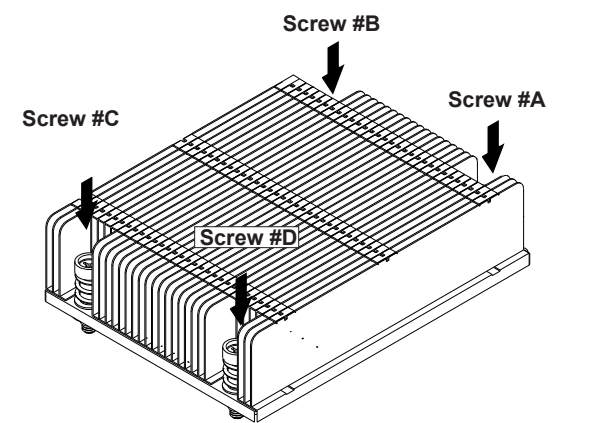
Beep Codes

BIOS Beep Codes		
Beep Code/LED	Message	Description
1 beep	Refresh	Ready to boot
5 short beeps + 1 long beep	Memory	No memory detected in the system
5 long beeps	No Con-In or No Con-Out devices	Con-In: USB or PS/2 keyboard, PCI or Serial Console Redirection, IPMI KVM or SOL Con-Out: Video Controller, PCI or Serial Console Redirection, IPMI SOL
1 beep per device	Refresh	1 beep for each USB device

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

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>

