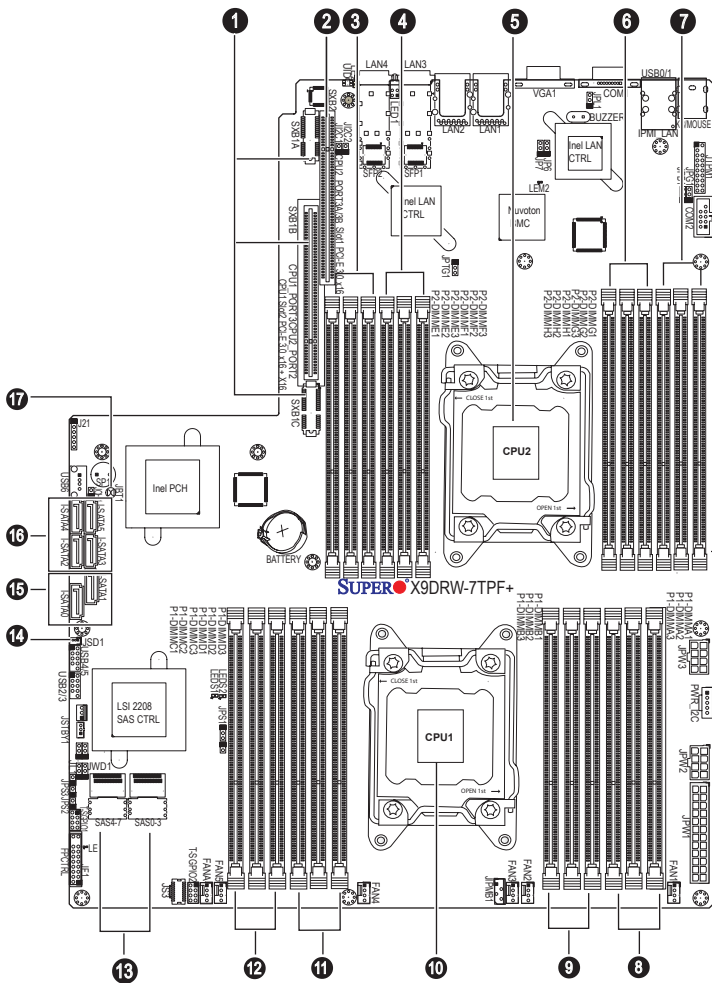


SUPERMICR SuperServer 2027R-72RFTP+ Quick Reference Guide

Board Layout



No.	Description
1	SXB1A/SXB1B/SXB1C: SMC-Proprietary WIO_L (Left) Add-On Card Slot
2	SXB2: SMC-Proprietary WIO_R (Right) Add-On Card Slot
3	P2-DIMME1(Blue)/P2-DIMME2/P2-DIMME3 slot
4	P2-DIMMF1(Blue)/P2-DIMMF2/P2-DIMMF3 slot
5	CPU2
6	P2-DIMMH1(Blue)/P2-DIMMH2/P2-DIMMH3 slot
7	P2-DIMMG1(Blue)/P2-DIMMG2/P2-DIMMG3 slot
8	P1-DIMMA1(Blue)/P2-DIMMA2/P2-DIMMA3 slot
9	P1-DIMMB1(Blue)/P2-DIMMB2/P2-DIMMB3 slot
10	CPU1 (Install CPU1 first)
11	P1-DIMMD1(Blue)/P2-DIMMD2/P2-DIMMD3 slot
12	P1-DIMMC1(Blue)/P2-DIMMC2/P2-DIMMC3 slot
13	SAS ports 0~3, 4~7 (from LSI 2208 SAS controller)
14	JSD1 = SATA DOM Power
15	SATA 3 Ports 0~1 (from AHCI)
16	SATA 2 Ports 2~5 (from Intel AHCI)
17	JBT1 = CMOS Reset

MEMORY

Processors and their Corresponding Memory Modules						
CPU#	Corresponding DIMM Modules					
CPU 1	P1-DIMMA1	P1-DIMMA2	P1-DIMMA3	P1-DIMMB1	P1-DIMMB2	P1-DIMMC2
CPU 2	P2-DIMME1	P2-DIMME2	P2-DIMME3	P2-DIMMF1	P2-DIMMF2	P2-DIMMF3

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, P1-DIMMA2/P1-DIMMB2, P1-DIMMC2/P1-DIMMD2
1 CPU & 9~12 DIMMs	CPU1 & P1-DIMMA1/P1-DIMMB1, P1-DIMMA1/P1-DIMMB1, P1-DIMMC1/P1-DIMMD1, P1-DIMMA2/P1-DIMMB2, P1-DIMMC2/P1-DIMMD2, P1-DIMMA3/P1-DIMMB3, P1-DIMMC3/P1-DIMMD3
2 CPUs & 4 DIMMs	CPU1 + CPU2 & P1-DIMMA1/P1-DIMMB1, P2-DIMME1/P2-DIMMF1
2 CPUs & 6 DIMMs	CPU1 + CPU2 & P1-DIMMA1/P1-DIMMB1, P2-DIMME1/P2-DIMMF1, P1-DIMMC1/P1-DIMMD1
2 CPUs & 8 DIMMs	CPU1 + CPU2 & P1-DIMMA1/P1-DIMMB1, P2-DIMME1/P2-DIMMF1, P1-DIMMC1/P1-DIMMD1, P2-DIMMG1/P2-DIMMH1
2 CPUs & 9~12 DIMMs	CPU1 + CPU2 & P1-DIMMA1/P1-DIMMB1, P2-DIMME1/P2-DIMMF1, P1-DIMMC1/P1-DIMMD1, P2-DIMMG1/P2-DIMMH1, P1-DIMMA2/P1-DIMMB2, P2-DIMME2/P2-DIMMF2
2 CPUs & 13~24 DIMMs	CPU1 + CPU2 & P1-DIMMA1/P1-DIMMB1, P2-DIMME1/P2-DIMMF1, P1-DIMMC1/P1-DIMMD1, P2-DIMMG1/P2-DIMMH1, P1-DIMMA2/P1-DIMMB2, P2-DIMME2/P2-DIMMF2, P1-DIMMC2/P1-DIMMD2, P2-DIMMG2/P2-DIMMH2, P1-DIMMA3/P1-DIMMB3, P2-DIMME3/P2-DIMMF3, P1-DIMMC3/P1-DIMMD3, P2-DIMMG3/P2-DIMMH3

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)				
			2 Slots Per Channel				
			1DPC		2DPC		
			1.35V	1.5V	1.35V	1.5V	
SRx8 Non-ECC	1GB	2GB	4GB	NA	1066, 1333	NA	1066, 1333
DRx8 Non-ECC	2GB	4GB	8GB	NA	1066, 1333	NA	1066, 1333
SRx16 Non-ECC	512MB	1GB	2GB	NA	1066, 1333	NA	1066, 1333
SRx8 ECC	1GB	2GB	4GB	1066	1066, 1333	1066	1066, 1333
DRx8 ECC	2GB	4GB	8GB	1066	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)						
			3 Slots Per Channel						
			1DPC		2DPC		3DPC		
			1.35V	1.5V	1.35V	1.5V	1.35V	1.5V	
SRx8	1GB	2GB	4GB	1066, 1333	1066, 1333, 1600	1066, 1333	NA	800, 1066	
DRx8	2GB	4GB	8GB	1066, 1333	1066, 1333, 1600	1066, 1333	NA	800, 1066	
SRx4	2GB	4GB	8GB	1066, 1333	1066, 1333, 1600	1066, 1333	NA	800, 1066	
DRx4	4GB	8GB	16GB	1066, 1333	1066, 1333, 1600	1066, 1333	NA	800, 1066	
QRx4	8GB	16GB	32GB	800	1066	800	800	NA	NA

Intel E5-2600 Series Processor RDIMM Memory Support-Table

QRx8	4GB	8GB	16GB	800	1066	800	800	NA	NA
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Populating LRDIMM (ECC) Memory

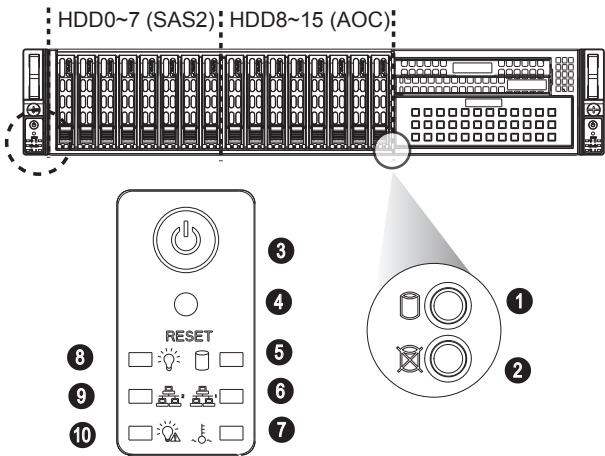
Intel E5-2600 Series Processor RDIMM Memory Support						
Ranks per DIMM & Data Width	Memory Capacity Per DIMM (See the Note below)		Speed (MT/s) and Voltage Validated by Slot per Channel (SPC) and DIMM Per Channel (DPC)			
			3 Slots Per Channel			
			1DPC and 2DPC		3DPC	
			1.35V	1.5V	1.35V	1.5V
QRx4 (DDP)	16GB	32GB	1066	1066, 1333	1066	1066
QRx8 (P)	8GB	16GB	1066	1066, 1333	1066	1066

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>.

Other Important Notes and Restrictions

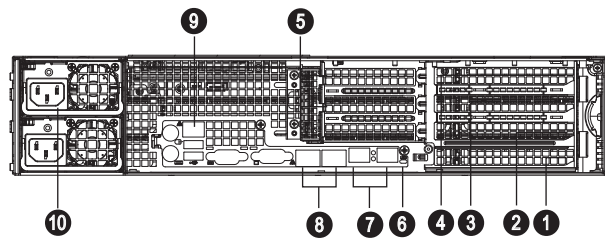
- For the memory modules to work properly, please install DIMM modules of the same type, same speed and same operating frequency on the motherboard. Mixing of RDIMMs, UDIMMs or LRDIMMs is not allowed. Do not install both ECC and Non-ECC memory modules on the same motherboard.
- Using DDR3 DIMMs with different operating frequencies is not allowed. All channels in a system will run at the lowest common frequency.

Front View & Interface



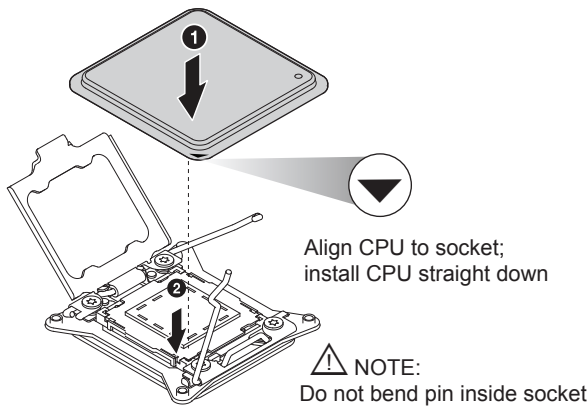
No.	Description
1	Hard Drive Signal
2	Hard Drive Fail
3	Power Button
4	Reset Button
5	Device Activity LED
6	LAN1 LED
7	Overheat & Fan Fail LED
8	Power LED
9	LAN2 LED
10	Power Failure LED

Rear View

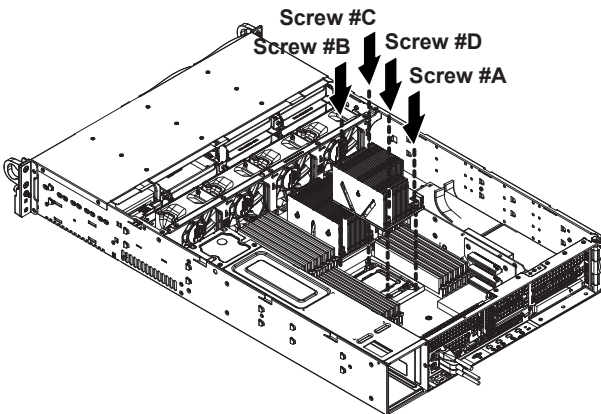


No.	Description
1	PCI-E 3.0 x8 Expansion Slot (FH, 6.6"L)
2	PCI-E 3.0 x8 Expansion Slot (FH, 10"L)
3	N/A
4	PCI-E 3.0 x16 Expansion Slot (FH, 16.5"L)
5	PCI-E 3.0 x8 Expansion Slot (LP, 6.6"L)
6	UID Button (Unit Identifier Button)
7	LAN3 & LAN4 (10G SFP+)
8	LAN1 & LAN2 (1GbE)
9	Dedicated LAN for IPMI
10	Power Supply Modules

CPU Installation



Heatsink Installation



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>

