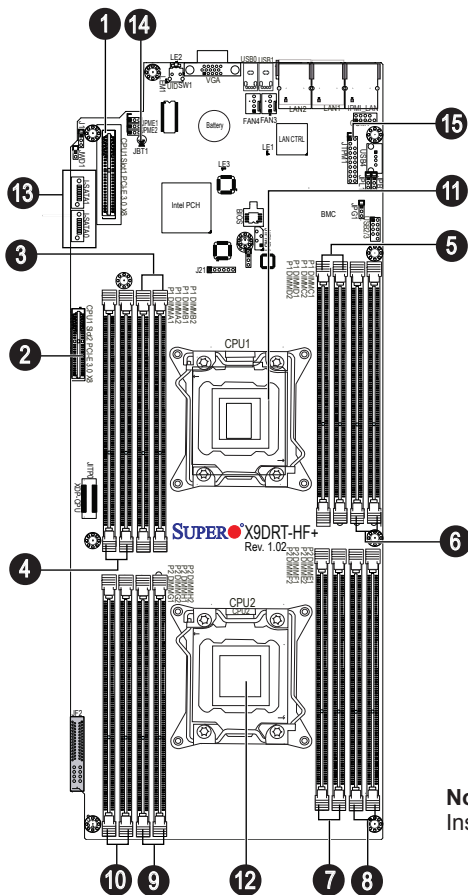


SUPERMICR[®] SuperServer 2027TR-HTRF+/H70RF+/H71RF+ Quick Reference Guide

Board Layout



Note:
Install CPU1 first

No.	Description
1	CPU1 Slot2 PCI-E 3.0 x8 for SMC-Proprietary Micro Low-Profile (LP) Card
2	CPU1 Slot1 PCI-E 3.0 x8 for SMC-Proprietary Daughter (Add-on) Card
3	P1-DIMMA1/P1-DIMMA2
4	P1-DIMMB1/P1-DIMMB2
5	P1-DIMMC1/P1-DIMMC2
6	P1-DIMMD1/P1-DIMMD2
7	P2-DIMME1/P2-DIMME2
8	P2-DIMMF1/P2-DIMMF2
9	P2-DIMMG1/P2-DIMMG2
10	P2-DIMMH1/P2-DIMMH2
11	CPU1 (Install CPU1 first)
12	CPU2
13	SATA 0/1 Connectors
14	JBT1 = CMOS Reset
15	TPM Header

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

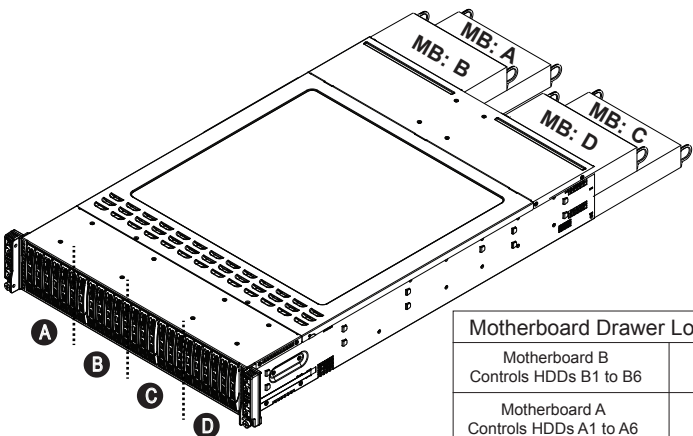
Intel E5-2600 Series Processor RDIMM Memory Support										
Ranks per DIMM & Data Width	Memory Capacity Per DIMM (See the Note below)		Speed (MT/s) and Voltage Validated by Slot per Channel (SPC) and DIMM Per Channel (DPC)							
			1 Slot Per Channel				2 Slots Per Channel			
			1DPC		1DPC		2DPC		2DPC	
			1.35V	1.5V	1.35V	1.5V	1.35V	1.5V	1.35V	1.5V
SRx8 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	

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>.

Installing RDIMM (ECC) Memory

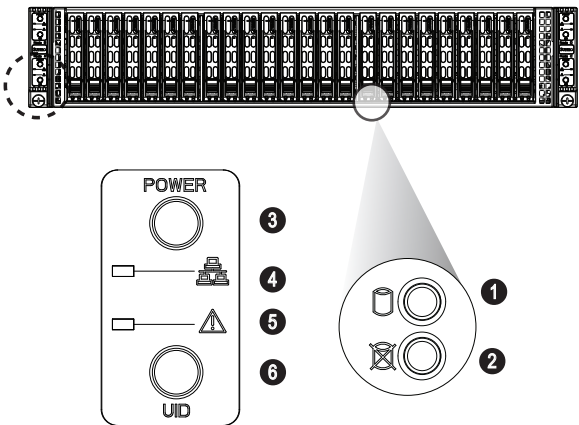
Intel E5-2600 Series Processor UDIMM Memory Support										
Ranks per DIMM & Data Width	Memory Capacity Per DIMM (See the Note below)		Speed (MT/s) and Voltage Validated by Slot per Channel (SPC) and DIMM Per Channel (DPC)							
			1 Slot Per Channel				2 Slots Per Channel			
			1DPC		1DPC		1DPC		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	
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 .										

Installing and Removing Hard Drives



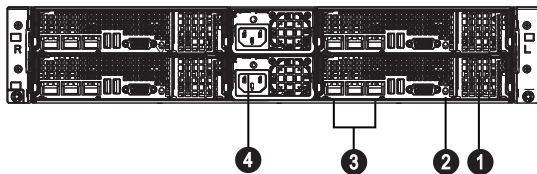
Motherboard Drawer Locations in the Chassis	
Motherboard B Controls HDDs B1 to B6	Motherboard D Controls HDDs D1 to D6
Motherboard A Controls HDDs A1 to A6	Motherboard C Controls HDDs C1 to C6

Front view & Interface



No.	Description
1	Hard Drive Signal
2	Hard Drive Fail
3	Power Button
4	LAN1 LED
5	Alert
6	UID Button

Rear View

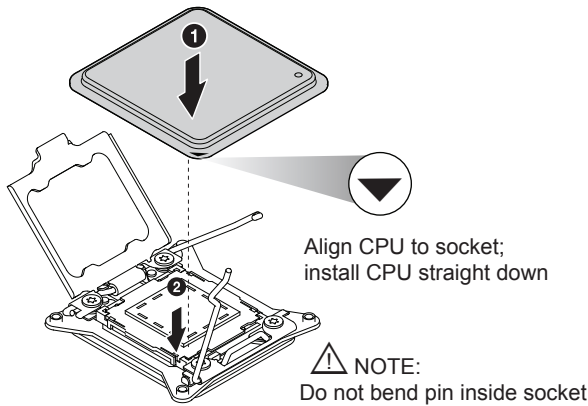


No.	Description
1	Mirco Low-Profile PCI-E Slots
2	UID Button
3	LAN Ports
4	Power Supply Module

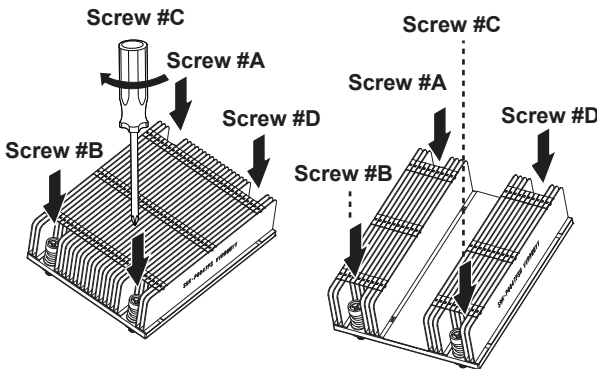
Beep Codes

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



SNK-P0047PS for CPU1

SNK-P0047PSM for CPU2

- 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>

