SUPERMICRO® SuperServer 1027TR-TF/TQF/TFF Quick Reference Guide
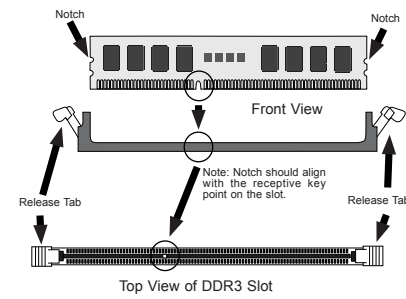
Board Layout

Super● X9DRT-F
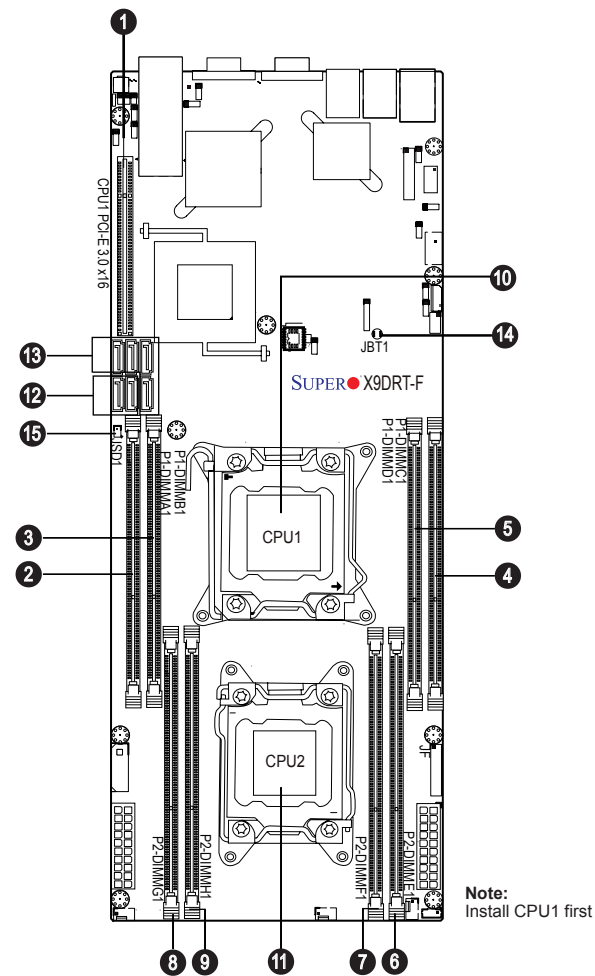
Note: Install CPU1 first

No.	Description
1	CPU1 PCI-E 3.0 x16 slot for SMC-Proprietary Riser Card (Available when CPU1 is installed)
2	P1-DIMMA1 slot
3	P1-DIMMB1 slot
4	P1-DIMMC1 slot
5	P1-DIMMD1 slot
6	P2-DIMME1 slot
7	P2-DIMMF1 slot
8	P2-DIMMG1 slot
9	P2-DIMMH1 slot
10	CPU1 (Install CPU1 first)
11	CPU2
12	I-SATA 3.0 (SATA 3.0 ports 0/1)
13	I-SATA 2.0 (SATA 2.0 ports 2~5)
14	JBT1 = CMOS Reset
15	JSD1 = SATA DOM Power

MEMORY

Front View

Note: Notch should align with the receptive key point on the slot.

Top View of DDR3 Slot

Processors and their Corresponding Memory Modules

CPU#	Corresponding DIMM Modules			
CPU 1	P1-DIMMA1	P1-DIMMB1	P1-DIMMC1	P1-DIMMD1
CPU2	P2-DIMME1	P2-DIMMF1	P2-DIMMG1	P2-DIMMH1

Processor 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
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

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

**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 RDIMM Memory Support

Ranks Per DIMM & Data Width	Memory Capacity Per DIMM (See the Note Below)			1 Slot Per Channel	
				1DPC	
				1.35V	1.5V
SRx8	1GB	2GB	4GB	1066, 1333	1066, 1333,1600
DRx8	2GB	4GB	8GB	1066, 1333	1066,1333, 1600
SRx4	2GB	4GB	8GB	1066, 1333	1066,1333, 1600
DRx4	4GB	8GB	16GB	1066, 1333	1066,1333, 1600
QRx4	8GB	16GB	32GB	800	1066
QRx8	4GB	8GB	16GB	800	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.

Front view & Interface
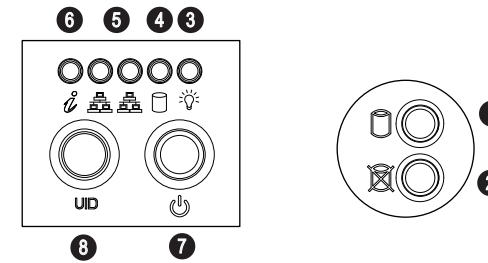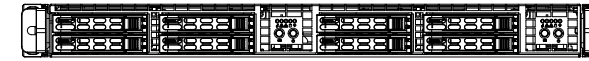
No.	Description
1	Hard Drive Signal
2	Hard Drive Fail
3	Power LED
4	Device Activity LED
5	LAN1 LED & LAN2 LED
6	Information LED
7	Power Button
8	UID Button

Rear View

No.	Description
1	PCI Expansion Slot (w/riser card)
2	Dedicated LAN for IPMI
3	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 Error	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 OH	System overheat

CPU Installation

Align CPU to socket; install CPU straight down

⚠ NOTE: Do not bend pin inside socket

Heatsink Installation

Screw #C Screw #A
Screw #B Screw #D

SNK-P0047PW for CPU1

SNK-P0047PS for CPU2
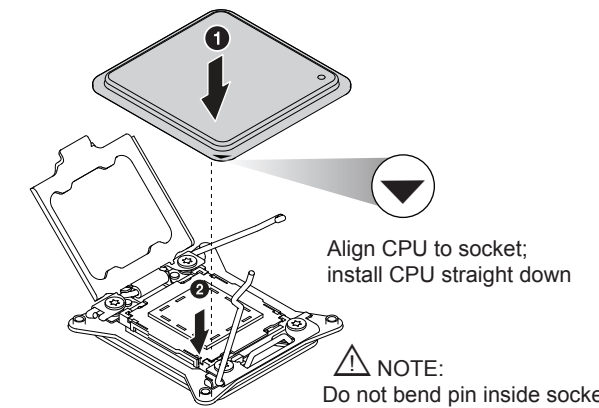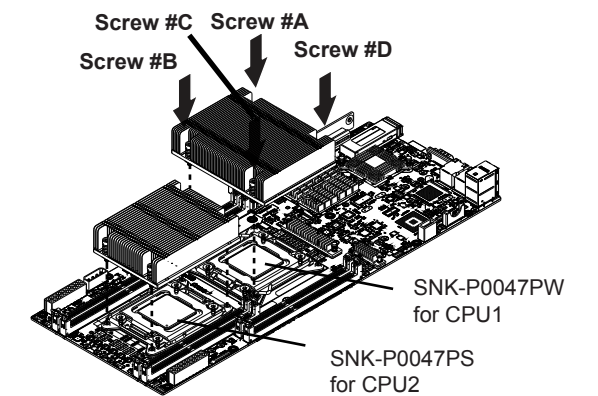
1. Place heatsink on top of installed CPU
2. Line up the four screws to socket
3. Push down heatsink and screw down as shown (cross pattern, in order: A, C, B, D)
4. NOTE: Only use 6-8 lb/f of torque; otherwise, hand-tighten each screw, to avoid damaging the system

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