SUPERMICRO®

X9DR7-TF+/X9DRE-TF+
QUICK REFERENCE GUIDE REV. 1.00

PACKAGE CONTENTS (FOR SINGLE-PACK ONLY)
- One (1) Supermicro Motherboard
- Two (2) SATA Cables
- Two (2) I-Pass to SATA Cables
- One (1) I/O Shield

Motherboard Layout and Features

Super○ X9DR7-TF+ Rev. 1.00

= mounting hole

Note: Item numbers are listed in counter-clockwise order.
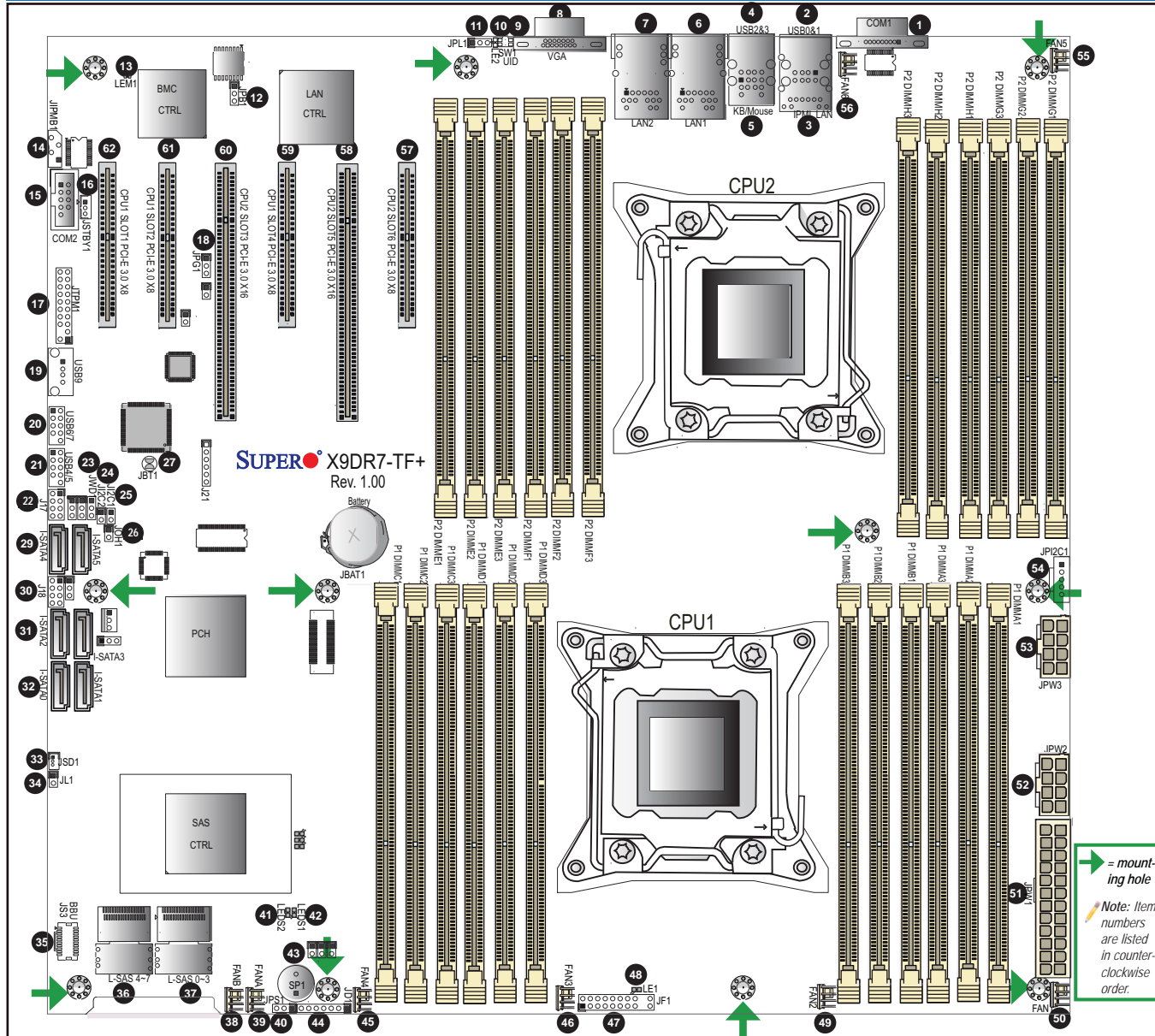
Jumpers/Connectors/LED Indicators

Jumpers

Jumper	Item	Description	Default Setting
JBT1	27	Clear CMOS	See Chapter 2
JPB1	12	BMC Enabled	Pins 1-2 (Enabled)
JPG1	18	VGA Enabled	Pins 1-2 (Enabled)
JPL1	11	10G_LAN1/10G_LAN2 Enable	Pins 1-2 (Enabled)
JPS1	40	SAS Enable (X9DR7-TF+ only)	Pins 1-2 (Enabled)
JWD1	25	Watch Dog Timer Enable	Pins 1-2 (Reset)

Connectors

Connectors	Items	Description
COM1/COM2	1, 15	Backplane COM Port1/Front Panel COM2 Header
FAN 1-6, FAN A/B	50, 49, 46, 45, 55, 56, 39, 38	CPU/System Fan Headers
JBAT1	28	Onboard Battery (See Chpt. 3 for Disposal Info.)
J17/J18	22, 30	T-SGPIO (Serial_Link General Purpose I/O) Headers
JD1	44	Speaker/Power LED Indicator
JF1	47	Front Panel Control Header
JIPMB1	14	4-pin External BMC I²C Header (for an IPMI Card)
JL1	34	Chassis Intrusion
JOH1	26	Overheat LED Indicator
JPI²C1	54	Power Supply SMBbus I²C Header
JPW1	51	ATX 24-Pin Power Connector
JPW2/3	52, 53	12V 8-Pin Power Connectors
JS3 (X9DR7-TF+)	35	Battery Backup Unit for SAS Devices
JSD1	33	SATA DOM (Disk on Module) Power Connector
JSTBY1	16	Standby Power Header
JTPM1	17	TPM (Trusted Platform Module)/Port 80
LAN1/LAN2	6, 7	10G-bit Ethernet LAN Ports 1/2
(IPMI) LAN	3	IPMI_Dedicated LAN
(I-)SATA 0/1	32	Intel AHCI SATA 3.0 Connectors 0/1
(I-)SATA 2/3, 4/5	31, 29	Intel AHCI SATA 2.0 Connectors 2-5
(L)SAS (X9DR7-TF+)	36, 37	SAS Connectors 0-3, 4-7 from LSI SAS Controller
SP1	43	Onboard Buzzer (Internal Speaker)
Slots 3/5	60, 58	CPU2 Slot3/CPU2 Slot5 PCI-Exp. 3.0 x16
Slots 1/2/4/6	62, 61, 59, 57	CPU1 Slot1/Slot2/Slot4, CPU2 Slot6 PCI-Exp. 3.0 x8
UID Switch	9	Unit Identifier Switch (SW1 UID)
(BP) USB 0/1, 2/3	2, 4	Back Panel USB 0/1, 2/3
(FP) USB 4/5, USB 6/7, USB 9	21, 20, 19	Front Panel Accessible USB Connections
VGA	8	Backpanel VGA Port

LED Indicators

LED	Item	Description	State	Status
LE1	48	Standby PWR LED	On	SB Power On
LE2	10	UID LED	Blue	UID
LEDS1	42	SAS Activity LED (X9DR7-TF+)	On	SAS Active
LEDS2	41	SAS Fault LED (X9DR7-TF+)	On	SAS Error(s)
LEM1	13	BMC Heartbeat LED	Green	BMC Normal

Memory Support

This motherboard supports up to 768 GB of Registered (RDIMM)/Load Reduced (LRDIMM) ECC or 128 GB of Unbuffered (UDIMM) ECC/Non-ECC DDR3 800/1066/1333/1600 MHz of 240-pin 4-channel (per CPU) memory in 24 DIMM modules.

Note: For memory optimization, use only DIMM modules that have been validated by Supermicro. For the latest memory updates, please refer to our website at http://www.supermicro.com/products/motherboard.
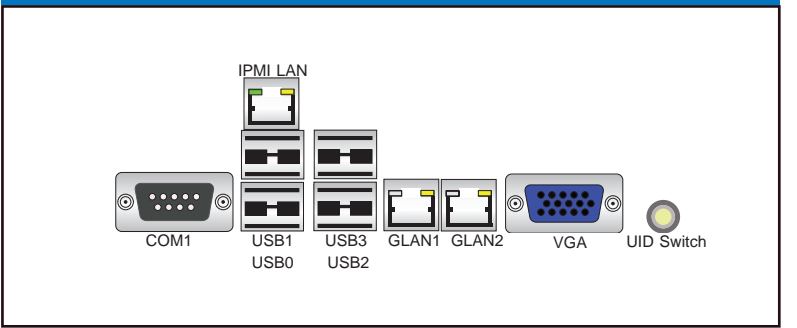
DIMM Installation

Insert the desired number of DIMMs into the memory slots, starting with P1-DIMMA1. For memory to work properly, follow the tables below for memory population order. Refer to the motherboard layout (at left) for the location of the DIMM slots.

Processors and their Corresponding Memory Modules

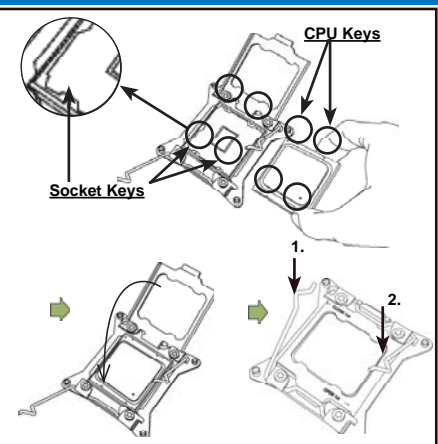| CPU#	Corresponding DIMM Modules											
CPU 1 P1-DIMM	A1	A2	A3	B1	B2	B3	C1	C2	C3	D1	D2	D3
CPU2 P2-DIMM	E1	E2	E3	F1	F2	F3	G1	G2	G3	H1	H2	H3

Processor and Memory Module Population

Number of CPUs+DIMMs	CPU and Memory Population Configuration Table (*For memory to work properly, please 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-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 DIMMs-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

Back Panel IO Connectors

IPMI LAN

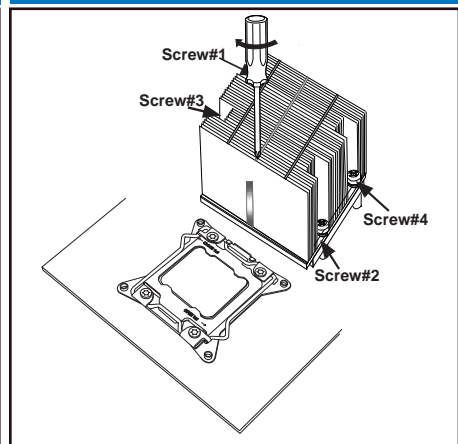COM1 / USB1 USB0 / USB3 USB2 / GLAN1 GLAN2 / VGA / UID Switch

Note: Refer to Chapter 2 of the user's manual for detailed information on memory support and CPU/motherboard installation instructions.

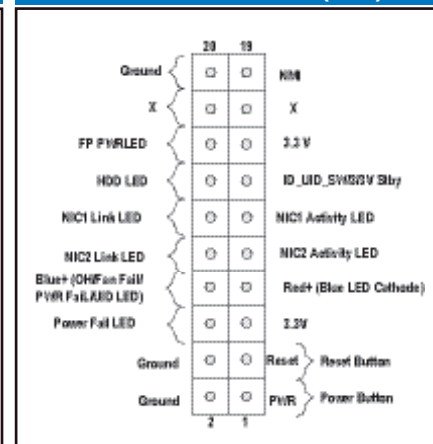## CPU Installation

CPU Keys / Socket Keys

Heatsink Installation

Screw#1 / Screw#3 / Screw#4 / Screw#2

Front Panel Control (JF1)

	20	19	
Ground	□	□	NMI
X	□	□	X
FP PWR/LED	□	□	3.3 V
HDD LED	□	□	ID_UID_SW/5V Stby
NIC1 Link LED	□	□	NIC1 Activity LED
NIC2 Link LED	□	□	NIC2 Activity LED
Blue+ (OH/Fan Fail/ PWR Fail/RAID LED)	□	□	Red+ (Blue LED Cathode)
Power Fail LED	□	□	3.3V
Ground	□	□	Reset Button
Ground	□	□	Power Button
	2	1	

Note: Graphics shown in this quick guide are for illustration only. Your components may or may not look exactly the same as drawings shown in this guide.

Note: Refer to Chapter 2 of the User Manual for detailed information on jumpers, connectors, and LED indicators.