SUPERMICRO®
X9DRD-iT+/CT+/CNT+
QUICK REFERENCE GUIDE 1.00

FOR YOUR SYSTEM TO WORK PROPERLY, PLEASE DOWNLOAD APPROPRIATE DRIVERS/IMAGES/USER'S MANUAL FROM THE LINKS BELOW:
- Manuals: http://www.supermicro.com/support/manuals
- Drivers & Utilities: ftp://ftp.supermicro.com/CDR_Images/CDR-X10-UP/
- Safety: http://www.supermicro.com/about/policies/safety_information.cfm

PACKAGE CONTENTS
- One (1) Supermicro Motherboard
- Six (6) SATA Cables
- One (1) I/O Shield
- One (1) Quick Reference Guide

Motherboard Layout and Features

→ = mounting hole   *Note: Item numbers are shown in counterclockwise order*
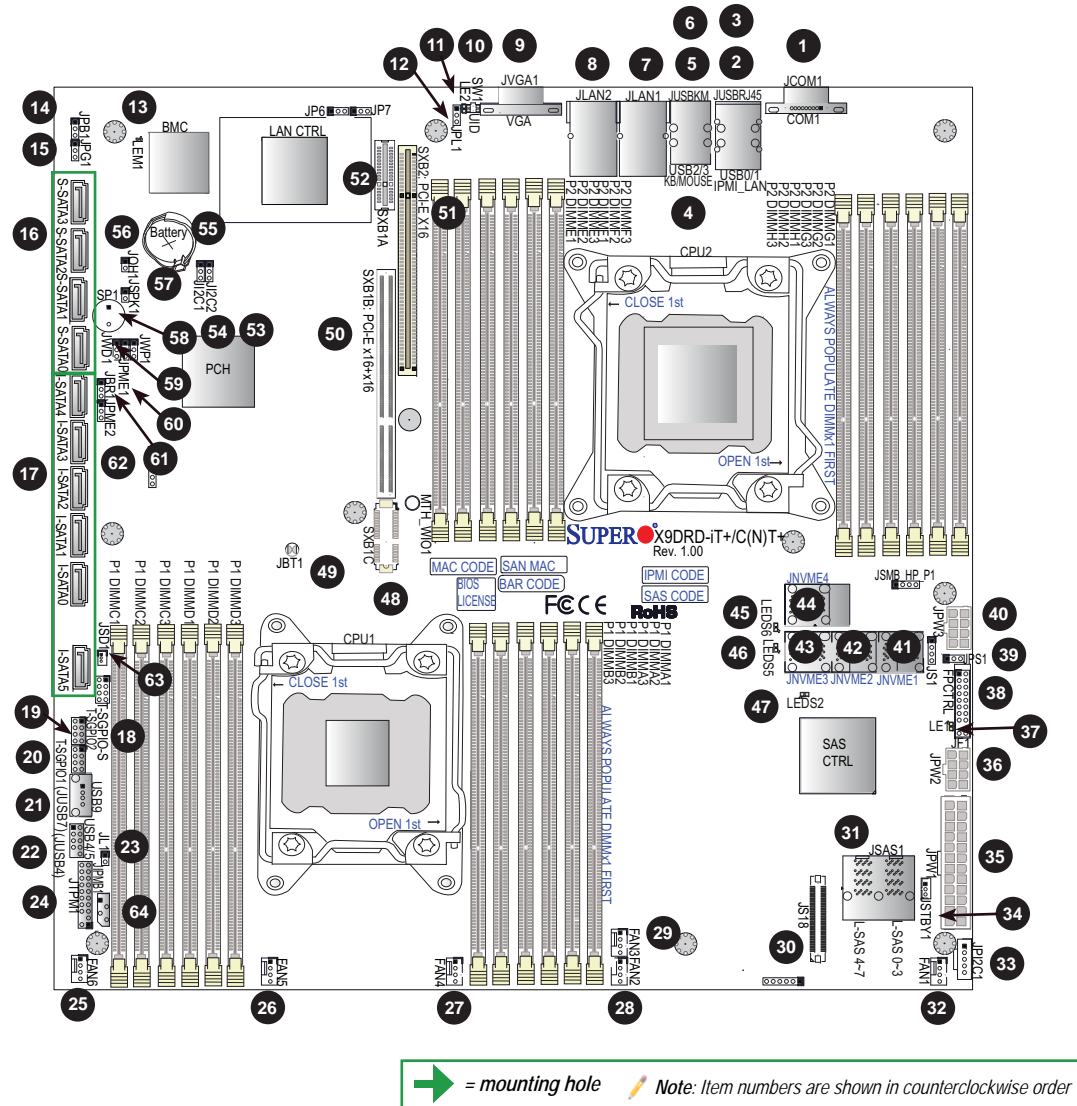
Jumpers, Connectors and LED Indicators

Jumpers

Jumper	Item #	Description	Default Setting
JBT1	49	Clear CMOS	See Chapter 2
JI²C1/JI²C2	54, 53	SMB to PCI-E Slots	Pins 2-3 (Disabled)
JPB1	14	BMC Enable	Pins 1-2 (Enabled)
JBR1	61	BIOS Recovery Enable	Pins 1-2 (Normal)
JPG1	15	VGA Enabled	Pins 1-2 (Enabled)
JPL1	12	GLAN1/GLAN2 Enable	Pins 1-2 (Enabled)
JPME1	60	Manufacture Recovery Mode Enable	Pins 1-2 (Normal)
JPME2	62	Manufacture Mode Select	Pins 1-2 (Normal)
JPS1	39	SAS Enable (X9DRD-CT+/CNT+ only)	Pins 1-2 (Enabled)
JSPK1	57	Onboard Buzzer Enable	Pins 1-2 (Enabled)
JWD1	59	Watch Dog Timer Enable	Pins 1-2 (Reset)

Connectors

| Connectors	Item #	Description
Battery (JBAT1)	55	Onboard CMOS Battery Socket
FAN1–6	32,28,29,27,26,25	CPU/System Fan Headers
JCOM1	1	Backplane COM Port 1
JIPMB1	64	4-pin External BMC I²C Header (for an IPMI Card)
JF1	38	Front Panel Control
JL1	23	Chassis Intrusion
JLAN1/JLAN2	7, 8	10G_LAN Ethernet Ports 1/2
JNVME1/2/3/4	41, 42, 43, 44	NVM Express PCI-Express 3.0 x4 Ports 1/2/3/4 (X9DRD-CNT+ Only)
JOH1	56	Overheat LED Indicator
JPI²C1	33	Power Supply SMBus I²C Header
JPW1	35	24-Pin ATX Main Power Connector (Warning on Pg. 1-6.)
JPW2/3	36, 39	12V 8-Pin Power Connectors (See Warning on Pg. 1-6.)
JS18	30	80-pin CVFM (Cache Vault Flash Module) Connector
JSAS1	31	SAS Connections 0-3, 4-7 supported by the LSI 3108 (X9DRD-CT+/CNT+)
JSD1	63	SATA DOM (Device on Module) Power Connector
JSTBY1	34	+5V Standby Power Header
JTPM1	24	TPM (Trusted Platform Module)/Port 80
JUSBRJ45	2	IPMI_Dedicated LAN & USB Ports 0/1
JUSBKM	6	USB Keyboard/Mouse & USB Ports 2/3
JUSB4	22	Front Panel Accessible USB Connections (4/5)
JUSB7	21	Type A USB Embedded Drive Connector
JVGA1	9	Rear VGA Port
I-SATA 0-5	17	Serial-Link ATA Ports 0-5 supported by the Intel PCH
S-SATA 0-3	16	Serial-Link ATA Ports 0-3 supported by the Intel SCU chip
SP1	58	Onboard Buzzer Header (Internal Speaker)
SXB1A/SXB1B/SXB1C	52, 50, 48	SMCI-Proprietary PCI-Express 3.0 x32 slots for WIO riser cards
SXB2	51	PCI-Express 3.0 x16 SMCI-Proprietary WIO Slot
SW1 (UID)	10	UID (Unit Identification) Switch
T-SGPIO-S	18	Serial_Link General Purpose I/O Headers for S-SATA0-3 Connections
T-SGPIO1/2	20, 19	Serial ATA (SATA) General Purpose I/O Headers for I-SATA0-5, T-SGPIO1: I-SATA0-3, T-SGPIO2: I-SATA4/5

Note: Refer to Chapter 1 of the User Manual for detailed information on jumpers, connectors, and LED indicators.

LED Indicators

| LED	Item #	Description	Color/State	Status
LE1	37	PWR LED	Green: On	MB PWR On
LE2	11	UID LED	Blue: On	Unit Identified
LEDS2 (CT+/CNT+ only)	47	SAS Heartbeat LED	Green: Blinking	SAS Normal
LEDS5 (CT+/CNT+ only)	46	SAS Activity	Green: Blinking	SAS Active
LEDS6 (CT+/CNT+ only)	45	SAS Fault	Red: On	SAS: In Fault Condition
LEM1	13	BMC Heartbeat LED	Green: Blinking	BMC Normal

Memory Support

The X9DRD-iT+/-CT+/-CNT+ motherboard supports 768GB (max.) of Registered (RDIMM)-ECC, 128 GB (max.) of Unbuffered (UDIMM)-ECC/Non-ECC, and 1.5 TB (max.) of 64GB Load Reduced (LRDIMM)-ECC DDR3 800/1066/1333/1600/1866 MHz 240-pin 3-channel memory modules in 24 DIMM slots (w/12 slots per CPU).
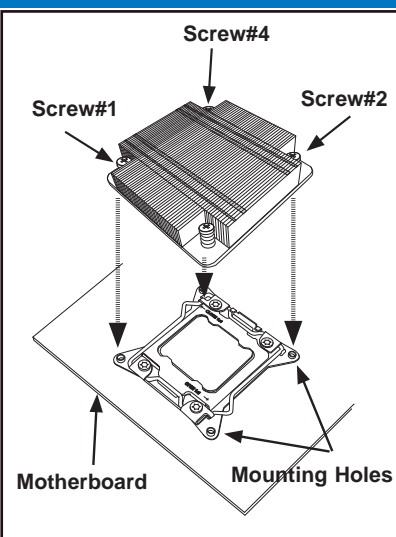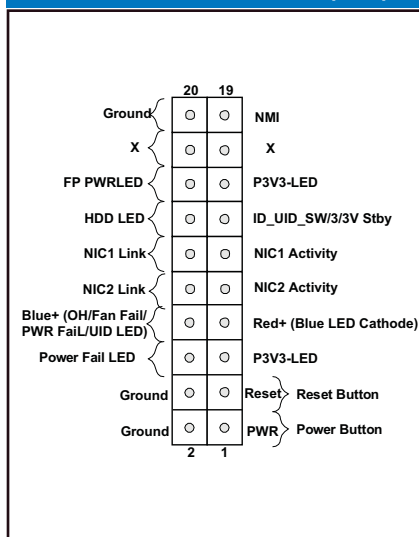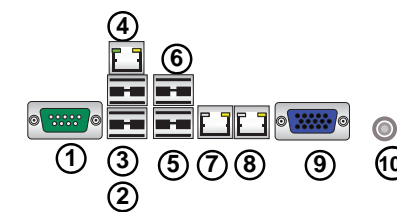
DIMM Memory Installation

Notches

Align the keys

Release Tabs
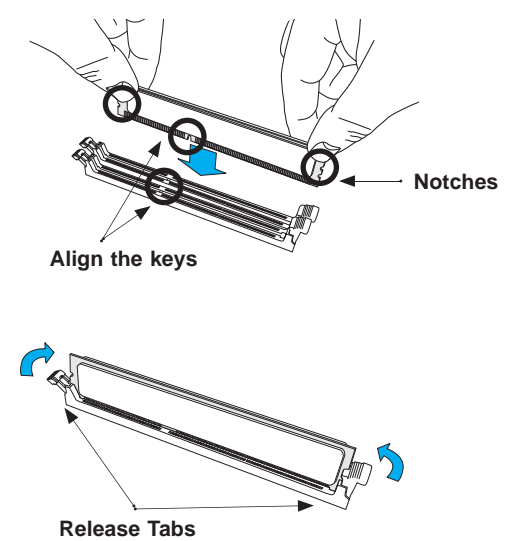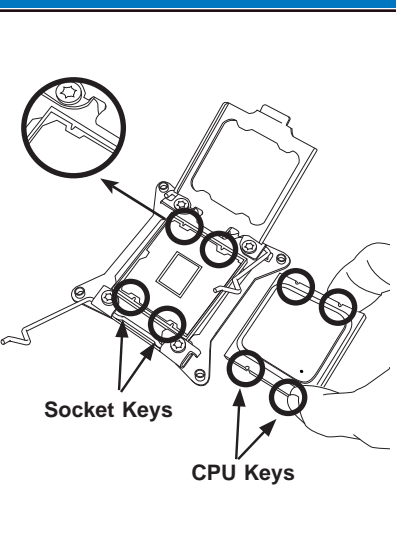
Back Panel I/O Connectors

1. COM Port 1 (Turquoise)	2. Rear USB Port 3
3. Rear USB Port 0	4. 10G LAN 1
5. Rear USB Port 1	6. 10G LAN 2
7. IPMI_Dedicated LAN	8. Back Panel VGA (Blue)
9. Rear USB Port 2	10. UID Switch

Note: Refer to Chapter 2 of the User Manual for detailed information on memory support and CPU/motherboard installation instructions.

CPU Installation

Screw#1, Socket Keys, CPU Keys

Heatsink Installation

Screw#4, Screw#2, Screw#1, Motherboard, Mounting Holes

Front Panel Control (JF1)

	20	19	
Ground	○	○	NMI
X	○	○	X
FP PWRLED	○	○	P3V3-LED
HDD LED	○	○	ID_UID_SW/3/3V Stby
NIC1 Link	○	○	NIC1 Activity
NIC2 Link	○	○	NIC2 Activity
Blue+ (OH/Fan Fail/PWR FaiL/UID LED)	○	○	Red+ (Blue LED Cathode)
Power Fail LED	○	○	P3V3-LED
Ground	○	○	Reset → Reset Button
Ground	○	○	PWR → Power Button
	2	1	

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

MNL-1612-QRG REV. 1.00