Motherboard Layout and Features

= mounting hole

CPU Installation

- Socket Keys
- CPU Keys
- CPU Pin1

Heatsink Installation

- Screw#1
- Screw#4
- Screw#2
- Screw#3
- Motherboard
- Mounting Holes

Front Control Panel (JF1)

20	19
Ground	NMI
X	X
FP PWRLED	3.3 V
HDD LED	UID Switch
NIC1 Link LED	NIC1 Activity LED
NIC2 Link LED	NIC2 Activity LED
OH/Fan Fail/ PWR Fail LED)	UID LED
Power Fail LED	3.3V
Ground	Reset > Reset Button
Ground	PWR > Power Button
2	1
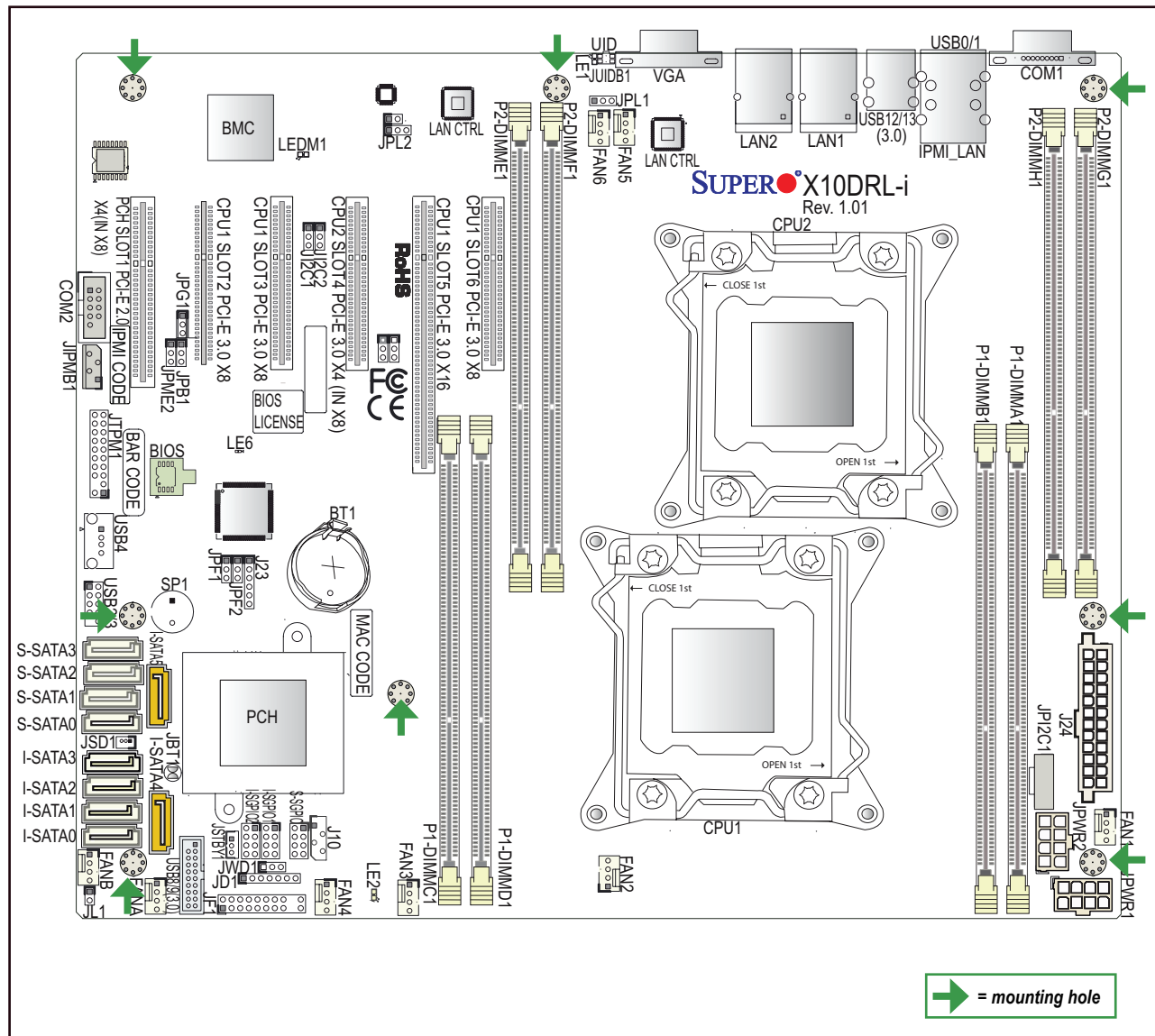
Jumpers, Connectors, and LED Indicators

Jumpers

Jumper	Description	Default Setting
JBT1	Clear Onboard CMOS Battery	See Chapter 2
JI²C1/ JI²C2	SMB to PCI-E Slots	Pins 2-3 (Disabled)
JPB1	BMC Enable	Pins 1-2 (Enabled)
JPG1	VGA Enable	Pins 1-2 (Enabled)
JPL1/JPL2	GLAN1/GLAN2 Enable	Pins 1-2 (Enabled)
JPME2	ME Manufacturing Mode Select	Pins 1-2 (Normal)
JWD1	Watch Dog Timer Enable	Pins 1-2 (Reset)

Connectors

Connectors	Description
BT1	Onboard Battery (See Chpt. 3 for Used Battery Disposal)
COM1/COM2	Back_panel COM Port1/Front Accessible COM2 Header
Fan1-6, FanA/B	CPU/System Fan Headers
J24	24-pin ATX Main Power Connector (See Warning on Pg. 1-6.)
JD1	Speaker/Power LED
JF1	Front Control Panel Header
JIPMB1	4-pin External BMC I²C Header (for an IPMI Card)
JL1	Chassis Intrusion
JPI²C1	Power Supply SMBbus I²C Header
JPWR1/JPWR2	12V 8-Pin Power Connectors (See Warning on Pg. 1-6.)
JSD1	SATA DOM (Device on Module) Power Connector
JSTBY1	Standby Power Connector
JTPM1	TPM (Trusted Platform Module)/Port 80 Header
JUIDB1	UID (Unit Identification) Button
LAN1/LAN2	G-bit Ethernet (GLAN) Ports 1/2
IPMI_LAN	IPMI_Dedicated LAN support by the Aspeed Controller
I-SATA 0-5	SATA 3.0 Connectors supported by Intel PCH (I-SATA 0-5)
S-SATA 0-3	SATA 3.0 Connectors supported by Intel SCU (S-SATA 0-3)
(PCH) Slot1	PCI-Express 2.0 x4 in x8 Slot from Intel PCH
(CPU1) Slot2	PCI-Express 3.0 x8 Slot from CPU1
(CPU1) Slot3	PCI-Express 3.0 x8 Slot from CPU1
(CPU2) Slot4	PCI-Express 3.0 x4 in x8 Slot from CPU2
(CPU1) Slot5	PCI-Express 3.0 x16 Slot from CPU1
(CPU1) Slot6	PCI-Express 3.0 x8 Slot from CPU1
I-SGPIO1/2	Seria_Link General Purpose I/O Headers 1/2 (I-SGPIO1 for I-SATA0-3, I-SGPIO2 for I-SATA4/5)
S-SGPIO	Seria_Link General Purpose I/O Header (for S-SATA0-3)
SP1	Internal Speaker/Buzzer
(BP) USB 0/1	Backpanel USB 2.0 Ports 0/1
(BP) USB 12/13 (3.0)	Backpanel USB 3.0 Ports 12/13
(FP) USB 2/3	Front-Accessible USB 2.0 Connection Header 2/3
(FP) USB 4	Front-Accessible Type A Connector USB 2.0 Port 4
(FP) USB 8/9 (3.0)	Front-Accessible USB 3.0 Connection Header 8/9
VGA	Backpanel VGA Port

LED Indicators

LED	Description	State	Status
LE1	Rear UID LED	Blue: On	Unit Identified
LE2	Onboard PWR LED	On	System Power On
LEDM1	BMC Heartbeat LED	Green: Blinking	BMC Normal

CPU Support

Dual Intel® E5-2600v3/v4 Series processors (Socket R3-LGA 2011); each processor supports dual full-width Intel QuickPath Interconnect (QPI) links (of up to 9.6 GT/s one direction per QPI)

Memory Support

The X10DRL-i Motherboard supports up to 512 GB of DDR4 Registered (RDIMM)/ Load Reduced (LRDIMM) ECC 2400/2133/1866/1600 MHz memory modules in eight DIMM slots. Memory speed support is dependent on the CPUs used in the motherboard. For the latest memory updates, please refer to our website a at http://www.supermicro.com/products/motherboard.

Populating RDIMM/LRDIMM DDR4 Memory Modules for the E5-2600v3-based Motherboard

| Type	Ranks Per DIMM and Data Width	DIMM Capacity (GB)		Speed (MT/s); Voltage (V); Slot Per Channel (SPC) and DIMM Per Channel (DPC)
				1 Slot Per Channel
				1DPC
		4Gb	8Gb	1.2V
RDIMM	SRx4	8GB	16GB	2133
RDIMM	SRx8	4GB	8GB	2133
RDIMM	DRx8	8GB	16GB	2133
RDIMM	DRx4	16GB	32GB	2133
LRDIMM	QRx4	32GB	64GB	2133
LRDIMM 3DS	8Rx4	64GB	128GB	2133

Populating RDIMM/LRDIMM DDR4 Memory Modules for the E5-2600v4-based Motherboard

| Type	Ranks Per DIMM and Data Width	DIMM Capacity (GB)		Speed (MT/s); Voltage (V); Slot Per Channel (SPC) and DIMM Per Channel (DPC)
				1 Slot Per Channel
				1DPC
		4Gb	8Gb	1.2V
RDIMM	SRx4	8GB	16GB	2400
RDIMM	SRx8	4GB	8GB	2400
RDIMM	DRx8	8GB	16GB	2400
RDIMM	DRx4	16GB	32GB	2400
LRDIMM	QRx4	32GB	64GB	2400
LRDIMM 3DS	8Rx4	64GB	128GB	2400

DIMM Memory Installation

- Notches
- Release Tabs
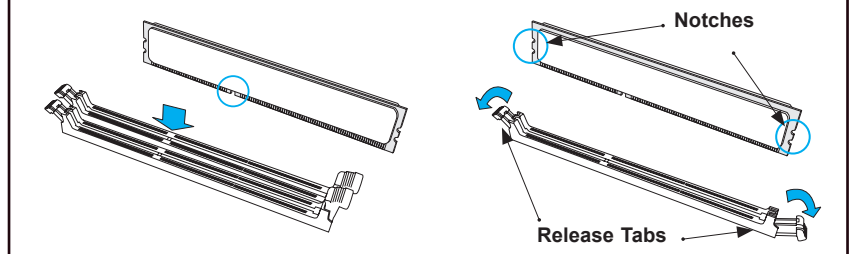
Back Panel I/O Connectors
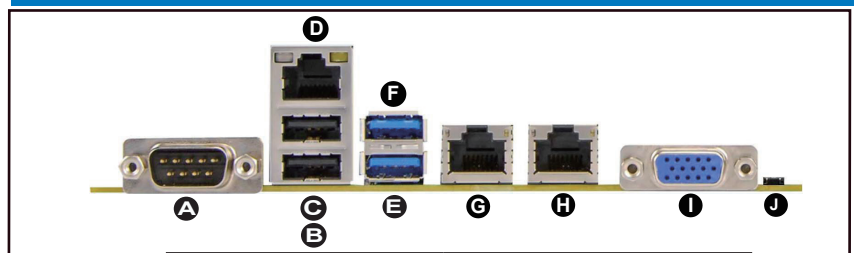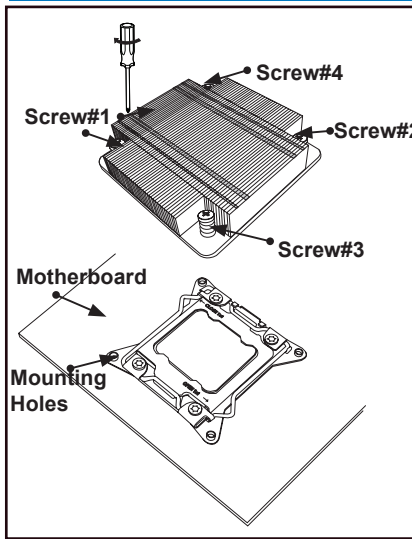

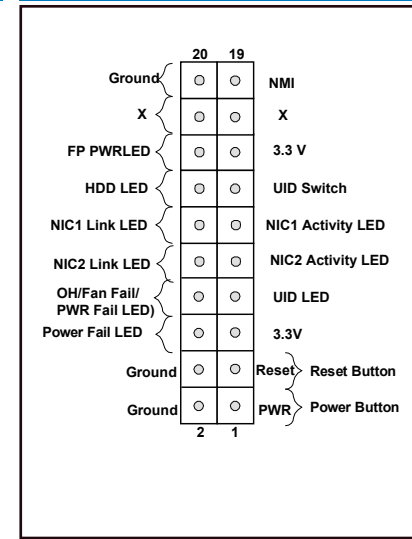| Backplane I/O Panel	
A. COM1	F. Backpanel USB 3.0 Port 13
B. Backpanel USB 2.0 Port 0	G. Gigabit LAN1
C. Backpanel USB 2.0 Port 1	H. Gigabit LAN2
D. IPMI_LAN	I. VGA
E. Backpanel USB 3.0 Port 12	J. UID Button/UID LED (LE1) (on the motherboard)
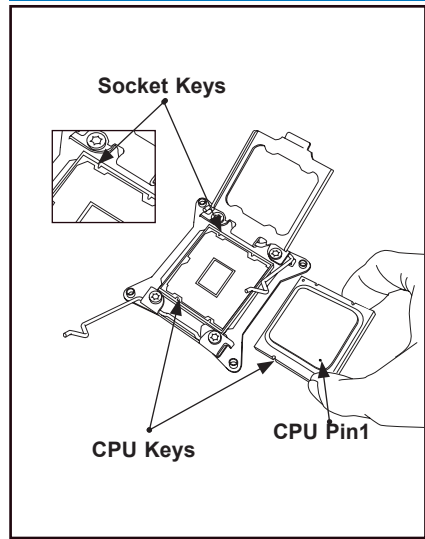
Note: Graphics shown in this quick reference guide are for illustration only. Your components may or may not look exactly the same as the drawings shown in this guide.

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

MNL-1566-QRG-10c