

### CONTACT INFORMATION

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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: <http://www.supermicro.com/wftp>
- Safety: [http://www.supermicro.com/about/policies/safety\\_information.cfm](http://www.supermicro.com/about/policies/safety_information.cfm)

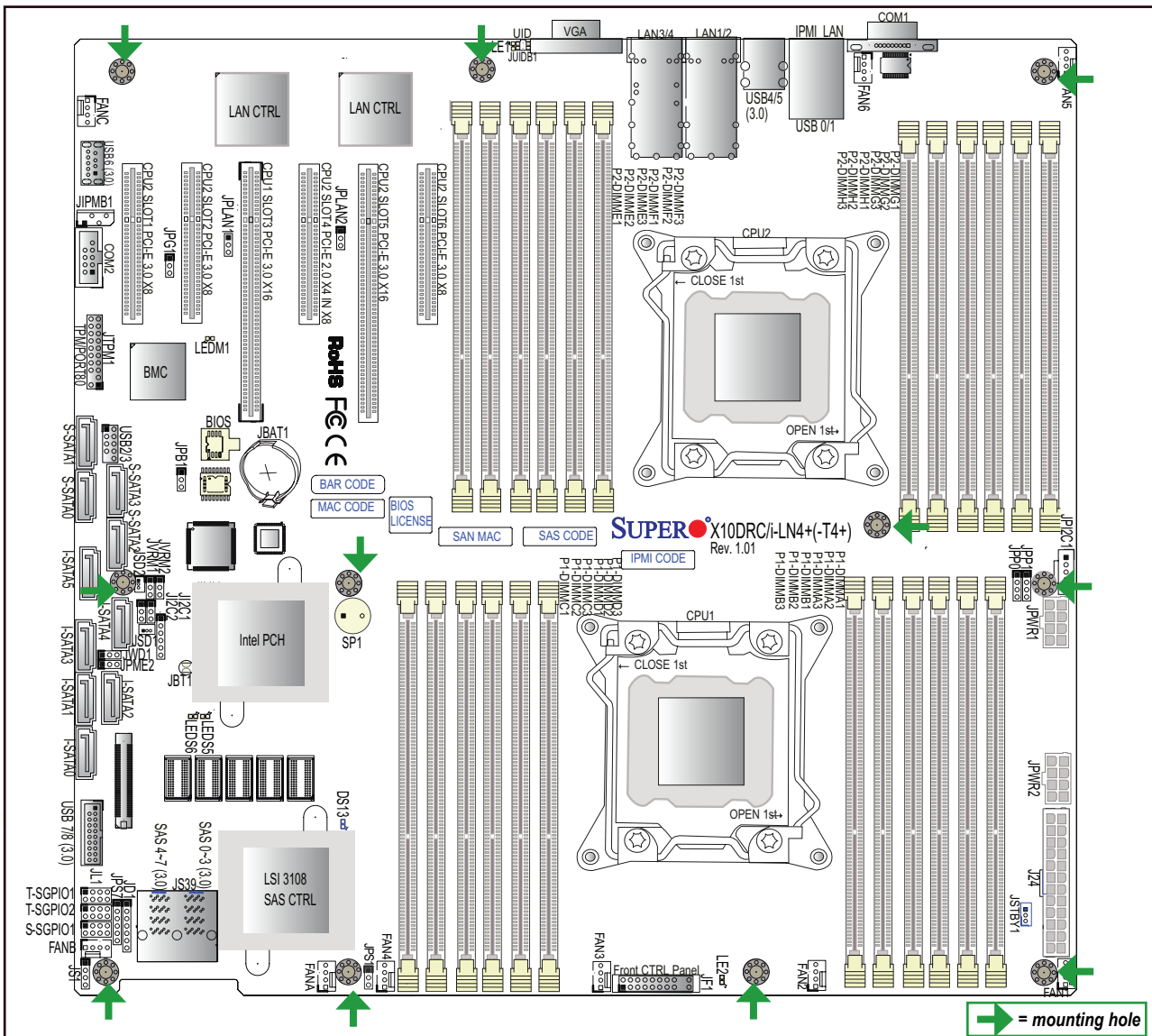
### PACKAGE CONTENTS

- One (1) Supermicro Motherboard
- One (1) I/O Shield
- One (1) Quick Reference Guide
- Two (2) SATA Cables (For X10DRC)
- Two (2) SAS Cables (For X10DRC)
- Six (6) SATA Cables (For X10DRI)



WARNING: This product can expose you to chemicals including lead, known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

## Motherboard Layout and Features



## Jumpers and Connectors

Jumpers		
Jumper	Description	Default Setting
JBT1	CMOS Clear	See Chatper
J1PC1/J1PC2	SMB to PCI-E Slots	Pins 2-3 (Disabled)
JPB1	BMC Enable	Pins 1-2 (Enabled)
JPG1	VGA Enable	Pins 1-2 (Enabled)
JPLAN1	GLAN1/2 Enable (X10DRC/i-LN4+) 10G(T)_LAN1/2 Enable (X10DRC/i-T4+)	Pins 1-2 (Enabled)
JPLAN2	GLAN3/4 Enable (X10DRC/i-LN4+) 10G(T)_LAN3/4 Enable (X10DRC/i-T4+)	Pins 1-2 (Enabled)
JPME2	Manufacture (ME) Mode Select	Pins 1-2 (Normal)
JPS1	SAS Enable (X10DRC-LN4+/T4+)	Pins 1-2 (Enabled)
JWD1	Watch Dog Timer Enable	Pins 1-2 (Reset)

Connectors		Description
COM1/COM2		Backplane COM Port1/Front Accessible COM2 Header
FAN1-6, FANA-C		CPU/System Fan Headers
J24		24-pin ATX Main Power Connector (See Warning on Pg. 1-6.)
JD1		Speaker/Power LED
JF1		Front Panel Control Header
JIPMB1		4-pin External BMC i2C Header (for an IPMI Card)
JL1		Chassis Intrusion
J1PC1		Power Supply SMBus i2C Header
JPS7		CPLD (Complex Programmable Logic Device) Programming Header for the LSI 3108
JPWR1/2		12V 8-Pin Power Connectors (See Warning on Pg. 1-6.)
JSD1/JSD2		SATA DOM (Device on Module) Power Connectors
JTPM1		TPM (Trusted Platform Module)/Port 80 Header
JUIDB1		UID (Unit Identification) Button
LAN1/LAN2		Gigabit LAN(GLAN) Ethernet Ports 1/2 (X10DRC/i-LN4+) 10G(T) LAN Ethernet Ports 1/2 (X10DRC/i-T4+)
LAN3/LAN4		Gigabit LAN (GLAN) Ethernet Ports 3/4 (X10DRC/i-LN4+) 10G(T) LAN Ethernet Ports 3/4 (X10DRC/i-T4+)
(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)
SAS0-3, 4-7 (3.0)		SAS 3.0 Connectors supported by the LSI 3108 controller (JS39)(X10DRC-LN4+/T4+)
(CPU2) Slot1		PCI-Express 3.0 x8 Slot from CPU2
(CPU2) Slot2		PCI-Express 3.0 x8 Slot from CPU2
(CPU1) Slot3		PCI-Express 3.0 x16 Slot from CPU1
(CPU2) Slot4		PCI-Express 2.0 x4 in x8 Slot from CPU2
(CPU2) Slot5		PCI-Express 3.0 x16 Slot from CPU2
(CPU2) Slot6		PCI-Express 3.0 x8 Slot from CPU2
S-SGPI01, T-SGPI01/2		Seria_Link General Purpose I/O Headers 1/2/3 (for SATA ports), (T-SGPI01 for I-SATA0-3, T-SGPI02 for I-SATA4/5, S-SGPI01 for S-SATA0-3)
SP1		Internal Speaker/Buzzer
JSTBY1		+5V Standby Power Header
(BP) USB 0/1 (2.0)		Backpanel USB 2.0 Ports 0/1
(BP) USB 4/5 (3.0)		Backpanel USB 3.0 Ports 4/5
(FP) USB 7/8 (3.0)		Front Accessible USB 3.0 Connection Header 7/8
(FP) USB 2/3 (2.0)		Front Accessible USB 2.0 Connection Header 2/3
(FP) USB 6 (3.0)		Front Accessible USB 3.0 Connection Header 6
VGA		Backpanel VGA Port

## 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 X10DRC/i-LN4+/T4+ motherboard supports up to 3072 GB of Load Reduced (LRDIMM) or up to 768 GB of Registered (RDIMM) DDR4 (288-pin) ECC modules 2400/2133/1866/1600 MHz in 24 slots. Memory speed support is depending on the CPUs installed in your system. For the latest memory updates, please refer to our website at <http://www.supermicro.com/products/motherboard>.

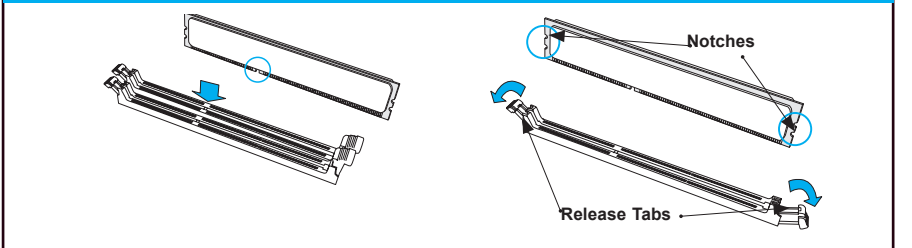
Populating RDIMM/LRDIMM DDR4 Memory Modules for the E5-2600v3-based Motherboard

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	2 Slots Per Channel	3 Slots Per Channel		3 Slots Per Channel		
			10PC	10PC	10PC	10PC	20PC	10PC	10PC
RDIMM	8Rx4	8GB	2133	2133	1866	2133	1866	1600	
RDIMM	8Rx8	16GB	2133	2133	1866	2133	1866	1600	
RDIMM	8Rx8	32GB	2133	2133	1866	2133	1866	1600	
RDIMM	8Rx8	64GB	2133	2133	1866	2133	1866	1600	
RDIMM	8Rx8	128GB	2133	2133	1866	2133	1866	1600	

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	2 Slots Per Channel	3 Slots Per Channel		3 Slots Per Channel		
			10PC	10PC	10PC	10PC	20PC	10PC	10PC
RDIMM	8Rx4	8GB	2400	2400	2133	2400	2133	1600	
RDIMM	8Rx8	16GB	2400	2400	2133	2400	2133	1600	
RDIMM	8Rx8	32GB	2400	2400	2133	2400	2133	1600	
RDIMM	8Rx8	64GB	2400	2400	2133	2400	2133	1600	
RDIMM	8Rx8	128GB	2400	2400	2133	2400	2133	1600	

## DIMM Memory Installation



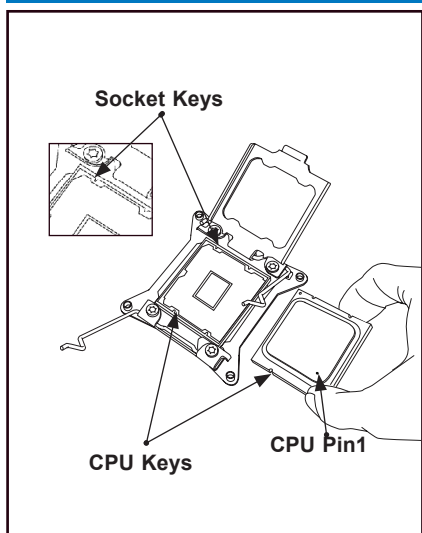
## Onboard LED Indicators

LED	Description	State	Status
DS13	SAS Heartbeat LED	Green: Blinking	SAS Normal
LE1	Rear UID LED	Blue: On	Unit Identified
LE2	Onboard Power LED	Green: On	System PWR On
LEDM1	BMC Heartbeat LED	Green: Blinking	BMC Normal
LEDS5	SAS Activity LED	Green: Blinking	SAS Active
LEDS6	SAS Error LED	Red: On	SAS Error Occurs

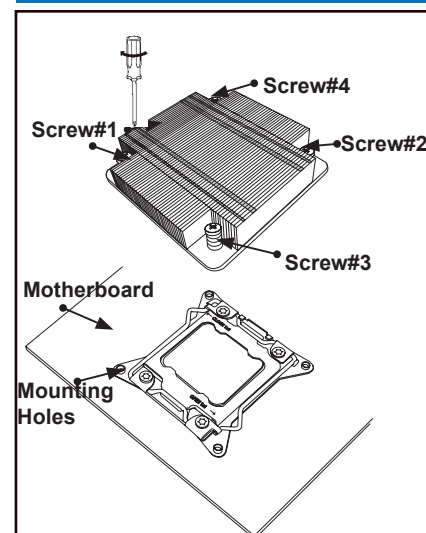
## Rear I/O Connectors

- COM Port 1 (Turquoise)
- Back Panel USB Port 0 (2.0)
- Back Panel USB Port 1 (2.0)
- IPMI\_Dedicated LAN
- Back Panel USB Port 4 (3.0)
- Back Panel USB Port 5 (3.0)
- GLAN 1 (X10DRC/i-LN4+), (10G) TLAN 1 (X10DRC/i-T4+)
- GLAN 2 (X10DRC/i-LN4+), (10G) TLAN 2 (X10DRC/i-T4+)
- GLAN 3 (X10DRC/i-LN4+), (10G) TLAN 3 (X10DRC/i-T4+)
- GLAN 4 (X10DRC/i-LN4+), (10G) TLAN 4 (X10DRC/i-T4+)
- Back Panel VGA (Blue)
- UID Button/UID LED (LE1)

## CPU Installation



## Heatsink Installation



## Front Panel Control (JF1)

Pin	Signal	Pin	Signal
20	Ground	19	NMI
X	FP PWRL	X	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
	Ground		Power Button

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.

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