**Motherboard Layout and Features** 

LEDBMC

FE (⊘)

## CONTACT INFORMATION

• Website: www.supermicro.com

SAN MAC SAS CODE

- General Information: marketing@supermicro.com
- Tech Support: support@supermicro.com
- Phone: +1 (408) 503-8000, Fax: +1 (408) 503-8008

I/O BACK PANEL

## 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

JPL1 |21 **■ ○ ■** ○ ○

• Safety: http://www.supermicro.com/about/policies/safety\_information.cfm • One (1) Quick Reference Guide

## PACKAGE CONTENTS (Applies to individual-pack only)

- One (1) Supermicro Motherboard
  X10DRL-iT: Six (6) SATA Cables
  X10DRL-CT/-C: Two (2) SATA & Two (2) SAS Cables



• One (1) I/O Shield

# **Jumpers and Connectors**

Jumpers				
Jumper	Description	<b>Default Setting</b>		
JBT1	Clear CMOS/Reset BIOS Configuration	(See Chpt. 2)		
JI2C1/JI2C2	SMB to PCI-E Slots	Pins 2-3 (Disabled)		
JPB1	BMC Enable/Disable	Pins 1-2 (Enabled)		
JPG1	Onboard VGA Enable	Pins 1-2 (Enabled)		
JPL1, JPL2	LAN1, LAN2 Enable/Disable	Pins 1-2 (Enabled)		
JPME2	Intel ME Recovery Mode	Pins 1-2 (Normal)		
JPS1	SAS Enable*	Pins 1-2 (Enabled)		
JPTG1	10Gb LAN Support Enable/Disable*	Pins 1-2 (Enabled)		
JWD1	Watch Dog Timer Enable	Pins 1-2 (Reset)		

JWD1	Watch Dog Timer Enable	Pins 1-2 (Reset)			
Connectors and Switches					
Connectors	Description				
COM1	On board Serial port heade	er for COM1			
FAN1~6, FANA/B	CPU/System Fan Headers				
I/O Back Panel	See Back Panel I/O Conne	ctors, Section 2-6			
I-SATA0~5	SATA Interface for SATA1,	SATA Interface for SATA1, 2, 3, 4, 5 and 6			
I-SGPIO1/I-SGPI	O2 Serial General Purpose I/C	Serial General Purpose I/O Headers 1 and 2			
J24	24-pin ATX Power Connect	or			
JD1	External Speaker/Power LE	ED			
JF1	Front Panel Control/LED He	eader			
JIPMB1	System Management Bus h	neader			
JL1	Chassis Intrusion Header				
JNVI2C1	PCI-E NVMe AOC I2C Hea	nder			
JPI2C1	Power Supply SMBus I2C I	Header			
JPWR1, JPWR2	8-pin ATX Power Connecto	rs			
JS18	LSISAS3108 TFM connecto	or			
JSD1	Power Connector for DOM	(Disk on Module) Device			
JSTBY1	Standby Power Connector				
JTPM1	TPM (Trusted Platform Mod	dule) / Port 80 Header			
JUIDB1	UID (Unit ID) Switch				
L-SAS0~3, L-SAS	64~7 L-SAS Interface for SAS0~	7*			
SP1	Internal Speaker/ Buzzer				
USB 2/3	USB 2.0 Header for USB p	orts 2/3			
USB4	USB 2.0 Type A port for US	SB 4			
USB 8/9 (3.0)	USB 3.0 Header for USB p	orts 8/9			
	LED Indicato	rs			

LED Indicators					
LED	Description	State	Status		
LEDBMC	BMC Heartbeat LED	Green/Blinking	BMC Normal		
LEDPWR	Onboard Power LED	Green/Solid	System Power On		
UID	UID Switch Indicator	Blue/Steady	UID Switch is On		

#### \*Note: Refer to the table below for supported features.

Supported Motherboard Features			
/lodel	10Gb LAN Support	SAS Support	
(10DRL-CT	Yes	Yes	
(10DRL-C	No	Yes	
(10DRL-iT	Yes	No	

## Note: Refer to Chapter 2 of the user manual for detailed information on jumpers, connectors, and LED indicators.

# **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-CT/-iT/-C 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. 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.

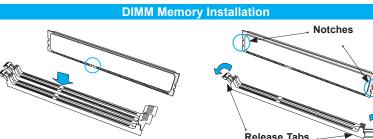
Populating RDIMM/LRDIMM DDR4 Memory Modules for the E5-2600v3based Motherboard

Populating RDIMM/LRDIMM DDR4 Memory Modules for the E5-2600v4based Motherboard

MNL-1620-QRG-10b

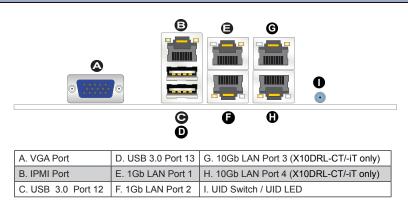
Туре	Ranks Per DIMM and Data Width	DIMM Capacity (GB)		Speed (MT/s); Voltage (V); Siot Per Channel (SPC) and DIMM Per Channel (DPC) 1 Slot Per Channel
		4Gb	8Gb	1.2V
RDIMM	SRx4	8GB	16GB	2133
RDIMM	SRx8	4GB	8GB	2133
RDIMM	DRx8	8GB	16GB	2133
RDIMM	DRx4	16GB	32GB	2133
LRDIMM	QRx4	32GB	64GB	2133
LRDIMM 3DS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

	Ranks Per			Speed (MT/s); Voltage (V); Slot Per Channel (SPC) and DIMM Per Channel (DPC)
Туре	DIMM and Data Width			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

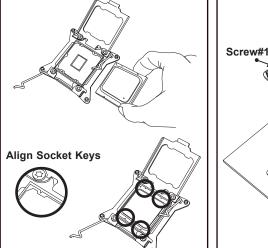


Note: Up to 512GB of memory are supported. See Chapter 2 of the user manual for complete memory population information.

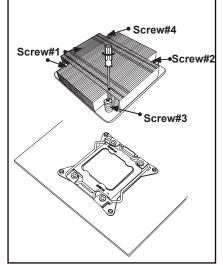




Note: Refer to Chapter 2 of the user manual for detailed information on memory support and CPU/ motherboard installation instructions.



**CPU Installation** 



**Heatsink Installation** 

# FP PWRLED « 3.3 V HDD LED UID Switch NIC1 Link LED **NIC1 Activity LED** NIC2 Activity LED NIC2 Link LED OH/Fan Fail/ PWR Fail LED) UID I FD ower Fail LED 3.3V

**Front Panel Control (JF1)** 

= mounting hole

BIOS

/ 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 quide.