QUICK REFERENCE GUIDE REV. 1.0b

CONTACT INFORMATION

• Website: www.supermicro.com

DRIVERS/IMAGES/USER'S MANUAL FROM THE LINKS BELOW: General Information: marketing@supermicro.com
Tech Support: support@supermicro.com
Drivers & Utilities: http://www.supermicro.com/about/policies/safety\_information.cfm
Four (4) SATA Cables
One (1) I/O shield dua
Safety: http://www.supermicro.com/about/policies/safety\_information.cfm

IDI2C1

FOR YOUR SYSTEM TO WORK PROPERLY, PLEASE DOWNLOAD APPROPRIATE PACKAGE CONTENTS

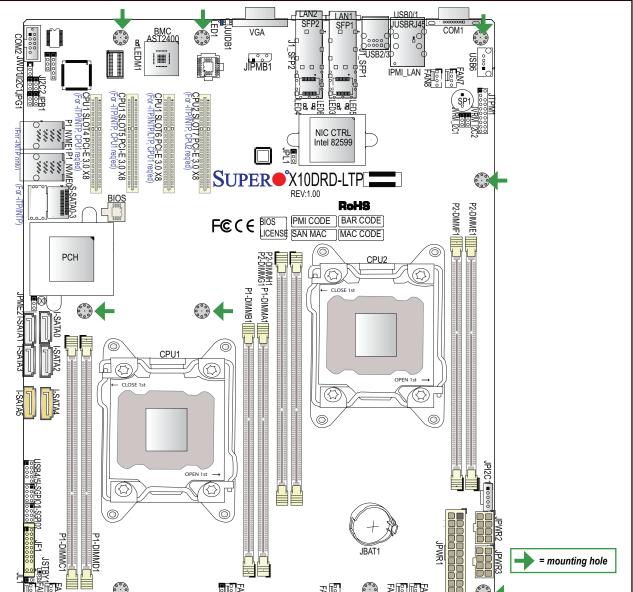
> • One (1) Supermicro Motherboard • Four (4) SATA Cables (CBL-0044L)

• One (1) I/O shield (MCP-260-00042-0N)

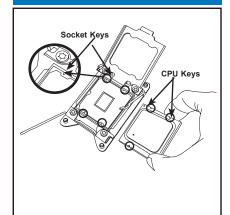
• One (1) Quick Reference Guide (MNL-1681-QRG)

• One (1) I/O shield dual-port SFP bracket • One (1) iPASS to 4-SATA cable (CBL-0097L-03) (for X10DRD-iTP/iNTP)

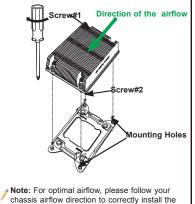
# **Motherboard Layout and Features**



#### **CPU Installation**



# **Heatsink Installation**



### **Front Control Panel (JF1)**

	1	2	•
Power Button	0	0	Ground
Reset Button	0	0	Ground
3.3V	0	0	Power Fail LED
UID LED	0	0	OH/Fan Fail/ PWR Fail LED)
NIC2 Activity LED	0	0	NIC2 Link LED
NIC1 Activity LED	0	0	NIC1 Link LED
UID Switch	0	0	HDD LED
3.3 V	0	0	FP PWRLED
х	0	0	x
NMI	0	0	Ground
'	19	20	-

# indicators.

#### **Jumpers and Connectors**

	Jumpers	
Jumper	Description	Default Setting
JBT1	Clear CMOS	See Chapter 2
JI <sup>2</sup> C1/JI <sup>2</sup> C2	SMB to PCI-E Slots	Pins 2-3 (Disabled)
JPB1	BMC Enable	Pins 1-2 (Enabled)
JPG1	VGA Enable	Pins 1-2 (Enabled)
JPL1	10G_SPF/LAN 1/2 Enable	Pins 1-2 (Enabled)
JPME2	Manufacture (ME) Mode Select	Pins 1-2 (Normal)
JWD1	Watch Dog Timer Enable	Pins 1-2 (Reset)
Connectors		

Connectors	Description
JBAT1 (Battery)	Onboard CMOS battery
COM1/COM2	Backplane COM Port1/Front accessible COM2 header

Power supply SMPhus I2C he

FAN 1- 8	CPU/system fan headers (FAN1-FAN8)
IPMI_LAN	IPMI_dedicated LAN support by the Aspeed controller
JF1	Front control panel header
JL1	Chassis intrusion header

JEIGI	rower supply sivibbus i C fleader
JPWR1	24-pin ATX main power connector
JPWR2/JPWR3	12V 8-pin power connectors

JSTBY1	Standby power connector
JTPM1	TPM (Trusted Platform Module)/Port 80 header
P1-NVME0/1	NVM Express PCI-E 3.0 x4 ports supported by CPU1 (for X10DRD-iNTP only) $$
I-SATA 0-5	SATA 3.0 connectors supported by Intel® PCH (I-SATA 0-5), (I-

	es-on-Module] with built-in power connectors)
I-SGPIO1/2	Seria_Link General Purpose I/O headers 1/2 for SATA ports (I-SGPIO1 for I-SATA0-3. I-SGPIO2 for I-SATA4/5)

	SGPIO1 for I-SATAU-3, I-SGPIO2 for I-SATA4/5)
S-SATA0-3	SATA 3.0 connections 0-3 supported by Intel® SCU (for X10DRD-iTP/iNTP only)

SFP+/LAN1	10G_SFP+ (Small-form Factor Pluggable Transceiver)/(10GbE) LAN Port 1 (J1_SFP1)
SFP+/LAN2	10G_SFP+ (Small-form Factor Pluggable Transceiver)/ (10GbE)

(CPU1)Slot4	PCI-Express 3.0 x8 slot from CPU1 (for X10DRD-iTP/iNTP)
(CPU1)Slot5	PCI-Express 3.0 x8 slot from CPU1 (for X10DRD-iTP/iNTP)
(CPU1)Slot6	PCI-Express 3.0 x8 slot from CPU1 (for X10DRD-iTP/iNTP/LTP
(CPU2)Slot7	PCI-Express 3.0 x8 slot from CPU2 (CPU2 is required) (fo X10DRD-iTP/iNTP)
SP1	Internal speaker/buzzer

IID-SW (JUIDB1)	UID (Unit Identification) switch
BP) USB 0/1 (2.0)	Backpanel USB 2.0 ports 0/1
BP) USB 2/3 (2.0)	Front accessible USB 2.0 connections (USB 2/3) header
RP) LISB 4/5 (2.0)	Backnanel USB 2.0 norts 4/5

Backpanel USB 2.0 ports 4/5 (FP) USB 6 (2.0) Front accessible Type A 2.0 connector (USB6) VGA Backpanel VGA port

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

#### **CPU Support**

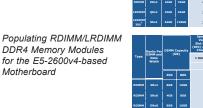
Dual Intel® E5-2600v3/v4 Series processors (Socket R3-LGA 2011); each processor supports dual full-width Intel QuickPath Interconnect (QPI) links (of up to 9.6 GT/s one direction per QPI)

Note: Please install both CPUs for full access to the PCI-E slots, DIMM slots, and onboard controllers. Refer to the block diagram on page 1-10 in the manual to determine which slots or devices may be affected. Please populate CPU socket 1 first.

#### **Memory Support**

This motherboard supports up to 1024 GB of Load Reduced (LRDIMM) or 256 GB or Registered (RDIMM) DDR4 (288-pin) ECC 2400 MHz (max.) modules in eight slots Memory speed support depends on the CPUs installed in the motherboard. 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





#### **Back Panel I/O Connectors**



	1. COM Port 1
	2. Back Panel USB 2.0 Port 0
	3. Back Panel USB 2.0 Port 1
9)	4. IPMI-Dedicated LAN
	5. Back Panel USB 2.0 Port 2
	6. Back Panel USB 2.0 Port 3
	7. 10G_SPF + 10GbE LAN Port 1
	8. 10G_SPF + 10GbE LAN Port 2
	9. Back Panel VGA (Blue)
	10. UID Button/UID LED

## **LED Indicators**

LED	Description	State	Status
LED1	Rear UID LED	Blue: On	Unit Identified
LED3	SFP+/LAN1 Activity LED	Green: Blinking	SFP+/LAN1 Active
LED4	SFP+/LAN1 Heartbeat LED	Green: Blinking	SFP+/LAN1 Normal
LED5	SFP+/LAN2 Activity LED	Green: Blinking	SFP+/LAN2 Active
LED6	SFP+/LAN1 Heartbeat LED	Green: Blinking	SFP+/LAN2 Normal
LEDM1	BMC Heartbeat LED	Green: Blinking	BMC Normal

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

MNL-1681-QRG-10b