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

## 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

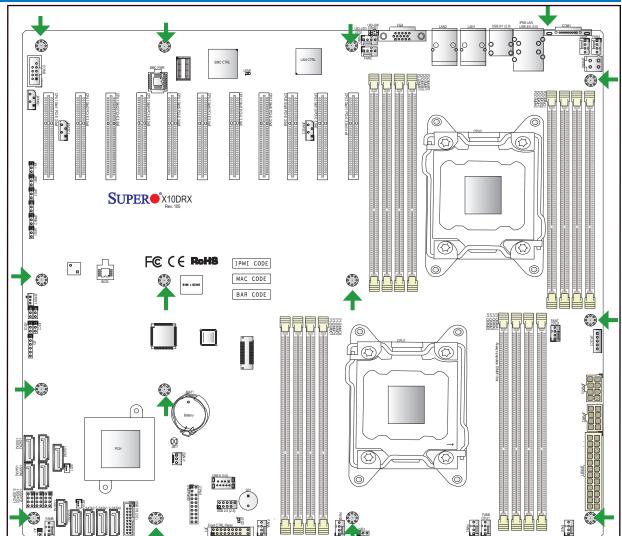
## PACKAGE CONTENTS

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



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.

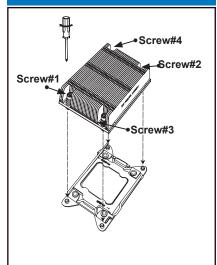
# **Motherboard Layout and Features**



## = mounting hole

# Socket Keys CPU Pin1 **CPU Keys**

**CPU Installation** 



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

	20	19	
Ground	0	0	NMI
<b>x</b> {	0	0	x
FP PWRLED	0	0	3.3 V
HDD LED	0	0	UID Switch
NIC1 Link LED	0	0	NIC1 Activity LED
NIC2 Link LED	0	0	NIC2 Activity LED
OH/Fan Fail/ PWR Fail LED)	0	0	UID LED
Power Fail LED	0	0	3.3V
Ground	0	0	Reset Button
Ground	0	0	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 the drawings shown in this guide.

**Jumpers and Connectors** 

	<b>Jumpers</b>						
	Jumper	Description	Default Setting				
	JBT1	Reset BIOS Configuration	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	LAN 1/2 Enable	Pins 1-2 (Enabled)				
	JPME2	ME Manufacturing Mode Select	Pins 1-2 (Normal)				
	JWD1	Watch Dog Timer Enable	Pins 1-2 (Reset)				
Connectors							

JPG1	VGA Enable	Pins 1-2 (Enabled)						
JPL1	LAN 1/2 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							
Battery (JBAT1)	Onboard CMOS battery (See Chpt. 3 for	or used battery disposal)						
COM1/COM2	Backplane COM port1/Serial connector	Backplane COM port1/Serial connector header 2						
Fan1-7, A-D	CPU/system fan headers (FAN6: CPU1 fan, FAN7: CPU2 fan)							
JF1	Front panel control header							
JL1	Chassis Intrusion header							
JIPMB1	4-pin external BMC I <sup>2</sup> C header (for an	IPMI card)						
JSD1/JSD2	3-pin power connectors for SATA DOM power required)	(Device on Module) devices (external						
JTPM1	TPM (Trusted Platform Module)/Port 80 header							
JUIDB1	UID (Unit Identification) button							
JNVI2C1/2	VPP header for NVMe add-on cards (AOC)							
IPMI_LAN	IPMI_dedicated LAN support by the Asp	peed controller						
JSTBY1	Standby power connector							
LAN1/LAN2	Gigabit LAN Ethernet ports 1/2							
JPI <sup>2</sup> C1 Power supply SMBus I <sup>2</sup> C header								
JPWR1	24-pin ATX main power connector (See Warning on Pg. 1-6 of User's Manual)							
JPWR2/3	12V 8-pin power connectors (See Warning on Pg. 1-6 of User's Manual)							
JPWR4	12V 4-pin power connector							
I-SATA0-5	SATA 3.0 connectors supported by Inte perDOMs with power-pins built-in)	I PCH (I-SATA4/I-SATA5: support Su-						
S-SATA 0~3	SATA 3.0 connectors supported by Intel	I SCU (S-SATA 0-3)						
I-SGPIO1/2	Seria_link General Purpose I/O (GPIO)	headers 1/2(for I-SATA0-3, I-SATA4/5)						
S-SGPI01	Seria_link General Purpose I/O (GPIO) header (for S-SATA0-3)							
SP1	Internal speaker/buzzer							
JUIDB1	Unit Identification (UID) switch							
(BP) USB 0/1 (2.0)	Backpanel USB 2.0 ports 0/1							
(FP) USB 2/3 (2.0)	Front-accessible USB 2.0 connections 2	2/3 header						
(BP) USB 4/5 (3.0)	Backpanel USB 3.0 ports 4/5							
(FP) USB 6 (3.0)	Front accessible Type A USB 3.0 port 6							
(FP) USB 7/8 (3.0)	Front-accessible USB 3.0 connections	7/8 header						
VGA	Backpanel VGA port							
	I ED Indicators							

LED	Description	Status
LED1	Rear UID LED (Blue: On)	Unit Identified
LED2	Onboard PWR LED On	System Power On
LEM1	BMC Heartbeat LED (Green: Blinking)	BMC Normal

## Note: Refer to Chapter 1 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**

This motherboard supports up to 2048 GB of Load Reduced (LRDIMM) and up to 512 GB of Registered (RDIMM) DDR4 (288-pin) ECC 2400/2133/1866/1600 MHz memory in 16 slots (2 DIMMs per channel). Memory speed support is dependent 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 E5-2600v3based Motherboard

Туре	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 Pe	r Channel
				1DPC	1DPC	2DPC
		4Gb	8Gb	1.2V	1.2V	1.2V
RDIMM	SRx4	8GB	16GB	2133	2133	1866
RDIMM	SRx8	4GB	8GB	2133	2133	1866
RDIMM	DRx8	8GB	16GB	2133	2133	1866
RDIMM	DRx4	16GB	32GB	2133	2133	1866
LRDIMM	QRx4	32GB	64GB	2133	2133	2133
LRDIMM 3DS <sup>†</sup>	8Rx4	64GB	128GB	2133	2133	2133

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

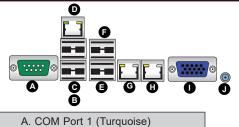
Туре	Ranks Per DIMM and Data Width	DIMM Capacity (GB)		Speed (MT/s); Voltage (V); Slot Per Channel (SPC) and DIMM Per Channel (DPC)			
				1 Slot Per Channel	2 Slots Per Channel		
				1DPC	1DPC	2DPC	
		4Gb	8Gb	1.2V	1.2V	1.2V	
RDIMM	SRx4	8GB	16GB	2400	2400	2133	
RDIMM	SRx8	4GB	8GB	2400	2400	2133	
RDIMM	DR×8	8GB	16GB	2400	2400	2133	
RDIMM	DRx4	16GB	32GB	2400	2400	2133	
LRDIMM	QRx4	32GB	64GB	2400	2400	2400	
LRDIMM 3DS	8Rx4	64GB	128GB	2400	2400	2400	

## **DIMM Memory Installation**





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



A. COM Port 1 (Turquoise)	
B. Back Panel USB 3.0 Port 4	
C. Back Panel USB 3.0 Port 5	
D. IPMI_dedicated LAN	
E. Back Panel USB 2.0 Port 1	
F. Back Panel USB 2.0 Port 2	
G. LAN Port 1	
H. LAN Port 2	
I. VGA	
J. UID Switch/UID LED (LED1)	

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