

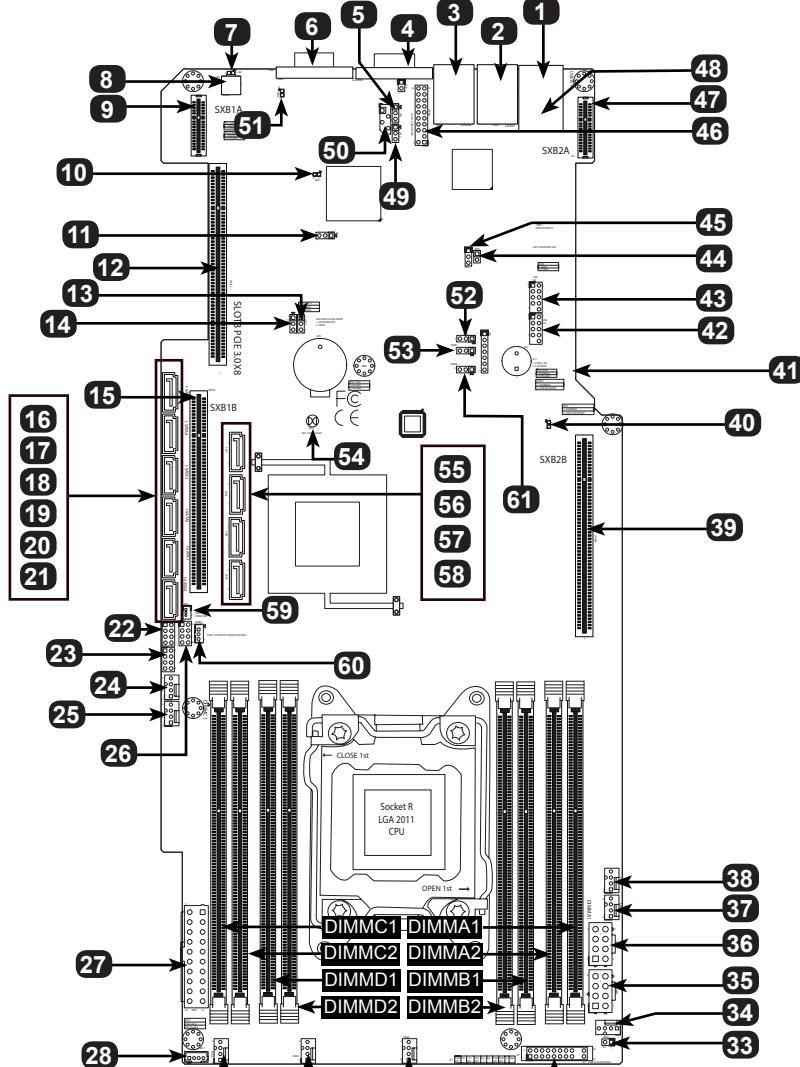
**CONTACT INFORMATION**

- [www.supermicro.com](http://www.supermicro.com) (Email: support@supermicro.com)
- Manuals: <http://www.supermicro.com/support/manuals>
- Drivers & Utilities: [ftp://ftp.supermicro.com](http://ftp.supermicro.com)
- Safety: [http://www.supermicro.com/about/policies/safety\\_information.cfm](http://www.supermicro.com/about/policies/safety_information.cfm)

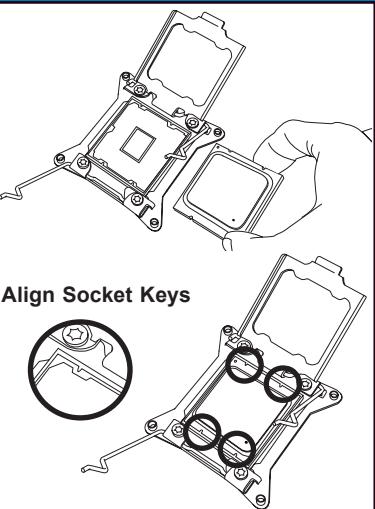
**PACKAGE CONTENTS** (Applies to individual-pack only)

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

**Motherboard Layout and Features**

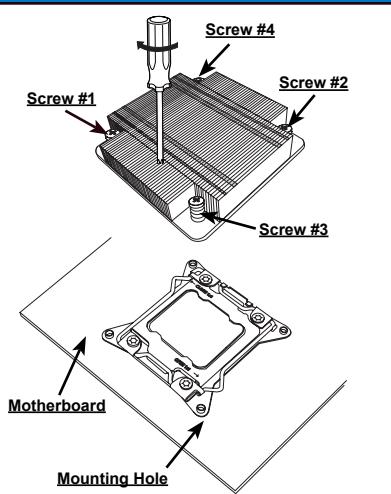


**CPU Installation**

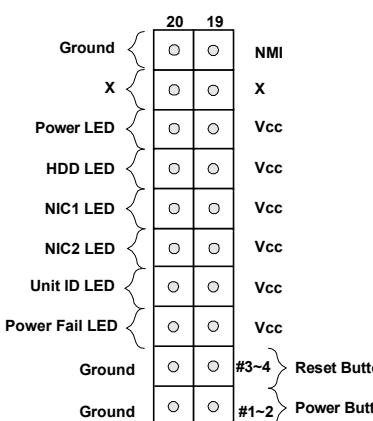


Align Socket Keys

**Heatsink Installation**



**Front Panel Control (JF1)**



**Jumpers, Connectors and LED Indicators**

Jumpers			
5,49	JPL1/JPL2	LAN1/LAN2 Enable/Disable	Pins 1-2 (Enabled)
11	JPG1	Onboard VGA Enable	Pins 1-2 (Enabled)
13,14	J12C3, J12C2	SMB to PCI Slots	Pins 1-2 (Enabled)
45	JWD1	Watch Dog Timer Reset	Pins 1-2 (Reset)
52	JPB1	BMC Enable	Pins 1-2 (Enabled)
53	JPME1	Intel ME Mode Select	Pins 1-2 (Enabled)
54	JBT1	CMOS Clear	Short contact pads to reset CMOS
61	JPME2	Intel ME Manufacturing Mode	Pins 1-2 (Disabled)

Connectors			
1	USB0, USB1	Backpanel USB Ports	
2,3	LAN1/LAN2	LAN Connectors (1Gb)	
4	COM1	Rear Serial Port (COM1)	
6	VGA1	Rear VGA Port	
8	UID	Unit ID Switch	
9,15	SXB1A, SXB1B	Slot for Supermicro riser card	
12	SLOT3	Slot for Supermicro riser card P/N RSC-R1UG-UR	
16,17,18,19	I-SATA 5,4,3,2	SATA 2.0 Connectors via PCH (3Gb/s)	
20,21	I-SATA 1, I-SATA 0	SATA 3.0 Connectors via PCH (6Gb/s)	
22,26	T-SGPIO1 & 2	Serial Link General Purpose I/O Headers (5V Gen1/Gen 2)	
23	T-SGPIO-S	Serial Link General Purpose I/O Headers (5V Gen1/Gen 2)	
24,25,37,38	FAN B,A,C,D	I/O Fan Connectors	
27	JPW1	20-pin Main Power Connector	
28	J12C1	Power Supply SMBus I2C Header	
29,30,31,34	FAN 4,3,2,1	System/CPU Fan Connectors	
32	JF1	Front Panel Control Header	
33	JL1	Chassis Intrusion Header	
35	JPW3	8-pin 3rd Power Connector for the GPU (use as needed)	
36	JPW2	8-pin Secondary Power Connector for the GPU	
39,47	SXB2B, SXB2A	Slot for Supermicro riser card	
41	SP1	Internal Speaker/Buzzer	
42,43	USB 2/3, 4/5	Internal USB Headers	
44	JOH1	Overheat LED/Fan Fail LED Header	
46	JTPM1	Trusted Platform Module (TPM) Header	
48	IPMI	IPMI LAN Port	
50	JIPMB1	4-pin External BMC I2C Header	
55,56,57,58	SCU1~SCU4	SATA 2.0 Connectors via SCU (3Gb/s, RAID 0,1,10,5)	
59	JSD1	SATA Disk On Module (DOM) Power Connector	
60	JSTBY1	Legacy Wake On LAN Header	

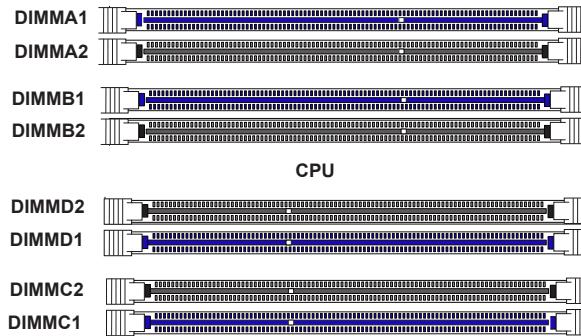
LED Indicators			
7	LE2	Unit ID LED	Blue: Solid On Unit ID Switch is On
10	BD1	IPMI Heartbeat	Green: Blinking IPMI Normal
40	LE1	Power On LED	Green: Solid On System is On/Running
51	LED2	Standby Power LED	Green: Solid On Standby Power On

**Memory Support**

This motherboard supports up to 256 GB of Registered DIMM or up to 64 GB of Unbuffered DIMM ECC/Non-ECC DDR3 1066/1600/1333 MHz memory in 8 DIMM slots.

**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>.

**DIMM Installation**



**Memory Population Guidelines**

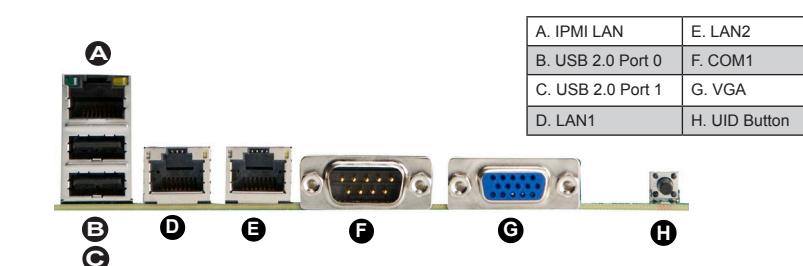
When installing memory modules, the DIMM slots should be populated in the following order: DIMMA1, DIMMB1, DIMMC1, DIMMD1 then DIMMA2, DIMMB2, DIMMC2, DIMMD2.

- Always use DDR3 DIMM modules of the same size, type and speed.
- Mixed DIMM speeds can be installed. However, all DIMMs will run at the speed of the slowest DIMM.
- The motherboard will support odd-numbered modules (1, 3, or 7 modules installed). However, for best memory performance, install DIMM modules in pairs to activate memory interleaving.

Recommended Population (Balanced)								
DIMMA1	DIMMB1	DIMMC1	DIMMD1	DIMMA2	DIMMB2	DIMMC2	DIMMD2	Total System Memory
2GB	2GB							4GB
2GB	2GB	2GB	2GB					8GB
2GB	2GB	2GB	2GB	2GB	2GB	2GB	2GB	12GB
2GB	2GB	2GB	2GB	2GB	2GB	2GB	2GB	16GB
4GB	4GB							8GB
4GB	4GB	4GB	4GB					16GB

**Note:** Up to 256GB of memory are supported. See chapter 2 of the User Manual for complete memory population information.

**Back Panel IO Connectors**



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