

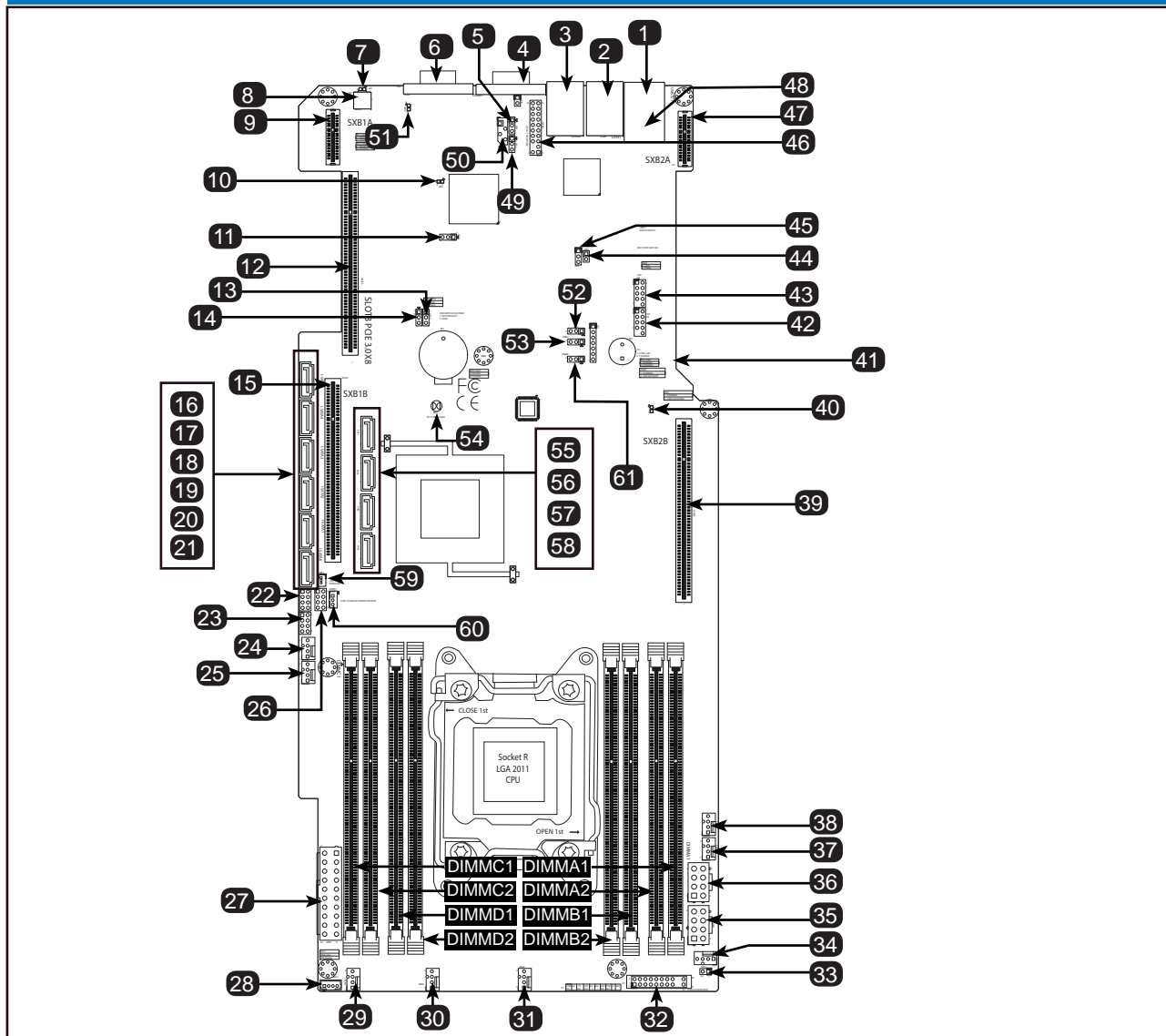
CONTACT INFORMATION

- www.supermicro.com (Email: support@supermicro.com)
- Manuals: http://www.supermicro.com/support/manuals
- Drivers & Utilities: ftp://ftp.supermicro.com
- Safety: 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



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	JI2C3, JI2C2	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-SGPI01 & 2	Serial Link General Purpose I/O Headers (5V Gen1/Gen 2)
23	T-SGPI0-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	JI2C1	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

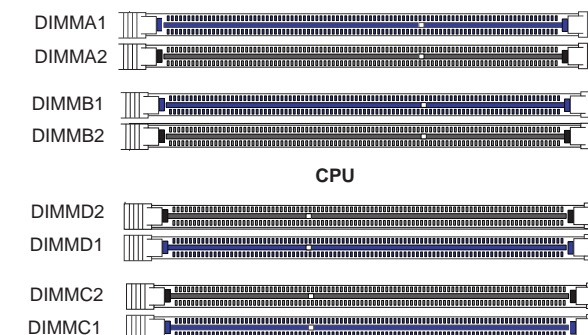
LED Indicators				
7	LE2	Unit ID LED	Blue: Solid On	Unit ID Switch is On
10	BD1	IPMI Heartbeat	Green: Blinking	IPMI Normal
40	LE1	Power On LED	Green: Solid On	System is On/Running
51	LED2	Standby Power LED	Green: Solid On	Standby Power On

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.

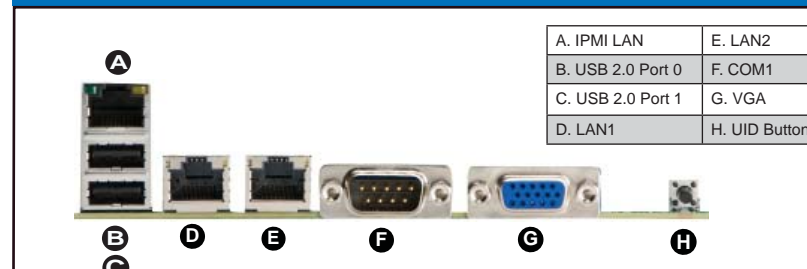
- Always use DDR3 DIMM modules of the same size, type and speed.
- Mixed DIMM speeds can be installed. However, all DIMMs will run at the speed of the slowest DIMM.
- The motherboard will support odd-numbered modules (1, 3, or 7 modules installed). However, for best memory performance, install DIMM modules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

Recommended Population (Balanced)

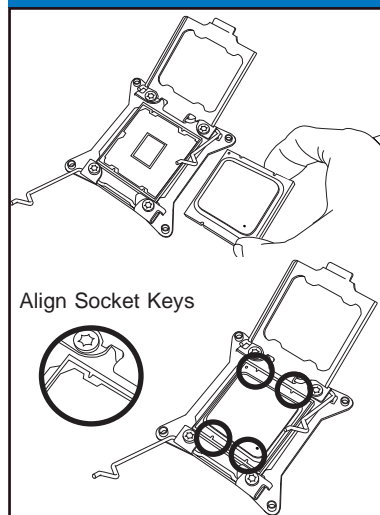
DIMMA1	DIMMB1	DIMMC1	DIMMD1	DIMMA2	DIMMB2	DIMMC2	DIMMD2	Total System Memory
2GB	2GB							4GB
2GB	2GB	2GB	2GB					8GB
2GB	2GB	2GB	2GB	2GB	2GB			12GB
2GB	2GB	2GB	2GB	2GB	2GB	2GB	2GB	16GB
4GB	4GB							8GB
4GB	4GB	4GB	4GB					16GB

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

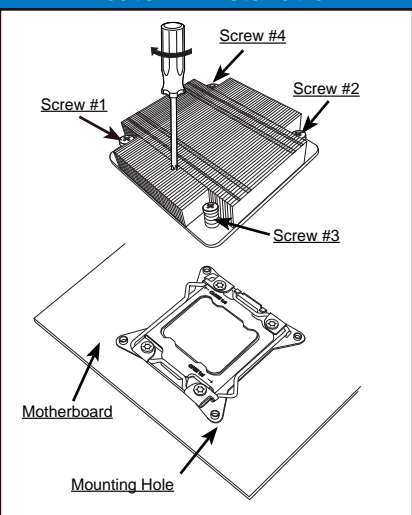
Back Panel IO Connectors



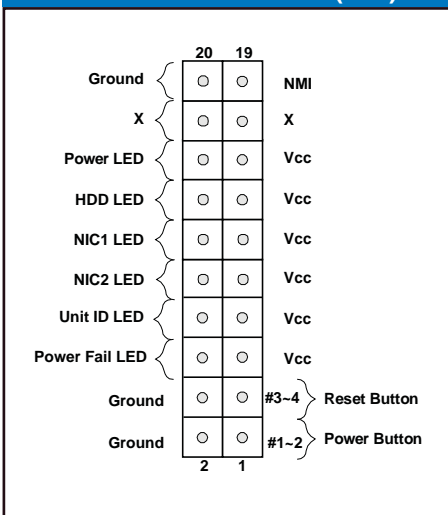
CPU Installation



Heatsink Installation



Front Panel Control (JF1)



Note: Graphics shown in this quick reference guide are for illustration only. Your components may or may not look exactly the same as drawings shown in this guide.

Note: Refer to Chapter 2 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.