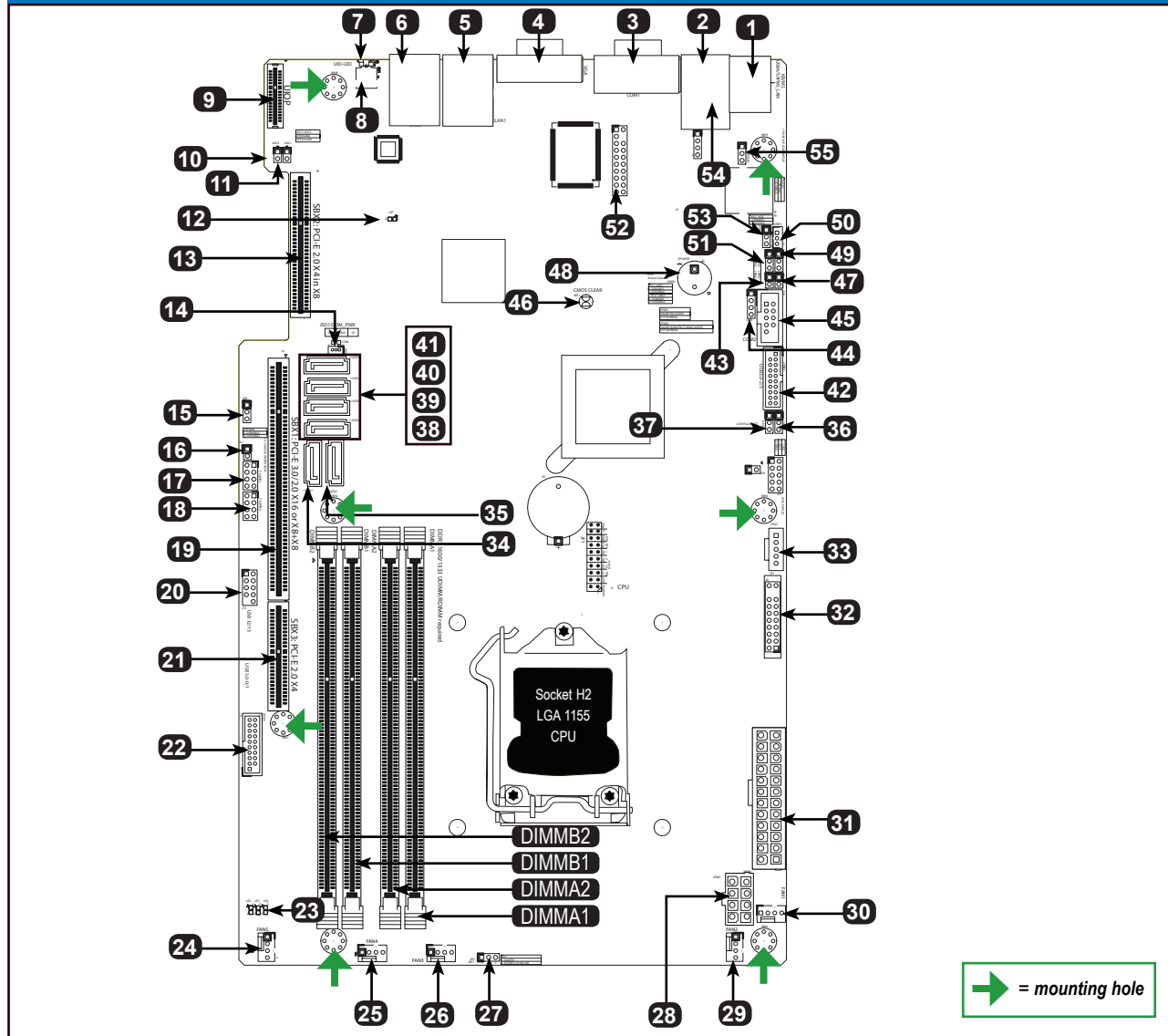
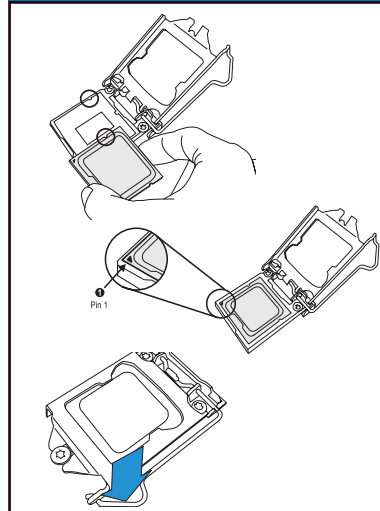


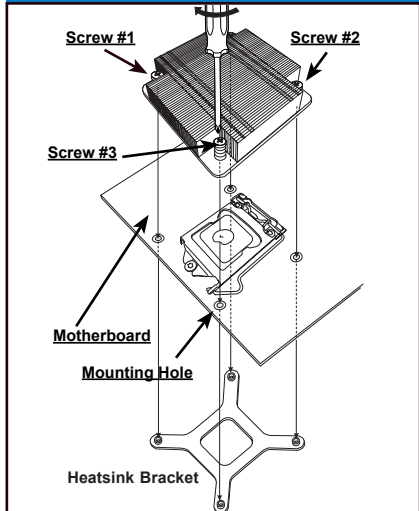
Motherboard Layout and Features



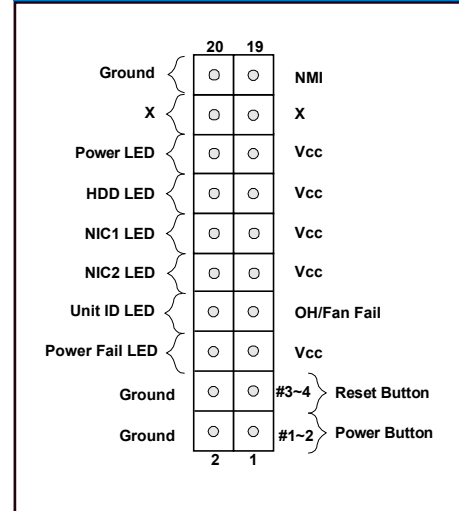
CPU Installation



Heatsink Installation



Front Panel Control (JF1)



Jumpers, Connectors and LED Indicators

Jumpers			
10,11	J12C2~J12C1	SMB to PCI Slots	Pins 1-2 (Enabled)
15	JPB	BMC Enable	Pins 1-2 (Enabled)
27	JRF1	x16 PCIe Setting, Force to x8+x8	Pins 1-2 (Auto)
36	JWD	Watch Dog Timer Reset	Pins 1-2 (Reset)
43	JPME2	ME Manufacture Mode	Pins 2-3 (Disabled)
45	JBT1	CMOS Clear	See Chpt. 2 in User Manual
47	JPME1	ME Recovery Mode Select	Pins 2-3 (Disabled)
49, 51	JPL2/JPL1	LAN1/LAN2 Enable/Disable	Pins 1-2 (Enabled)
53	JPG1	Onboard VGA Enable	Pins 1-2 (Enabled)
55	JUSB1	USB Wake-up Enable (Rear USB Ports)	Pins 1-2 (Enabled)

Connectors		
1	KB/MS	PS/2 Keyboard / Mouse Port
2	IPMI	Rear IPMI LAN Port
3, 44	COM1, COM2	Back Panel COM1 Port, COM2 Header
4	VGA	Rear VGA Port
5, 6	LAN1/LAN2	Rear LAN Connectors (1Gb)
8	UID-LED	Unit ID Switch
13	SBX2	Slot for Supermicro riser card P/N RSC-R1UU-E8R+
14	JSD1	SATA Disk On Module (DOM) Power Connector
16	JL1	Chassis Intrusion Header
17, 18	T-SGPIO1~T-SGPIO2	Serial Link General Purpose I/O Headers (5V Gen1/Gen 2)
9, 19, 21	UIO-Riser, SBX1, SBX3	Slots for Supermicro riser card
20	USB12/13	Internal USB 2.0 Headers USB12/13
22, 42	JUSB3, JUSB4	Internal USB 3.0 Headers USB0/1, USB2/3
24,25,26,29,30	FAN 5, 4, 3, 2, 1	System/CPU Fan Headers
28	JPW2	8-pin Secondary Power Connector for the GPU
31	JPW1	24-pin Main ATX Power Connector
32	JF1	Front Panel Control Header
33	JPI2C2	Power Supply SMBus I2C Header
34, 35	I-SATA1, I-SATA0	SATA 3.0 Connectors via PCH (6Gb/s)
37	JLED	3-pin Power LED Header
38,39,40,41	I-SATA2~I-SATA5	SATA 2.0 Connectors via PCH (3Gb/s)
44	JSPK	Internal Speaker/Buzzer Select or Ext. Speaker Header
48	SPEAKER	Internal Speaker (Keep jumper on JSPK installed, pins 1-2)
50	JSTBY1	Legacy Wake On LAN Header
52	JTPM	Trusted Platform Module (TPM) Header
54	USB4/5	Rear USB Ports

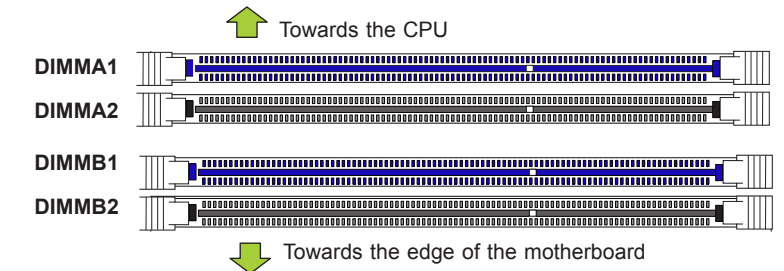
LED Indicators				
7	LE5	Unit ID LED	Blue: Solid On	Unit ID Switch is On
12	LE7	IPMI Heartbeat	Green: Blinking	IPMI Normal
23	LE4	Standby Power LED	Green: Solid On	Standby Power On

Memory Support

This motherboard supports up to 32 GB of Unbuffered (UDIMM) DDR3 ECC 1600/1066/1333 MHz memory in 4 memory 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 then DIMMA2, DIMMB2

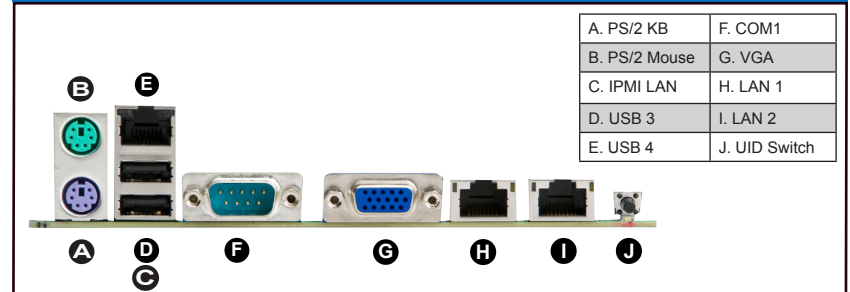
- Always use DDR3 DIMM modules of the same size, type and speed.
- Mixed DIMM speeds can be installed. However, all DIMMs will run at the speed of the slowest DIMM.
- The motherboard will support odd-numbered modules (1 or 3 modules installed). However, for best memory performance, install DIMM modules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

Recommended Population (Balanced)

DIMMA1	DIMMB1	DIMMA2	DIMMB2	Total System Memory
2GB	2GB			4GB
2GB	2GB	2GB	2GB	8GB
4GB	4GB			8GB
4GB	4GB	4GB	4GB	16GB
8GB	8GB			16GB
8GB	8GB	8GB	8GB	32GB

Note: Up to 32GB of memory are supported using ECC or non-ECC UDIMMs.

Back Panel IO Connectors



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.