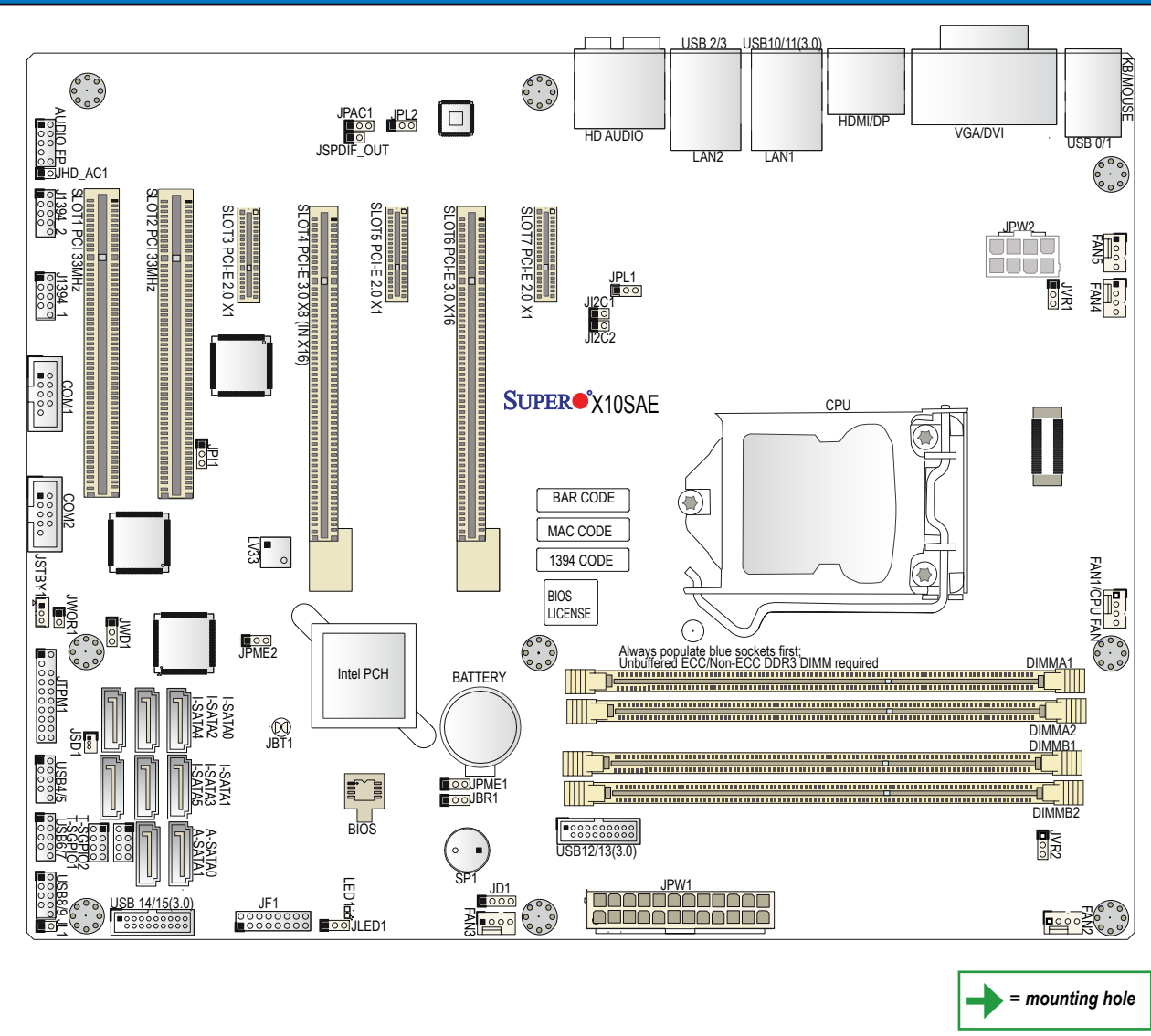


Motherboard Layout and Features



Jumpers, Connectors and LED Indicators

Jumpers		
JBT1	CMOS Clear	(See Chpt. 2)
JPC1/JPC2	SMB to PCI Slots	Off (Disabled)
JHD_AC1	High Definition (HD) Audio Enable	Pins 1-2 (Enabled)
JPAC1	Front Panel Audio Enable	Pins 1-2 (Enabled)
JPI1	1394_1/1394_2 Enable	Pins 1-2 (Enabled)
JPL1/JPL2	LAN1/LAN2 Enable	Pins 1-2 (Enabled)
JWD1	Watch Dog Enable	Pins 2-3 (NMI)

Connectors	
1394_1/2	1394 Connectors 1/2
Audio FP	Front Panel Audio Header
HD AUDIO	High-Definition Audio Connectors (on the I/O back panel)
BATTERY	Onboard Battery
COM1/COM2	COM1/COM2 Port Headers
Fan1~Fan5	System/CPU Fan Headers (Fan1: CPU Fan)
HDMI/DP	Backplane HDMI(High-Definition Multimedia Interface)/DP Audio Port
JD1	Speaker/buzzer (Pins 3-4: Buzzer, Pins 1-4: External Speaker)
JF1	Front Panel Control Header
JL1	Chassis Intrusion Header
JLED1	Power LED Indicator Header
JPW1	24-pin ATX Main Power Connector (Required)
JPW2	+12V 8-pin CPU power Connector (Required)
JSD1	SATA DOM (Device_On_Module) Power Connector
JSPDIF_OUT	Sony/Philips Digital Interface (SPDIF)_Out Header
JSTBY1	Standby Power Header
JTPM1	Trusted Platform Module/Port 80 Connector
JVR1/JVR2	PWM SMB programming headers 1/2(for debugging only)
JWOR1	Wake_On-Ring Header
KB/Mouse	Keyboard/Mouse Connectors
LAN1/LAN2	Gigabit (RJ45) Ports (LAN1/2)
SP1	Internal Speaker/Buzzer
A-SATA0/A-SATA1	(ASMedia) Serial ATA (SATA 3.0) Ports 0/1 (6Gb/sec)
I-SATA0-I-SATA5	(Intel) Serial ATA (SATA 3.0) Ports 0-5 (6Gb/sec)
Slot 3/Slot 5/Slot 7	PCI-Express 2.0 x1 Slots
Slot 6	PCI-Express 3.0 x16 Slot (x8 if Slot 4 is used)
Slot 4	PCI-Express 3.0 x8 in x16 Slot
Slot 1, Slot 2	PCI 33MHz Slot (5V)
T-SGPIO 1/2	Serial_Link General Purpose I/O Connection Headers 1/2
USB 0/1, 2/3	Backpanel USB 2.0 Ports 0/1, 2/3
USB 10/11	Backpanel USB 3.0 Ports 10/11
USB 4/5, USB 6/7, USB 8/9	Front Panel Accessible USB 2.0 Headers 4/5, 6/7, 8/9
USB 3.0 12/13, 14/15	Front Panel Accessible USB 3.0 Headers 12/13, 14/15
VGA/DVI	Backpanel VGA/DVI (Digital Video Interface) Port

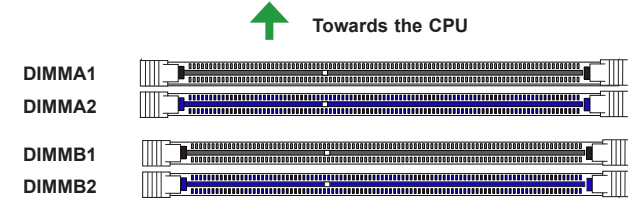
LED Indicators			
LED1	Onboard Standby PWR LED	Green: Solid on	Power On

Memory Support

The X10SAE supports up to 32GB of Unbuffered (UDIMM) DDR3 ECC/non-ECC 1600/1333/1066 MHz in 4 memory slots. Populating these DIMM modules with a pair of memory modules of the same type and same size will result in interleaved memory, which will improve memory performance.

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 Memory Installation



Memory Population Guidelines

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

- 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.

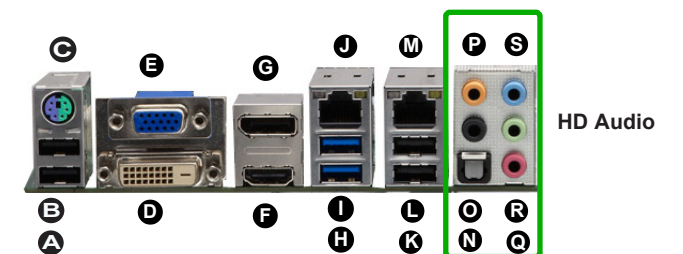
Recommended Population (Balanced)

DIMMA2	DIMMB2	DIMMA1	DIMMB1	Total System Memory
1GB	1GB			2GB
1GB	1GB	1GB	1GB	4GB
2GB	2GB			4GB
2GB	2GB	2GB	2GB	8GB
4GB	4GB			8GB
4GB	4GB	4GB	4GB	16GB
8GB	8GB			16GB
8GB	8GB	8GB	8GB	32GB

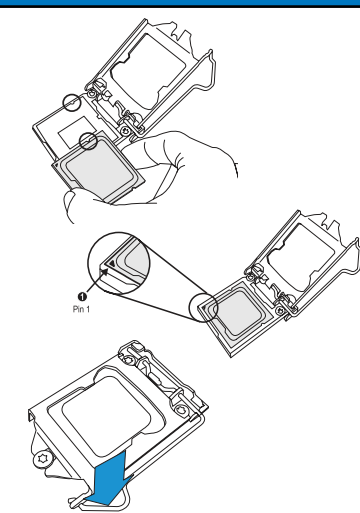
Note: Up to 32GB of memory are supported. See chapter 2 of the User Manual for complete memory population information.

Back Panel IO Connectors

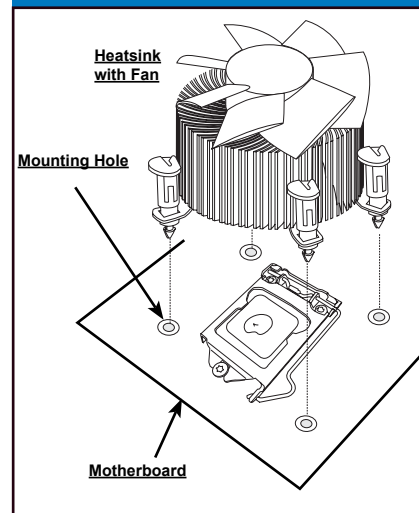
Backplane I/O Panel			
A. USB 2.0 Port 0	G. Display/Port Connector	N.S.: HD Audio Jacks	N. SPDIF Out
B. USB 2.0 Port 1	H. USB 3.0 Port 10		O. Surround Out
C. Keyboard/Mouse	I. USB 3.0 Port 11		P. Center/LFE Out
D. DVI Port	J. Gb LAN Port 1		Q. Mic In
E. VGA Port	K. USB 2.0 Port 2		R. Line Out
F. HDMI Port	L. USB 2.0 Port 3		S. Line In



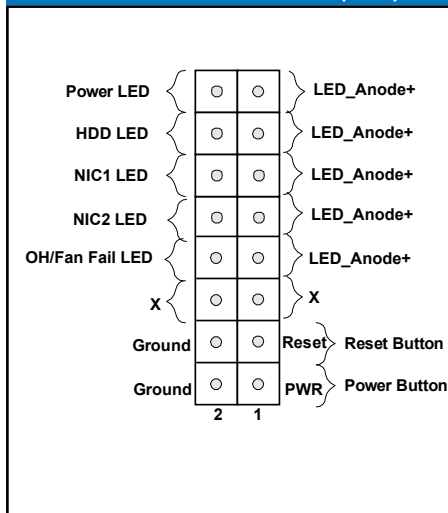
CPU Installation



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.