SUPERMICRO®

X7SBA Motherboard
QUICK REFERENCE GUIDE

MNL-0976-QRG

Motherboard Layout and Features

SUPER® X7SBA
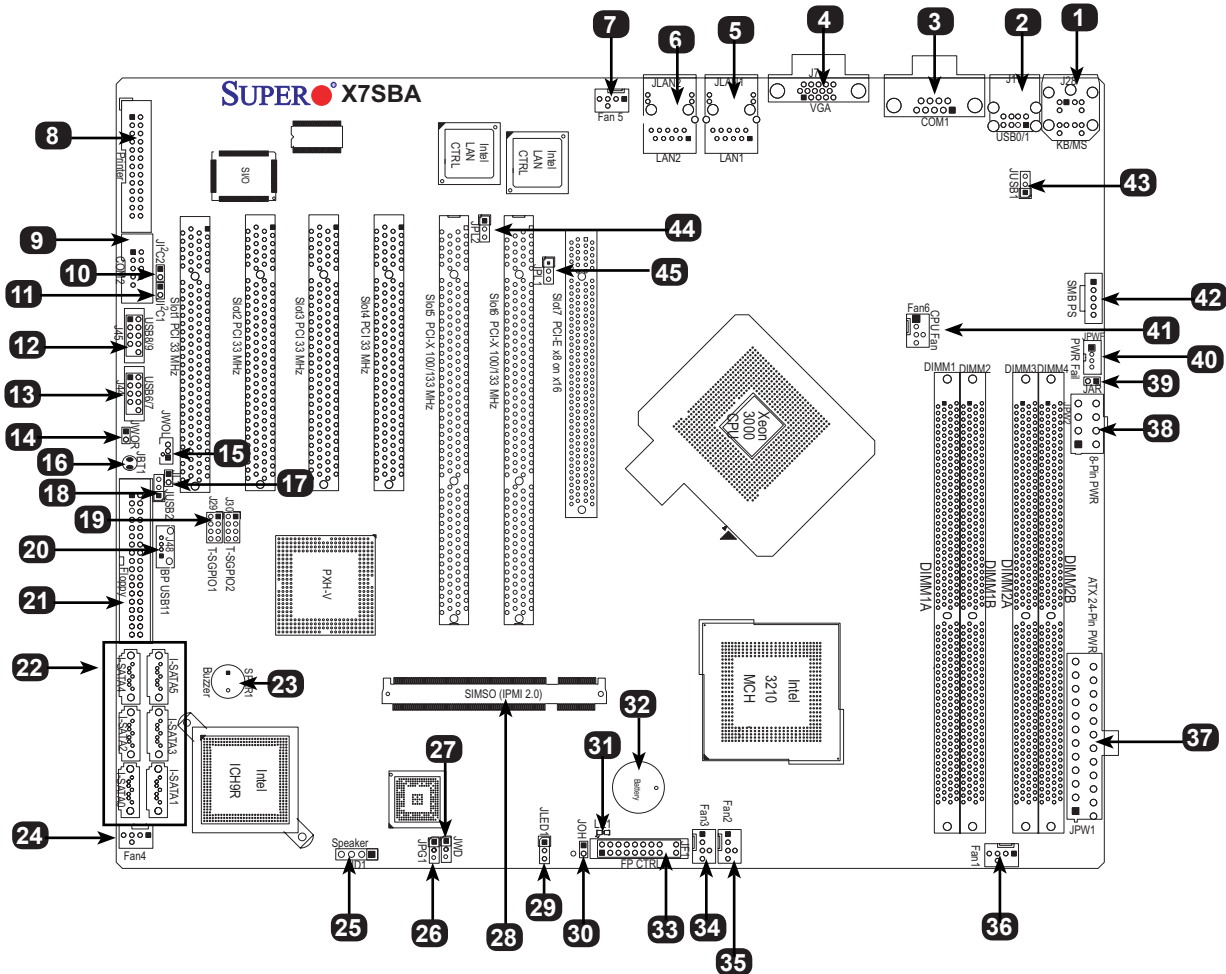
Jumpers, Connectors and LED Indicators

Jumpers

Item #	Jumper	Description	Default
10,11	JI2C2,JI2C1	I2C (SMB) Bus to PCI slots	(Open/Open: Disabled)
16	JBT1	CMOS Reset	Open (short pads to reset)
18,43	JUSB2,JUSB1	Front Panel USB Wake Up	Pins 2-3 (Disabled)
26	JPG1	Enable/Disable On Board VGA	Pins 1-2 (Enabled)
27	JWD	Watch Dog Timer Reset	Pins 1-2 (Reset)
44,45	JPL2,JPL1	LAN2,LAN1 Enable/Disable	Pins 1-2 (Enabled)

Connectors

Item #	Connector	Description
1~6	I/O Back Panel	Please see "Back Panel IO Connectors" section below, right.
7,24,34,35,36,41	Fan 5,4,3,2,1,6	System Fan Headers
8	Printer	Parallel Printer Port for LPT1
9	COM2	COM2 Header
12,13	USB 8/9,6/7	Internal USB Headers
14	JWOR	Wake On Ring Header
15	JWOL	Wake On LAN Header
17	JL1	Chassis Intrusion Header
19	T-SGPIO1/T-SGPIO2	Serial General Purpose I/O Headers 1/2
20	USB 11	Internal USB Port, Type A
21	Floppy	Floppy Drive Port
22	I-SATA 0~5	SATA Ports 0~5
23	SPKR1	Internal Speaker/Buzzer
25	JD1	Speaker Header (Pins 3-4: Internal Buzzer Enable, Pins 1-4: External Speaker Cable)
28	SIMSO IPMI	SIMSO IPMI 2.0 Socket
29	JLED 1	Power LED Header
30	JOH	System Overheat LED Header
32	Battery	System Backup Battery
33	JF1	Front Panel Control Header
37	JPW1	24-pin ATX Power Header
38	JPW2	8-pin ATX Auxilliary Power Header
39	JAR	Alarm Reset Header
40	JPWF	Power Failure Header
42	SMB PS	Power Supply SMbus (I2C)

LED Indicators

Item #	LED	Description	Color/State	Status
31	LE1	Power Standby LED	Green/Solid	System is Plugged In/Ready

Memory Support

This motherboard supports up to 8GB of Dual channel, unbuffered ECC DDR2 800/667 SDRAM in 4 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

⬆ Towards the CPU

DIMM1A
DIMM1B
DIMM2A
DIMM2B

⬇ Towards the edge of the motherboard
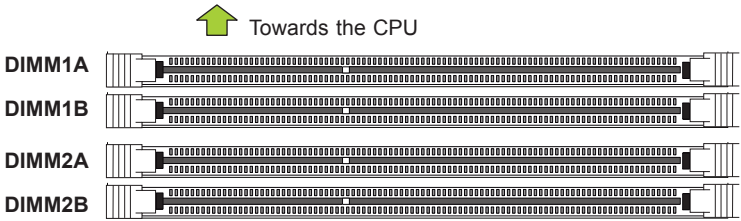
Note: Please populate the memory slots in the following order for optimal results: DIMM1A, DIMM2A, DIMM1B, DIMM2B.

| Possible System Memory Allocation & Availability		
System Device	Size	Physical Memory Remaining (-Available) (4 GB Total System Memory)
Firmware Hub flash memory (System BIOS)	1 MB	3.99
Local APIC	4 KB	3.99
Area Reserved for the chipset	2 MB	3.99
I/O APIC (4 Kbytes)	4 KB	3.99
PCI Enumeration Area 1	256 MB	3.76
PCI Express (256 MB)	256 MB	3.51
PCI Enumeration Area 2 (if needed) -Aligned on 256-MB boundary-	512 MB	3.01
VGA Memory	16 MB	2.85
TSEG	1 MB	2.84
Memory available to OS and other applications		2.84
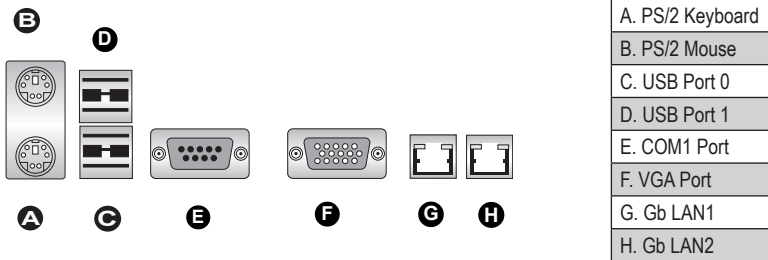
CPU Installation

Heatsink Installation

Passive Heatsink

Screw#1
Screw#2
Screw#1
Screw#2
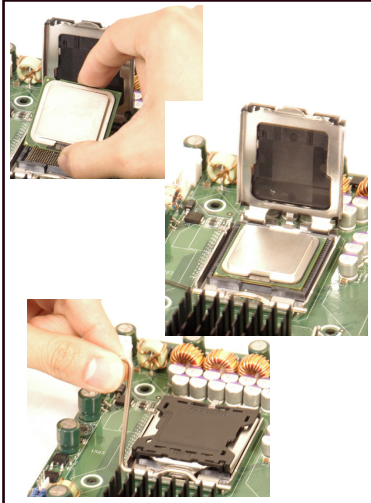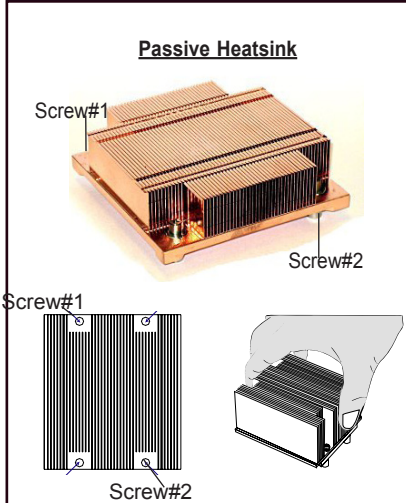
Front Panel Control (JF1)

	20	19	
Ground	○	○	NMI
X	○	○	X
Power LED	○	○	Vcc
HDD LED	○	○	Vcc
NIC1 LED	○	○	Vcc
NIC2 LED	○	○	Vcc
OH/Fan Fail LED	○	○	Vcc
PWR Fail LED	○	○	Vcc
Ground	○	○	Reset — Reset Button
Ground	○	○	PWR — Power Button
	2	1	

Back Panel IO Connectors

A. PS/2 Keyboard
B. PS/2 Mouse
C. USB Port 0
D. USB Port 1
E. COM1 Port
F. VGA Port
G. Gb LAN1
H. Gb LAN2

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.