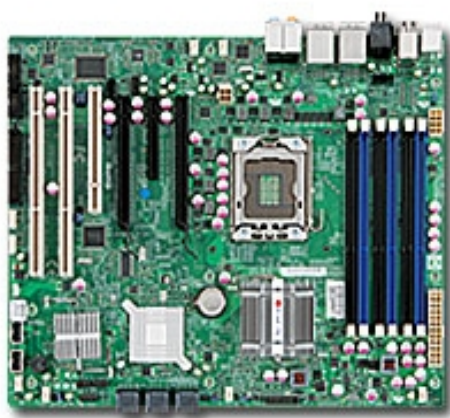


X8SAX

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Key Features

1. Intel® Core™ i7 / i7 Extreme Edition, and future Intel® Nehalem processor families (QPI up to 6.4 GT/s)
2. Intel® X58 Express Chipset
3. Up to 24GB DDR3 1333/1066/800 ECC / non-ECC Un-Buffered DIMM
4. Intel® Dual 82574L Gigabit Ethernet Controller
5. 6x SATA (3.0Gbps) Ports RAID 0, 1, 5, 10
6. 2 (x16) PCI-Express 2.0, 1 (x4) PCI-Express (using X8 slot), 2x 64-bit 133/100MHz PCI-X, 1x 32-bit PCI Slots
7. Realtek ALC883 7.1 HD Audio
8. 12x USB 2.0 Ports
9. 2x IEEE 1394a Headers

Links & Resources

[Tested Memory List](#)

[Motherboard Manual](#)

[Update Your BIOS](#)

[Download the Latest Drivers and Utilities](#)

Specifications

Product SKUs	
MBD-X8SAX -O	▪ X8SAX (Standard Retail Pack)
MBD-X8SAX -B	▪ X8SAX (Bulk Pack)
Physical Stats	
Form Factor	▪ ATX
Dimensions	▪ 12" x 10" (30.5cm x 25.4cm)
Processor/Cache	
CPU	▪ LGA 1366 Socket
	▪ Intel® Core™ i7-965 processor Extreme Edition (3.2 GHz)
	▪ Intel® Core™ i7-940 processor (2.93 GHz)
	▪ Intel® Core™ i7-920 processor (2.66 GHz)
	▪ Supports future Intel® Nehalem processor families
System Bus	▪ QPI (up to 6.4 GT/s)
System Memory	
Memory Capacity	▪ Supports up to 24 GB 1333 / 1066 / 800MHz DDR3 ECC / non-ECC Un-Buffered memory
	▪ Three Channel memory bus
Memory Type	▪ 1333 / 1066 / 800MHz Un-Buffered ECC / non-ECC DDR3 SDRAM 72-bit, 240-pin gold-plated DIMMs
DIMM Sizes	▪ 256MB, 512MB, 1GB, 2GB, 4GB
Memory Voltage	▪ 1.5 V
Error Detection	▪ Corrects single-bit errors
	▪ Detects double-bit errors (using ECC memory)
	▪ Supports Intel® x4 and x8 Single Device Data Correction (SDCC)
On-Board Devices	
Chipset	▪ Intel® X58 Express chipset ▪ ICH10R + PXH/V
SATA	▪ Intel ICH10R SATA 3.0Gbps Controller ▪ RAID 0, 1, 5, 10 support
Network Controllers	▪ Dual Intel® 82574L Gigabit Ethernet Controller ▪ Supports 10BASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output
Audio	▪ Realtek ALC883 7.1 HD audio
Super I/O	▪ Winbond 83627DHG chip
Clock Generator	▪ CK505
Input / Output	
Serial ATA	▪ 6 Serial ATA ports ▪ 6 SATA hard drives supported
Floppy	▪ 1 Floppy controller; 1.44 MB
LAN	▪ 2x RJ45 LAN ports
USB	▪ 8x USB rear ports
	▪ 2x USB on-board
	▪ 1x USB internal header (2 ports)
	▪ Total 12 USB 2.0 Compliant
Audio	▪ Realtek ALC883 7.1 HD audio ▪ 1x S/PDIF digital output
Keyboard / Mouse	▪ PS/2 keyboard and mouse ports
Serial Port / Header	▪ 2 Fast UART 16550 serial header
I/O Panel	
• Please see this board's I/O Panel	
OS Compatibility	
• Please see our OS Compatibility Chart	

Chassis (Optimized for X8SAX)	
Mid-Tower	▪ CSE-733E-465B
	▪ CSE-733I-450
	▪ CSE-733I-465B
	▪ CSE-733I-645
	▪ CSE-733TQ-465B
	▪ CSE-733TQ-645
Important Chassis Notes	▪ To ensure system stability, a 550W (minimum) ATX power supply [4-pin (+12V), 8-pin (+12V) and 24-pin are required]
Expansion Slots	
PCI-Express	▪ 2 (x16) PCI-e 2.0 slots ▪ 1 (x4) PCI-e slot (using x8 slot)
PCI-X	▪ 2x 64-bit 133/100MHz PCI-X (3.3V) slots
PCI	▪ 1x 32-bit PCI slot
System BIOS	
BIOS Type	▪ 4Mb SPI Flash EEPROM with AMI BIOS
BIOS Features	▪ DMI 2.3
	▪ PCI 2.2
	▪ ACPI 1.0 / 2.0
	▪ USB Keyboard support
	▪ SMBIOS 2.3
Management	
Software	▪ Super Doctor III
	▪ Watch Dog
	▪ NMI
Power Configurations	▪ ACPI / ACPM Power Management
	▪ Main Switch Override Mechanism
	▪ Keyboard Wakeup from Soft-Off
	▪ Power-on mode for AC power recovery
	▪ Internal/External modem ring-on
	▪ Suspend to RAM (STR)
PC Health Monitoring	
CPU	▪ Monitors for CPU Cores, +1.8V, +3.3V, +5V, ±12V, +3.3V Standby, +5V Standby, VBAT, HT, Memory, Chipset Voltages.
	▪ 6-Phase-switching voltage regulator with auto-sense from 0.8375V - 1.60V
	▪ Total of six fan headers supporting up to 6 fans
FAN	▪ Six 4-pin fan headers
	▪ 6x fans with tachometer status monitoring
	▪ Status monitor for speed control
	▪ Status monitor for on/off control
	▪ Support 3-pin fans (w/o speed control)
	▪ Low noise fan speed control
	▪ Pulse Width Modulated (PWM) fan connectors
Temperature	▪ Monitoring for CPU and chassis environment
	▪ CPU thermal trip support
	▪ FC temperature sensing logic
	▪ Thermal Monitor 2 (TM2) support
	▪ PECI
LED	▪ CPU / System Overheat LED ▪ Suspend-state indicator LED ▪ +5V Standby alert LED
Other Features	▪ Chassis intrusion detection ▪ Chassis intrusion header
Operating Environment / Compliance	
RoHS	▪ RoHS Compliant 6/6, Pb Free
Environmental Spec.	▪ Operating Temperature: 10° to 35°C (50° to 95°F)
	▪ Non-operating Temperature: -40° to 70° C (-40° to 158°F)
	▪ Operating Relative Humidity: 8% to 90% (non-condensing)
	▪ Non-operating Relative Humidity: 5 to 95% (non-condensing)

Parts List

Parts List			
	Part Number	Qty	Description
X8SAX	MBD-X8SAX -O	1	X8SAX Motherboard
Manual(s)	MNL-1063	1	Motherboard Manual for X8SAX
I/O Cables	CBL-022L	1	ATX Floppy Cable
	CBL-0044L	6	2ft. Amphenol, SATA Cable
	CBL-0173L	1	Internal to External Cable for 1394 Connector
Driver Disk	CDR-X8-UP 1.00	1	Version 1.00 CD or later
I/O Shield	MCP-260-00030-0N	1	Motherboard I/O Shield

Note: Items in a Standard Retail Package may differ from items in a Standard Bulk Package.