

## Product SKUs

MBD-X7DA8-O	<ul style="list-style-type: none"><li>• X7DA8 (Standard Retail Pack)</li></ul>
MBD-X7DA8-B	<ul style="list-style-type: none"><li>• X7DA8 (Bulk Pack)</li></ul>

## Physical Stats

Form Factor	<ul style="list-style-type: none"><li>• Extended ATX</li></ul>
Dimensions	<ul style="list-style-type: none"><li>• 12" x 13.05" (30.5cm x 33.2cm)</li></ul>

## Processor/Cache

CPU	<ul style="list-style-type: none"><li>• Dual 771-pin LGA Sockets</li><li>• Supports up to two Intel® 64-bit Xeon® processor(s) of the same type below:<ul style="list-style-type: none"><li>○ <b>Quad-Core Intel® Xeon® Processor 5300 sequence (Clovertown processor) up to 2.66 GHz</b></li><li>○ <b>Dual-Core Intel® Xeon® Processor 5100/5000 sequence (Woodcrest/Dempsey processor) up to 3.73 GHz</b></li><li>○ <b>NOTE: Motherboard PCB revision 2.0 or above is required to support Xeon® 5100 (Woodcrest) processors</b></li></ul></li></ul>
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System Bus	<ul style="list-style-type: none"><li>• 1333 MHz, 1066 &amp; 667 MHz system bus</li></ul>
Operating System Software	<ul style="list-style-type: none"><li>• Supports 64-bit Operating Systems</li><li>• Supports 32-bit Operating Systems</li></ul>

## System Memory

Memory Capacity	<ul style="list-style-type: none"><li>• Eight 240-pin DIMM sockets</li><li>• Supports up to 32 GB 667 / 533MHz DDR2 ECC FB-DIMM memory</li><li>• Dual branch memory bus</li><li>• Memory must be populated in pairs</li><li>• Memory Mirroring supported</li></ul>
Memory Type	<ul style="list-style-type: none"><li>• 667 / 533MHz FB-DIMM (Fully Buffered DIMM) DDR2 ECC SDRAM 72-bit, 240-pin gold-plated DIMMs</li></ul>
DIMM Sizes	<ul style="list-style-type: none"><li>• 512 MB, 1GB, 2GB, 4GB</li></ul>
Memory Voltage	<ul style="list-style-type: none"><li>• 1.8 V only</li></ul>

## Chassis ( Optimized for X7DA8 )

2U Chassis	<ul style="list-style-type: none"><li>• <a href="#">SC825S2-R700LPV</a></li><li>• <a href="#">SC825S2-560LP</a></li><li>• <a href="#">SC823S-550LP</a></li></ul>
3U Chassis	<ul style="list-style-type: none"><li>• <a href="#">SC836S2-R800V</a></li><li>• <a href="#">SC833S2-R760</a></li><li>• <a href="#">SC833S-R760</a></li><li>• <a href="#">SC833S2-550</a></li><li>• <a href="#">SC833S-550</a></li><li>• <a href="#">SC933S1-R760</a></li><li>• <a href="#">SC933S2-R760</a></li></ul>
Tower / 4U Rackmount	<ul style="list-style-type: none"><li>• <a href="#">SC745S2-R800</a></li><li>• <a href="#">SC745S2-700</a></li><li>• <a href="#">SC743S2-R760</a></li><li>• <a href="#">SC743S1-R760</a></li><li>• <a href="#">SC743S2-650</a></li><li>• <a href="#">SC743S1-650</a></li><li>• <a href="#">SC743S1-645</a> (FAN-0091 Required)</li></ul>
Important Chassis Notes	<ul style="list-style-type: none"><li>• To ensure system stability, a 500W (minimum) ATX power supply [4-pin (+12V), 8-pin (+12V) and 24-pin are required]</li></ul>

## Expansion Slots

PCI-Express	<ul style="list-style-type: none"><li>• 1 (x16) PCI-e slot</li><li>• 1 (x4) PCI-e (using x16) slot</li></ul>
PCI-X	<ul style="list-style-type: none"><li>• 2x 64-bit 133/100MHz PCI-X (3.3V) slots</li><li>• 1x 64-bit 100MHz PCI-X (3.3V) slot</li></ul>
PCI	<ul style="list-style-type: none"><li>• 1x 32-bit 33MHz PCI (5V) slot</li></ul>

## System BIOS

BIOS Type	<ul style="list-style-type: none"><li>• 8Mb Flash EEPROM with Phoenix® BIOS</li></ul>
BIOS Features	<ul style="list-style-type: none"><li>• Plug and Play (PnP)</li><li>• SMBIOS 2.3</li><li>• DMI 2.1</li><li>• PCI 2.2</li><li>• ACPI 1.0</li><li>• PCI-X 1.0</li><li>• USB Keyboard support</li><li>• Hardware BIOS Virus protection</li></ul>

## Management

Software	<ul style="list-style-type: none"><li>• Optional IPMI (Intelligent Platform Management Interface) v2.0</li></ul>
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- 1.5V(AMB)
- Corrects single-bit errors
- Detects double-bit errors (using ECC memory)
- Supports Intel® x4 and x8 Single Device Data Correction (SDDC)

Error Detection

**On-Board Devices**

- Chipset
  - Intel® 5000X (GreenCreek) chipset
  - MCH + PXH-V + ESB2
- SATA
  - Intel ESB2 SATAII Controller
  - RAID 0, 1, 5, 10 support
- SCSI
  - Adaptec AIC-7902 Controller
  - Dual-Channel Ultra320 SCSI
  - Host RAID 0, 1, 10 support (only for 4 drives)
- RAID
  - Support for Zero-Channel RAID with Supermicro All-In-One-ZCR Card: [AOC-LPZCR1](#) or [AOC-LPZCR2](#)
  - SCSI RAID 0, 1, 5, 10
  - Optional: (Card NOT included)
- IPMI
  - Support for Intelligent Platform Management Interface v.2.0
  - 200-pin IPMI slot (SIMLP)
  - (Optional: [AOC-SIMLP-B](#))
  - (Optional: [AOC-SIMLP-3](#)) with 3rd LAN support
  - **NOTE:** KVM-over-LAN not supported - there is no DVO signal to the IPMI slot
- Network Controllers
  - Intel® (ESB2/Gilgal) 82563EB Dual-Port Gigabit Ethernet Controller
  - Supports 10BASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output
  - Intel® I/OAT support for fast, scaleable, and reliable networking
- Super I/O
  - Winbond 83627HF chip
- Clock Generator
  - CK410B chip

**Input / Output**

- Serial ATA
  - Six Serial ATA ports
  - Six SATA hard drives supported
- IDE
  - Single EIDE channel supports up to two UDMA IDE devices(IDE-M, IDE-S) including CF card

- [Super Doctor III](#)
- Watch Dog
- NMI
- ACPI Power Management
- Wake-On-Ring (WOR) header
- Wake-On-LAN (WOL) header
- Power-on mode for AC power recovery
- Internal/External modem remote ring-on

Power Configurations

**PC Health Monitoring**

- CPU
  - Monitors for CPU Cores, +1.8V, +3.3V, +5V, -12V & +5V Standby, VBAT
  - CPU Core 5-Phase-switching voltage regulator with auto-sense from 0.8375V-1.60V
- FAN
  - Total of eight 4-pin fans
  - 8x fans with status monitoring
  - Status monitor for speed control
  - Support 3-pin fans
  - Low noise fan speed control
  - Pulse Width Modulated (PWM) fan connectors
- Temperature
  - Monitoring for CPU and chassis, environment
  - CPU thermal trip support
  - PSU I<sup>2</sup>C temperature sensing logic
  - Thermal Monitor 2 (TM2) support
- LED
  - CPU / System Overheat LED
- Other Features
  - Chassis intrusion detection
  - Chassis intrusion header

**Operating Environment / Compliance**



RoHS

- [RoHS Compliant 6/6, Pb Free](#)
- 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)

Environmental Spec.

	<ul style="list-style-type: none"> <li>• Supports UDMA Mode 5, PIO Mode 4, and ATA/100</li> <li>• Compact Flash (40-pin connector, IDE 1, single channel) slot</li> </ul>
Floppy	<ul style="list-style-type: none"> <li>• 1 Floppy controller; 1.44 MB, 2.88 MB</li> </ul>
LAN	<ul style="list-style-type: none"> <li>• 2x RJ45 LAN ports</li> </ul>
USB	<ul style="list-style-type: none"> <li>• 4x USB rear ports</li> <li>• 1x USB internal header</li> <li>• 6 total USB ports, 2.0 Compliant / 1.1 Compliant</li> </ul>
Audio	<ul style="list-style-type: none"> <li>• AC97 Audio</li> </ul>
Keyboard / Mouse	<ul style="list-style-type: none"> <li>• PS/2 keyboard and mouse ports</li> </ul>
Serial Port / Header	<ul style="list-style-type: none"> <li>• 1 Fast UART 16550 serial port</li> <li>• 1 Fast UART 16550 serial header</li> </ul>
Parallel Port	<ul style="list-style-type: none"> <li>• 1 ECP / EEP parallel port</li> </ul>

## OS Compatibility

- Please see our [OS Compatibility Chart](#)

## Parts List

### Parts List

	Part Number	Qty	Description
<b>X7DA8</b>	MBD-X7DA8-O	1	X7DA8 Motherboard
<b>Manual(s)</b>	<a href="#">MNL-0831</a>	1	<a href="#">Motherboard Manual for X7DA8</a>
	MNL-0669	1	Ultra 320 SCSI Manual
<b>I/O Cables</b>	CBL-0022L	1	ATX Floppy Cable
	CBL-0034-U320	1	LVD, Ultra320 SCSI Cable
	CBL-0036L-02	1	ATA 66/100 IDE LP Cable
	CBL-0044L	4	2ft. Amphenol, SATA Cable
<b>Driver Disk</b>	CDR-X7	1	Version 1.00 CD or later
<b>I/O Shield</b>	MCP-260-00002-00	1	Motherboard I/O Shield

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