X7DBR-8+

For OEMs Only - Minimum quantity required. Please contact your Supermicro Sales representative for additional details



- 16-DIMM Xeon Dual-Core Blackford SCSI / SATA ServerBoard

Key Features

1. Quad & Dual Core Intel® 64-bit Xeon® Support, 667 / 1066 / 1333MHz FSB
2. Intel® 5000P (Blackford) Chipset
3. Up to 64GB DDR2 667 & 533 SDRAM Fully Buffered DIMM (FB-DIMM)
4. Intel® (ESB2/Gilgal) 82563EB Dual-port Gigabit Ethernet Controller
5. Adaptec AIC-7902 Dual Channel Ultra320 SCSI
6. 6x SATA 3.0Gbps Ports via ESB2 SATA Controller
7. Left Universal Slot:
   1 64-bit 133MHz PCI-X OR
   2 (x8) PCI-Express
8. Right Slot:
   1 (x8) PCI-Express Slot (for 2U Only)
9. Zero-Channel RAID Support
10. ATI ES1000 Graphics with 16MB video memory
11. IPMI 2.0 (SIMSO) Socket

Links & Resources

- Tested Memory List
- Motherboard Manual
- Update Your BIOS
- Download the Latest Drivers and Utilities

RoHS 5/6 Solder Exempt

Specifications

Product SKUs

MBD-X7DBR-8+-B	X7DBR-8+ (Bulk Pack)

Physical Stats

Form Factor	Enhanced Extended ATX
Dimensions	13.68" x 13" (34.7cm x 33cm)

Processor/Cache

CPU	Dual 771-pin LGA Sockets Supports up to two **Intel® 64-bit Xeon®** processor(s) of the same type below: **Quad-Core Intel® Xeon®Processor 5400/5300 sequence (Harpertown /Clovertown processor)** up to 3.16 GHz **Dual-Core Intel® Xeon®Processor 5200/5100/5000 sequence (Wolfdale /Woodcrest/Dempsey processor)** up to 3.40 GHz
System Bus	1333 / 1066 / 667 MHz system bus
Operating System Software	Supports 64-bit Operating Systems Supports 32-bit Operating Systems

System Memory

Memory Capacity	Sixteen 240-pin DIMM sockets Supports up to 64 GB 667 / 533MHz DDR2 ECC FB-DIMM memory Dual branch memory bus Memory must be populated in pairs Memory Mirroring supported
Memory Type	667 / 533MHz FB-DIMM (Fully Buffered DIMM) ECC DDR2 SDRAM 72-bit, 240-pin gold-plated DIMMs
DIMM Sizes	512 MB, 1GB, 2GB, 4GB
Memory Voltage	1.8V only 1.5V(AMB)
Error Detection	Corrects single-bit errors Detects double-bit errors (using ECC memory) Supports Intel® x4 and x8 Single Device Data Correction (SDDC)

On-Board Devices

Chipset	Intel® 5000P (Blackford) chipset MCH + PXH-V + ESB2
SCSI	Adaptec AIC-7902 Controller Dual-Channel Ultra320 SCSI (Host RAID only supports 4 drives) Host RAID 0, 1, & 10 support
RAID	Support for Zero-Channel RAID with **Supermicro All-In-One-ZCR Card**: AOC-SOZCR1 Optional: (Card not included) RAID 0, 1, 5, 10
SATA	Intel ESB2 SATA 3.0Gbps Controller RAID 0, 1, 5, 10 support (Windows Only) RAID 0, 1, 10 support (Linux)
IPMI	Support for Intelligent Platform Management Interface v.2.0 200-pin IPMI SO-DIMM Socket (SIMSO) (Optional: AOC-SIMSO(+))
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
Graphics	ATI ES1000 controller with 16 MB of video memory
Super I/O	Winbond 83627HG 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(Compact Flash) Card Compact Flash (40-pin connector, IDE 1, single channel) slot Supports UDMA Mode 5, PIO Mode 4, and ATA/100
Floppy	1 Floppy controller; 1.44 MB, 2.88 MB
LAN	2x RJ45 LAN ports
USB	2x USB rear ports 2x USB internal headers Total 6 USB 2.0 Compliant / 1.1 Compliant
VGA	1x VGA Port
Keyboard / Mouse	PS/2 keyboard and mouse ports
Serial Port / Header	1 Fast UART 16550 serial port 1 Fast UART 16550 serial header

Chassis (Optimized for X7DBR-8+)

1U Chassis	CSE-815S-700V CSE-815S-560
Important Chassis Notes	To ensure system stability, a 560W (minimum) ATX power supply [4-pin (+12V), 8-pin (+12V) and 24-pin are required]

Expansion Slots (For 1U Systems)

Left Universal Slot	1 64-bit 133MHz PCI-X OR 1 (x8) PCI-e Slot

Expansion Slots (For 2U Systems)

Left Universal Slot	1 64-bit 133MHz PCI-X OR 2 (x8) PCI-e Slots OR 3 64-bit 133MHz PCI-X
Right Slot	1 (x8) PCI-e Slot (For 2U Only)

System BIOS

BIOS Type	8Mb Flash EEPROM with Phoenix® BIOS
BIOS Features	Plug and Play (PnP) SMBIOS 2.3 DMI 2.1 PCI 2.2 PCI-X 1.0 ACPI 1.0 USB Keyboard support Hardware BIOS Virus protection

Management

Software	Optional IPMI (Intelligent Platform Management Interface) 2.0 SuperDoctor® III Watch Dog NMI
Power Configurations	ACPI Power Management Main Switch Override Mechanism Wake-On-Ring (WOR) header Wake-On-LAN (WOL) header Power-on mode for AC power recovery Internal / External modem remote ring-on

PC Health Monitoring

Voltage	Monitors for CPU Cores, +3.3V, +5V, ±12V, +1.2V, 1.5V, +5V Standby, VBAT 5-Phase-switching voltage regulator with auto-sense from 0.8375V-1.60V
FAN	Total of five 3-pin fan headers supporting up to 5 fans 5x fans with tachometer status monitoring Status monitor for speed control Low noise fan speed control
Temperature	Monitoring for CPU and chassis environment CPU thermal trip support Thermal Control for 5x fan connectors PSU I^2C temperature sensing logic Thermal Monitor 2 (TM2) support
LED	CPU / System Overheat LED
Other Features	Chassis intrusion detection Chassis intrusion header SDDC Support

Operating Environment / Compliance

RoHS	RoHS 5/6 RoHS Compliant 5/6, Server Exemption
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)

OS Compatibility

- Please see our OS Compatibility Chart

Regulatory

FCC	Passed to meet FCC standard requirement

Note: For optimized or compatible chassis, additional parts may be required, please check with Supermicro sales rep

Parts List

Standard Bulk Package

	Part Number	Qty	Description
X7DBR-8+	MBD-X7DBR-8+-B	1	X7DBR-8+ Motherboard
Manual(s)	MNL-0863	1	Motherboard Manual for X7DBR-8+
I/O Cables	CBL-0022L	1	ATX Floppy Cable
	CBL-0036L-03	1	ATA 66/100 IDE LP Cable
Driver Disk	CDR-X7 1.01	1	Version 1.01 CD or later

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

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