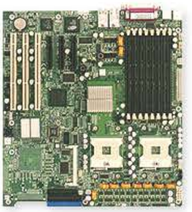
X6DHE-G2



Key Features

1. Dual Intel® 64-bit Xeon® Support, up to 3.80 GHz, 800 MHz FSB
2. Intel® E7520 (Lindenhurst) Chipset
3. Up to 16GB DDR2 400 SDRAM
4. Intel® 82546GB Dual-port Gigabit Ethernet Controllers
5. 2x SATA Ports via ICH5R Controller
6. 2 (x8) & 1 (x4) PCI-Express, 1x 64-bit 133MHz PCI-X, 2x 64-bit 100MHz PCI-X
7. IPMI 2.0 Socket
8. ATI RageXL 8MB Graphics

Links & Resources

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

Specifications

Product SKUs

MBD-X6DHE-G2-O	X6DHE-G2 (Standard Retail Pack)
MBD-X6DHE-G2-B	X6DHE-G2 (Bulk Pack)

Physical Stats

Form Factor	Extended ATX
Dimensions	12" x 13.05" (30.5cm x 33.2cm)

Processor/Cache

CPU	Dual 604-pin FC-mPGA4 Sockets Supports up to two Intel® 64-bit Xeon® processor(s) of the same type below: Xeon (Nocona) CPU with 1MB L2 Integrated Advanced Transfer Cache, up to 3.60 GHz Xeon (Irwindale) CPU with 2MB L2 Integrated Advanced Transfer Cache, up to 3.80 GHz Xeon LV (Low Voltage) CPU, up to 2.8 GHz
System Bus	800 MHz system bus
Operating System Software	Supports 64-bit Operating Systems Supports 32-bit Operating Systems OS Compatibility Chart

System Memory

Memory Capacity	Eight 240-pin DIMM sockets Supports up to 16 GB DDR2 400MHz memory Dual channel memory bus Memory must be populated in pairs Single-rank modules are recommended for 6+ DIMM support
Memory Type	DDR2 400MHz buffered (registered) ECC SDRAM 72-bit, 240-pin gold-plated DIMMs
DIMM Sizes	256 MB, 512 MB, 1GB, 2GB
Memory Voltage	1.8V only
Error Detection	Corrects single-bit errors Detects double-bit errors (using ECC memory) Supports Intel® x4 Single Device Data Correction (SDDC)

On-Board Devices

Chipset	Intel® E7520 chipset MCH + ICH5R + PXH +82546GB
SATA	ICH5R SATA Controller RAID 0, 1, JBOD support
IPMI	Support for Intelligent Platform Management Interface v.2.0 (Optional: AOC-IPMI20-E)
Network Controllers	Intel® 82546GB Dual Port Gigabit Controller Supports 10BASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output
Graphics	ATI Rage XL SVGA PCI video controller with 8 MB of video memory
Super I/O	National 87427 chip

System BIOS

BIOS Type	8Mb Flash EEPROM with Phoenix® BIOS
BIOS Features	Plug and Play (PnP) SMBIOS 2.3 DMI 2.1 ACPI 1.0 Fan Speed Control

Chassis (Optimized for X6DHE-G2)

2U Chassis	SC823i-550LP SC823i-R500RC
Tower / 4U Rackmount	SC743i-R760 SC743i-650
Important Chassis Notes	To ensure system stability, a 420W (minimum) ATX power supply [4-pin (+12V), 8-pin (+12V) and 24-pin are required] Chassis must have CPU mounting holes required for 800MHz FSB CPUs with this serverboard.

Expansion Slots

PCI-Express	2 (x8) PCI-e slots 1 (x4) PCI-e slot
PCI-X	1x 64-bit 133MHz PCI-X (3.3V) slot 2x 64-bit 100MHz PCI-X (3.3V) slots

Input / Output

Serial ATA	Two Serial ATA ports Two SATA hard drives supported
IDE	Dual EIDE channels support up to four UDMA IDE devices Supports UDMA Mode 5, PIO Mode 4, and ATA/100
Floppy	1 Floppy controller; 1.44 MB, 2.88 MB, 3-mode support
LAN	2x RJ45 LAN ports
USB	2x USB rear ports 3x USB internal headers 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
Parallel Port	1 ECP / EEP parallel port

Management

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

PC Health Monitoring

Voltage	Monitors for CPU Cores, +3.3V, +5V, ±12V & +3.3V Standby CPU Core 3-Phase-switching voltage regulator with auto-sense from 0.8375V-1.6V
FAN	Total of four 4-pin and four 3-pin fan headers 8x fans with status monitoring Status monitor with firmware/software on/off control Low noise fan speed control 4x Pulse Width Modulated (PWM) fan connector
Temperature	Monitoring for CPU and chassis environment CPU thermal trip support Thermal Monitor 2 support
LED	CPU Overheat LED System Overheat LED Suspend-state indicator LED
Other Features	Chassis intrusion detection Chassis intrusion header SDDC

OS Compatibility

- Please see our OS Compatibility Chart

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

Parts List

Parts List

	Part Number	Qty	Description
X6DHE-G2	MBD-X6DHE-G2-O	1	X6DHE-G2 Motherboard
Manual(s)	MNL-0727	1	Motherboard Manual for X6DHE-G2
I/O Cables	CBL-0010L-01	1	9-pin Serial Port Cable
	CBL-0022L	1	ATX Floppy Cable
	CBL-0036L-02	1	ATA 66/100 IDE LP Cable
	CBL-0044L	1	2ft. Amphenol, SATA Cable
	CBL-0083	1	-
Driver Disk	CDR-INTC 1.20	1	Version 1.20 CD or later
I/O Shield	CSE-PT07L	1	Motherboard I/O Shield

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

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