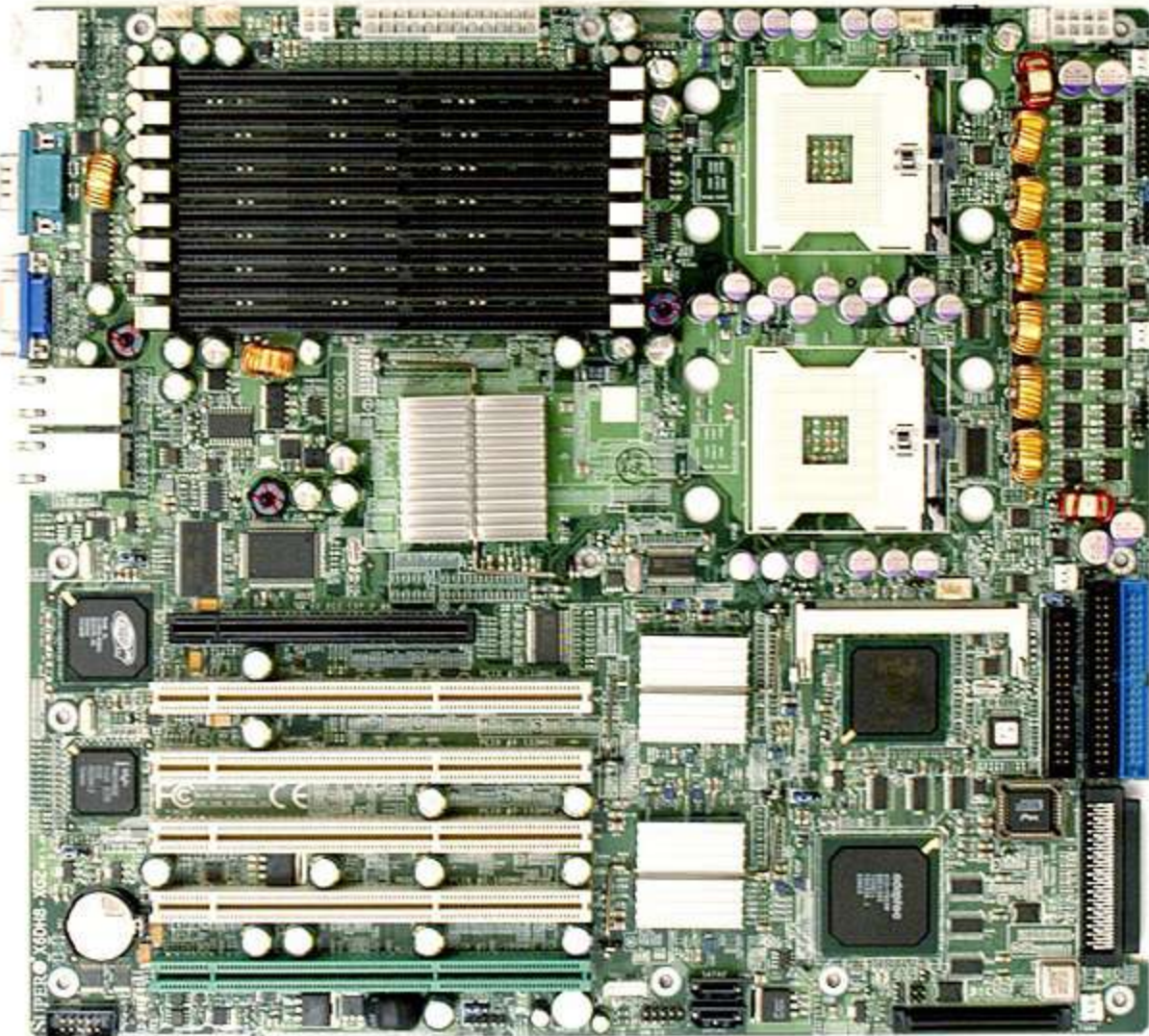


X6DH8-XG2



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. Adaptec AIC-7902 Dual Channel Ultra320 SCSI
6. 2x SATA Ports via ICH5R Controller SATA Controller
7. 1 (x8) PCI-Express on (x16), 3x 64-bit 133MHz PCI-X, 2x 64-bit 100MHz PCI-X
8. Zero-Channel RAID Support
9. ATI RageXL 8MB Graphics
10. IPMI 2.0 Socket

Specifications

MBD-X6DH8-XG2-O	• X6DH8-XG2 (Standard Retail Pack)
MBD-X6DH8-XG2-B	• X6DH8-XG2 (Bulk Pack)
Physical Stats	
Form Factor	• Extended ATX
Dimensions	• 12" x 13.05" (30.5cm x 33.2cm)
Processor/Cache	
CPU	<ul style="list-style-type: none"> • Dual 604-pin FC-mPGA4 Sockets • Supports up to two Intel® 64-bit Xeon® processor(s) of the same type below: <ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Supports 64-bit Operating Systems • Supports 32-bit Operating Systems • OS Compatibility Chart
System Memory	
Memory Capacity	<ul style="list-style-type: none"> • Eight 240-pin DIMM sockets • Supports up to 16 GB DDR2 400 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	<ul style="list-style-type: none"> • Corrects single-bit errors • Detects double-bit errors (using ECC memory) • Supports Intel® x4 Single Device Data Correction (SDCC)
On-Board Devices	
Chipset	<ul style="list-style-type: none"> • Intel® E7520 chipset • MCH + ICH5R + PXH +82546GB
SATA	<ul style="list-style-type: none"> • ICH5R SATA Controller • RAID 0, 1, JBOD support
SCSI	<ul style="list-style-type: none"> • Adaptec AIC-7902 Controller • Dual-Channel Ultra320 SCSI (Host RAID only supports 4 drives) • Host RAID 0, 1, 10, JBOD support
RAID	<ul style="list-style-type: none"> • Support for Zero-Channel RAID • Optional: (Card not included)
IPMI	• Support for Intelligent Platform Management Interface v.2.0 (Optional: AOC-IPMI2.0-E)
Network Controllers	<ul style="list-style-type: none"> • 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
Input / Output	
Serial ATA	<ul style="list-style-type: none"> • Two Serial ATA ports • Two SATA hard drives supported
IDE	<ul style="list-style-type: none"> • 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
LAN	• 2x RJ45 LAN ports
USB	<ul style="list-style-type: none"> • 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 Ports	• 2 Fast UART 16550 serial ports

Chassis (Optimized for X6DH8-XG2)

2U Chassis	<ul style="list-style-type: none"> • SC823S-550LP • SC823S-R500LP
3U Chassis	<ul style="list-style-type: none"> • SC833S-R760 • SC833S-550 • SC933S1-R760 • SC933S2-R760
Tower / 4U Rackmount	<ul style="list-style-type: none"> • SC743S1-R760 • SC743S1-650 • SC742S-420 • SC742S-500 • SC742S-600 • SC942S-600 • SC942R-R760
Important Chassis Notes	<ul style="list-style-type: none"> • 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	• 1 (x8) on a (x16) PCI-E slot
PCI-X	<ul style="list-style-type: none"> • 3x 64-bit 133MHz PCI-X (3.3V) slots • 2x 64-bit 100MHz PCI-X (3.3V) slots
System BIOS	
BIOS Type	• 8Mb Flash EEPROM with Phoenix® BIOS
BIOS Features	<ul style="list-style-type: none"> • Plug and Play (PnP) • SMBIOS 2.3 • DMI 2.1 • ACPI 1.0 • Fan Speed Control
Management	
Software	<ul style="list-style-type: none"> • Optional IPMI (Intelligent Platform Management Interface) 2.0 • SuperDoctor® III • Watch Dog • NMI
Power Configurations	<ul style="list-style-type: none"> • ACPVAPM 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	<ul style="list-style-type: none"> • Monitors for CPU Cores, +3.3V, +5V, ±12V & +5V Standby • CPU Core 3-Phase-switching voltage regulator with auto-sense from 0.83V-0.63V
FAN	<ul style="list-style-type: none"> • 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 • Pulse Width Modulated (PWM) fan connector
Temperature	<ul style="list-style-type: none"> • Monitoring for CPU and chassis environment • CPU thermal trip support • Thermal Monitor 2 support
LED	<ul style="list-style-type: none"> • CPU Overheat LED • System Overheat LED • Suspend-state indicator LED
Other Features	<ul style="list-style-type: none"> • Chassis intrusion detection • Chassis intrusion header • SDCC
OS Compatibility	
• Please see our OS Compatibility Chart	

Parts List

Parts List	Part Number	Qty	Description
X6DH8-XG2	MBD-X6DH8-XG2-O	1	X6DH8-XG2 Motherboard
Manual(s)	MNL-0737	1	Motherboard Manual for X6DH8-XG2
	MNL-0669	1	Ultra 320 SCSI Manual
I/O Cables	CBL-0010L-01	1	9-pin Serial Port Cable
	CBL-0022	1	ATX Floppy Cable
	CBL-0034-U320	1	LVD, Ultra320 SCSI Cable
	CBL-0036-02	1	ATA 66/100 IDE LP Cable
	CBL-0044L	1	2ft. Amphenol, SATA Cable
Driver Disk	CBL-0083	1	2-Port USB Cable
	CDR-INTC 1.20	1	Version 1.20 CD or later
I/O Shield	CSE-PT7	1	Motherboard I/O Shield

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

Compatibility Level: **RECOMMENDED**

Description
This is a "Recommended" motherboard / chassis combination. Although an "Optimized" level is a better choice, the "Recommended" combination is the next best match. The X6DH8-XG2 fits suitably in the SC742S-500 chassis. No accessories is required.

Recommended Heatsinks / Adjustments:

Part #	Qty	Description / Comment
SNK-P0008A	2	Active 3-Wire Copper Heatsink (For 3U Chassis and Above) Comment: Recommended Chassis Fan Speed BIOS Setting: 1. Disabled (Full Fan Speed @ 12V) or 2. 3-pin (Server)

Advantages:

- 4U / Tower
- (3 + 4) Hot-swap SCA Drive Bays with SAF-TE
- Cost-Effective
- 500W Triple Redundant Power Supply (2 + 1)

Compatible Chassis: SC742S-500

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