SE440BX-2

Intel® Pentium® III processor or Pentium II processor-based minitower

Pentium® III processor or Pentium II processor and 82440BX AGPset platform with AC97 audio

The SE440BX-2 is a second-generation motherboard designed to ease transition from the original SE440BX. With 100-MHz system bus, AGP, and support for the latest Intel processors, the SE440BX-2 provides power for the most demanding software applications. With an AC97 compliant audio solution, the SE440BX-2 meets the hardware requirements for PC98. The Yamaha DS1-L AC97 audio solution delivers improved sound quality and full Sound Blaster Pro* compatibility, and supports up to 32 simultaneous voices of wavetable synthesis in hardware.

Superior System Performance

The 100-MHz bus and 100-MHz SDRAM optimize system performance with Pentium® III or Pentium II processors. The SE440BX-2 also provides graphics performance improvements. The 82440BX AGPset includes AGP bus improvements and supports the 100-MHz system bus. The result is better 3-D performance and improved texture rendering for corporate applications like data visualization and web-authoring tools and consumer applications like games and digital imaging.

Enhanced Manageability

The SE440BX-2 includes a hardware manageability ASIC and BIOS support for DMI v2.0, LANDesk Service Agent (LSA), and ACPI. The system power supply provides 5 V standby at up to 720 mA to support remote wake-up over a LAN. When integrated with a network card that supports remote wake on LAN, the SE440BX-2 system complies with the Wired for Management (WfM) 1.1 specification. This allows IT organizations to remotely monitor system conditions, and simplifies asset management, new system setup, and off-hours maintenance for lower total cost of ownership.

Expandable ATX system

The SE440BX-2 minitower is an excellent building block for a wide range of OEM applications. Six expansion slots and six peripheral bays provide plenty of room to support complex system configurations, and the 160 W power supply will support a fully loaded system. The ATX 2.01 compliant minitower chassis is designed for ease of use. No tools are required for chassis access, making integration, end-user upgrades, and service easier. With the top and side covers removed, memory sockets and add-in card slots are readily accessible.

System Features	Benefits
• Pentium® III processor or Pentium II processor	• Intel's highest level of computing power available today for the desktop
• Intel 82440BX AGPset	• 100-MHz system bus, AGP, and SDRAM for improved system performance
• AGP connector	• High speed, dedicated bus for improved 3-D graphics performance
• Integrated Yamaha DS1-L PCI audio	• Improved audio quality with full Sound Blaster Pro* compatibility
• Three 168-pin DIMM sockets	• Increased memory configuration flexibility, supports up to 768 MB system memory
• Wired for Management (WfM) 1.1 compliant	• Remote system monitoring lowers total cost of ownership
• Six peripheral bays and six full length expansion slots	• Allows maximum expandability and configuration flexibility
• ATX 2.01 chassis and 160 W PSU	• Provides ease of integration and upgradeability

SE440BX-2 Minitower

PROCESSOR/CACHE

Processors Supported	Pentium® III processor or Pentium II processor; 512 KB of integrated L2 cache

MEMORY

Memory Capacity	3 168-pin DIMM sockets for up to 768 MB SDRAM (16 MB minimum)
Memory Type	Accepts Intel 4-clock, 72-bit ECC, or 64-bit non-ECC, unbuffered 66-MHz or 100-MHz SDRAM DIMMs
DIMM Sizes	16 MB, 32 MB, 64 MB, 128, 256 MB
Memory Voltage	3.3 volts

INTEL 82440BX AGPSET

Intel 82443BX – PCI/AGP Controller (PAC)
Supports 100 MHz or 66 MHz front side bus frequencies

Intel 82371EB – PCI-ISA/IDE Xcelerator (PIIX4E)
Dual channel enhanced IDE interface
- Supports up to 4 IDE devices
- Ultra DMA/33 and PIO Mode 3 & 4

USB controller

ACCELERATED GRAPHICS PORT (AGP)

Dedicated graphics port running at transfer rates of 66 MHz or 133 MHz

INTEGRATED PCI AUDIO

Digital Controller	Yamaha DS1-L Sound Blaster* Pro compatible 32-voice hardware wavetable
Analog CODEC	Analog Devices AD1819A 16-bit stereo, full duplex Phat* 3D stereo enhanced

INTEGRATED SUPER I/O

Controller	SMC FDC37C707
One Serial Port	Async, RS-232C, PC16550A compatible
Parallel Port	ECP and EPP support
Floppy Controller	1.44 MB, 2.88 MB, 3-mode support
Keyboard/Mouse	PS/2
APM/APC	Power On, Off, Sleep, Resume features
Infra Red Interface	IrDA 1.1 and Consumer IR compatible
Real Time Clock	Century Reg., +/- 13 min/yr accuracy

SYSTEM BIOS

BIOS Type	4 Mb Flash with Intel/Phoenix BIOS
Special Features	Plug and Play, IDE drive autoconfigure, ACPI 1.0 with Windows* 98, APM 1.2, boot from CD ROM support, ECC support, multilingual support

JUMPERS AND FRONT PANEL CONNECTORS

Connectors	Speaker, Reset, Power LEDs, HD LED, infrared, power on/off, sleep/resume
Jumpers	Single jumper block for normal, configure, and recovery modes.

EXPANSION SLOTS *(All full length)*

Description	One dedicated AGP slot Three dedicated PCI slots One dedicated ISA slot One shared slot for either ISA or PCI

HARDWARE MONITOR On-board sensors for remote monitoring of PS voltages, fan speed, and motherboard temperature

SYSTEM ATX Minitower Chassis

Height	14.76” (37.5 cm)
Width	8.94” (22.7cm)
Depth	17” (43.2 cm)
Weight (no peripherals)	17.7 lbs (8 kg)

Drive Bays

External 5.25”, 1/2 height (1.6”)	3
External 3.5”, 1/3 height (1.0”)	1*
Internal 3.5"; 1/3 height (1.0")	2

*Standard 3.5” floppy drive installed

Board Style ATX standard mounting holes
Integrated back panel I/O connectors include:
Two serial ports, one parallel port, PS/2 keyboard and mouse connectors, audio line in, line out, and microphone connectors, game port, and two USB connectors

Board size 7.75" x 12.0" (19.7 cm x 30.5 cm)
ATX information available at **http://www.teleport.com/~atx/**

POWER SUPPLY

160 W	Continuous power rating
200 W	Peak power rating
+3.3 V	Tolerance +5/-4%, maximum current 14.0 A
+5 V	Tolerance +5/-4%, maximum current 18.0 A
+5 V standby	Tolerance ± 5%, maximum current 0.72 A
+12 V	Tolerance ± 5%, maximum current 6.0 A
-5 V	Tolerance ± 10%, maximum current 0.3 A
-12 V	Tolerance ± 10%, maximum current 0.8 A

SYSTEM ENVIRONMENTAL LIMITS

Operating Temperature	+10 °C to +35 °C
Storage Temperature	-40 °C to +70 °C
Operating Shock	Half sine, 2 G, 11 msec
Unpackaged Vibration	.001 g^2/Hz@5 Hz, sloping to .01 g^2/Hz, 20-500 Hz
Acoustic Noise	45 dBA A-weighted noise at 1 meter

REGULATIONS

System marks/certifications:
$_{C}UL_{US}$, C-Tick, ERG GS, VCCI, CE marking, FCC, Canada ICES-003.

The system shall include a CB certificate and report for international compliance (no marking associated with CB scheme).

ORDERING INFORMATION

For configurations available in your area, please contact your Intel field sales representative.
Reference Intel’s web site: **http://www.intel.com**