Product Brief

Intel® SR440BX Motherboard for Intel® Pentium® III and Pentium® II Processors

The Intel® SR440BX motherboard supports Intel Pentium® III and Pentium® II processors, providing system integrators with a performance system solution that enables a powerful Internet and multimedia experience. The µATX SR440BX motherboard features high-end, integrated components, such as the award-winning nVidia* TNT* 2X AGP 16 MB graphics and Creative Labs* PCI SoundBlaster* audio.

Performance System Solutions for Mainstream Users.

The SR440BX motherboard enables system integrators to build Pentium III and Pentium II processor-based performance systems at competitive price points. Integrators can save on overall system costs by building solutions around the SR440BX motherboard instead of separately purchasing a motherboard, a comparable 16 MB high-end graphics solution and a PCI audio solution. The µATX form factor allows integrators an additional opportunity to minimize total system integration costs. The SR440BX motherboard offers slot flexibility with three PCI slots plus one additional shared PCI/ISA slot so integrators can maintain flexibility with a µATX design.

Make the Most of the Internet.

The SR440BX motherboard is designed for users to make the most of the Internet through the Pentium III processor. Multimedia, graphics and gaming applications come alive when run on a SR440BX motherboard. Plus, with high-end integration features, the SR440BX motherboard gives users a powerful total system experience for taking advantage of the advanced multimedia and streaming capabilities the new Pentium III processor delivers.

Features	Benefits
Supports Intel® Pentium® III processors	Pentium III processors 500 MHz and 450 MHz
Supports Intel® Pentium® II processors	Pentium II processors 233 MHz to 450 MHz
Supports Intel® Celeron™ processors	Celeron "242-Contact Slot Connector" processors 300A MHz to 400 MHz
Intel® 82440BX AGPset	Proven design supports both 66-MHz and 100-MHz system bus components
NVidia* TNT* 2X AGP, 16 MB SDRAM, 128-bit graphics	Award-winning performance, integrated graphics with 128-bit wide arrangement
Creative Labs* SoundBlaster* Audio PCI 64 V*	Excellent sound. PCI design, support for downloadable wavetable, 3D positional audio
Two 168-pin DIMM sockets	Flexibility for support up to 512 MB of SDRAM
Dual USB connectors	Expand and simplify connectivity, while enabling new peripherals
Ultra ATA	Faster disk I/O with improved data integrity
Three PCI, plus one additional shared PCI/ISA slot	Expansion slots for custom system configurations and future add-in card upgrades
microATX form factor	Provides backward compatibility with standard ATX2.01 chassis for easy integration and lower overall system cost
Three year limited warranty	Expanded investment protection

The boxed Intel® SR440BX motherboard includes:

- SR440BX motherboard with integrated nVidia* TNT* 2X AGP, 16 MB SDRAM graphics and integrated Creative Labs* SoundBlaster* PCI 64 V* audio
- ATX compliant I/O shield
- One S.E.P.P. retention mechanism for the Intel® Pentium® III and Celeron™ processors
- One S.E.C.C. retention mechanism for the Intel® Pentium® II processor
- One IDE cable, one floppy cable
- One Adjustable Standoff for backward compatibility to standard ATX chassis
- Quick Start Guide
- Configuration label, stickers, back-panel label and a battery warning label
- CD-ROM with software drivers, warranty and Product Guide

Technical Features at a Glance

Processor/Cache

Processors	Intel® Pentium® III processors 500 MHz and 450 MHz with 100 MHz system bus and 512 K of integrated L2 cache Intel® Pentium® II processors 450 MHz to 233 MHz with 66 MHz and 100 MHz system bus and 512 K of integrated L2 cache; Intel® Celeron™ processors 400, 366, 333 and 300A MHz with 66 MHz system bus and 128 K of integrated L2 cache. Supports "242-Contact Slot Connector" Celeron processors only.

Intel® Chipset

Intel® 82440BX AGPset	Intel® 82443BX PAC Intel® 82371EB PIIX4e

System Memory

Memory Capacity	Two DIMM sockets for up to 512 MB SDRAM (16 MB minimum)
Memory Type/Size	Supports Intel® 4-clock, 72-bit ECC or 64-bit non-ECC, unbuffered 66-MHz or 100-MHz DIMMs
DIMM Sizes	16 MB, 32 MB, 64 MB, 128 MB, 256 MB
Memory Voltage	3.3V only

Integrated Graphics

NVidia* 'Riva TNT*' 2X AGP, 16 MB SDRAM, 128-bit 3D wide arrangement graphics controller

Integrated Audio

Creative Labs* SoundBlaster* Audio PCI 64V* (ES 1373) with 64-voice software wavetable synthesis, compatible with SoundBlaster* Pro, Windows* Sound System and Roland* MPU-401*, supports Microsoft* DirectSound 3D, Ensoniq* 3D Positional Audio and Aureal* A3D*

Integrated PCI/ISA IDE Xcelerator

IDE	Two independent channels for four IDE devices PIO Mode 0, PIO Mode 3, PIO Mode 4, Ultra DMA and CD-ROM support
USB	Two stacked USB connectors

Integrated Super I/O

Controller	SMSC FDC37M807 Super I/O Controller
Serial Ports	Two FIFO serial ports
Async	RS-232C, PC16450/16C550A compatible
Parallel Port	Compatible, Bidirectional, ECP, EPP (IEEE 1284 compliant)
Floppy Controller	1.44 MB, 2.88 MB, 3-Mode support
Keyboard/Mouse	8042A Compatible Controller
Real Time Clock	Century Reg. ±13 min/yr accuracy
Intelligent Auto Power Management	Shadowed write-only registers for ACPI Compliance. Programmable wakeup event interface

System BIOS

BIOS Type	4 Mb bootblock Flash,AMI BIOS 4Mb Flash
Special Features	Plug and Play, IDE drive auto-configure, Advanced Power Management (APM) 1.2, ACPI 1.0, DMI 2.0 ECC/Parity support, LS120 support, Multilingual support

Jumpers and Front Panel Connectors

Connectors	Speaker, Reset, Sleep/Power LEDs, HD LED, infrared, power on/off, sleep/resume
Jumpers	Single jumper to set configuration mode for the BIOS Setup Program

Expansion Slots (all full length)

Description	Three dedicated PCI slots, plus one additional shared PCI/ISA slot

Mechanical

Board Style	microATX mounting holes and external connector placement
Board Size	9.6" x 9.6"

Baseboard Power Requirements

+3.3V	Tolerance ±5% .60A
+5V	Tolerance ±5% .70A
+5V	Tolerance ±5% .72A (standby)
-5V	Tolerance ±5% .01A
+12V	Tolerance ±5% .60A
-12V	Tolerance ±5% .10A

Environment

Operating Temp.	0°C to +55°C
Storage Temp.	-40°C to +70°C

Safety Regulations

U.S. and Canada	UL 1950—CSA 950-95, U.S. and Canadian recognition component marks
Europe	UL Classified to IEC 950
EMI/RFI reg.	***Intended for use in systems meeting the following EMI/RFI regulations:***
U.S.	FCC Class B (DofC—Cover off testing)
Canada	IC Class B
Europe	EU Class B (Res, Com, Light Industry)
Japan	VCCI, Class B (ITE)

Complies with U.S. CRF via EN55022 + 6 db in an open chassis and EU Directive 89/336/EEC via EN55022 and EN50082-1 in a representative chassis.

For the most current product information, visit Intel's Web site at:
channel.intel.com/business/ibp/boards/sr440bx.htm