

RC440BX Motherboard for the Intel® Pentium® II processor

Highly Integrated ATX Motherboard

Balanced platform solution for Pentium® II processors and the 82440BX AGPset

The RC440BX motherboard offers high levels of performance in a consumer desktop solution featuring the Pentium® II processor with a 100-MHz front-side bus and the 82440BX AGPset in a standard ATX motherboard. With on-board Creative Labs® PCI audio and nVidia® AGP graphics, the RC440BX motherboard is a fully featured high integration motherboard.



PRODUCT BRIEF

Maximum Expansion Slots

The RC440BX motherboard offers generous PCI/ISA expansion capabilities through 3 PCI, 3 ISA, and 1 shared PCI/ISA slots.

The motherboard's highly integrated design is complemented by the support of the maximum number of expansion slots available on an ATX platform.

The on-board hardware management ASIC, when coupled with a management application such as the Intel LANDesk® Client Manager, can provide early warning of impending system problems (such as a system fan failure).

The RC440BX motherboard features the 82440BX AGPset to support its high performance integrated AGP graphics solution. Additionally, the motherboard is fully SMBIOS 2.0 (System Management BIOS) compliant and offers support for ECC memory to guard against data corruption. Universal Serial Bus (USB) support assures compatibility with the latest high-performance or special-purpose peripherals.

Features

Benefits

Supports Pentium® II and Intel® Celeron™ processors

Flexible processor solutions for: Pentium II processor from 233 MHz to 450 MHz. Celeron processor from 266 MHz to 333 MHz.

Intel 82440BX AGPset

Supports both 66-MHz and 100-MHz system bus components

nVidia RIVA 128ZX* 2X AGP Graphics, 8 MB SDRAM, 64-bit

Exceptional integrated graphics with 64-bit wide arrangement

Creative Labs SoundBlaster* Audio PCI 64D*

PCI design, support for downloadable wavetable, 3D positional audio

Two 168-pin DIMM sockets

Flexibility for support up to 256 MB of SDRAM memory

Dual USB connectors

Expand and simplify connectivity while enabling new peripherals

3 PCI, 3 ISA, and 1 shared PCI/ISA slot

Maximum expansion slots for custom system configurations and future add-in card upgrades

Augmented 10-pack Option

Includes 10 I/O Shields, 10 Cable sets, 10 Retention Mechanisms, 10 CD ROMs, one quick start guide, and one passive heatsink support



Intel® RC440BX Motherboard

Processor/Cache

Processors Supported Pentium® II processors 233 MHz to 450 MHz with 512 KB of integrated L2 cache
Intel® Celeron™ processors 266 MHz to 333 MHz; 128 KB of integrated L2 cache on Celeron processors 333 MHz and 300A MHz

System Memory

Memory Capacity Two DIMM sockets for SDRAM meeting Intel 4-clock SDRAM specification for 66-MHz or 100-MHz SDRAM

Memory Type/Size Supports up to 256 MB (16 MB minimum) of 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

Memory Voltage 3.3V only

Integrated Accelerated Graphics Port (AGP)

nVidia® RIVA 128ZX* graphics with 8 MB SDRAM

AGP 2x runs at 133 MHz (with AC timing) Data throughput rate of up to 528 MB/sec (burst)

Integrated PCI Audio

Creative Labs® SoundBlaster® AudioPCI 64D*

Single interrupt design, AC'97 architecture

64 voice downloadable wavetable, with 3D positional audio support

Integrated PCI/ISA IDE Xcelerator

IDE Two independent channels for four IDE devices

PIO Mode 0, PIO Mode 3, PIO Mode 4, Ultra DMA-33 and CD-ROM support

USB Two stacked USB connectors

Integrated Super I/O

Controller SMC® 707

Serial Ports Two FIFO serial ports. Header on board for 2nd serial port.

Async, RS-232C, PC16450/16C550A compatible

Parallel Port Compatible, Bi-directional, EPP, ECP (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

APM/APC Power ON/OFF, Sleep/Resume features

IR Interface IrDA v1.1 compatible and Consumer IR Compliant System BIOS

System BIOS

BIOS Type 4 Mb Flash EEPROM with Intel/AMI® BIOS

Special Features Plug and Play, IDE drive auto-configure, ACPI and Advanced Power Management (APM) 1.2, SMBIOS 2.0 ECC/Parity support, Multilingual support

Intel Chipset

Intel 82440BX AGPset
Intel 82443BX PAC
Intel 82371EB PIIX4E

Jumpers and Front Panel Connectors

Connectors Speaker, Reset, Sleep/Power LEDs, HDD LED, infrared, power on/off, sleep/resume

Jumpers Single jumper to set configuration mode for the Set-up Program

Hardware Monitor ASIC

Features On-board sensors to monitor power supply voltages, fan speeds, motherboard temperature and chassis intrusion

Expansion Slots (*all full length*)

Description Three dedicated PCI, three dedicated ISA, one shared PCI/ISA

Mechanical

Board Style ATX mounting holes and external connector placement

Board Size Full ATX 9.6" x 12.0"

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

Regulations

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 regulations *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.



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