PCA-6275

Dual Pentium® II/III Processor-based PCI/ISA-bus CPU Card

Accommodates three DIMM modules, up to 768 MB

ATX power control connector

Intel 82440BX PCI set

Bi-directional parallel port

Metal bracket for stability

USB ports

COM1 connector

COM2 connector

PS/2 mouse & keyboard connector

CPU temperature sensor connector

Intel Pentium® II/III processor up to 500+ MHz

FDD connector

EIDE connector
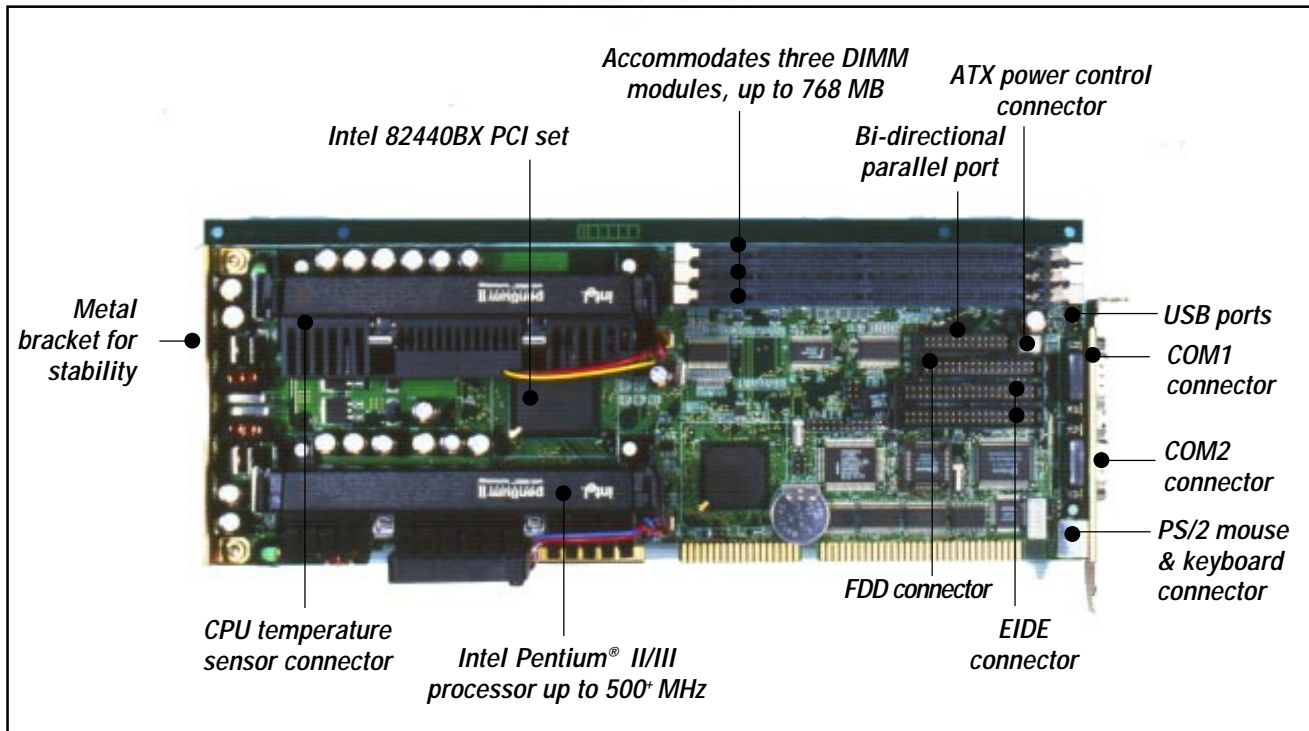
Introduction

The PCA-6275 is a high-performance dual Pentium® II/III CPU card. Using Intel's 82440BX chipset, the PCA-6275 is able to support up to 500+ MHZ of processing speed. This makes it an ideal choice for applications that require extremely high performance, such as computer telephony.

Each CPU provides 512 KB on-chip L2 cache, eliminating the need for external SRAM chips. The PCA-6275 has two PCI EIDE interfaces (for up to four devices), and an FDD interface (for up to two devices). Other features include two RS-232 serial ports (16C550 UARTs with 16-byte FIFO or compatible), one enhanced parallel port (supports SPP/EPP/ECP), and support for two USB (Universal Serial Bus) ports. The PCI Bus Master IDE controller supports Ultra DMA/33 operation. This provides data transfer rates up to 33 MB/sec, and allows drive capacities up to 8.4 GB. System BIOS supports boot-up from IDE CD-ROM.

A backup of CMOS data is stored in the Flash memory, which protects data even after a battery failure. Also included is a 63-level watchdog timer, which resets the CPU or generates an interrupt if a program cannot be executed normally. This enables reliable operation in unattended environments.

Features

• Dual Intel Slot 1 architecture, supports 66/100 MHz FSB

• Pentium® II/III processors up to 500+ MHz

• Intel 82440BX PCI set

• Three DIMM sockets for SDRAM up to 768 MB, supports ECC

• Winbond 837810 to support on-board security; for monitoring CPU fan, voltage and temperature

• Award Flash BIOS

• On-board ATX power control connector to meet ACPI requirements

• Two enhanced IDE ports, supporting Ultra DMA/33, PIO Mode 4, and DMA Mode 2

• Two USB ports

• Two RS-232 serial ports

• One bi-directional parallel port, supports SPP/ECP/EPP

• One floppy port

• PCI V2.1 compliant

• PICMG 2.0 compliant

• Additional metal bracket to provide board stability for the Pentium® II/III processors

• CMOS backup battery 7 year lifetime

• ISA High Drive

Note: All features and specifications are subject to change without notice.

Year 2K Compliant

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Specifications

- **CPU:** Dual Intel Pentium® II/III up to 500+ MHz

- **BIOS:** Award Flash BIOS 2 MB

- **Green function:** Supports power management operation via BIOS. Activated by keyboard or mouse activity

- **Bus interface:** PCI/ISA bus, PICMG compliant

- **Data bus:** 64-bit

- **Bus speed:** PCI: 33 MHz
  ISA: 8 MHz

- **DMA channels:** 7

- **Interrupt levels:** 15

- **RAM:** Up to 768 MB in three available 168-pin DIMM sockets. Supports SDRAM PC100

- **Error correction (parity DRAM only):** Modules can detect multi-bit memory errors. Correction of 1-bit memory errors

- **PCI enhanced IDE hard disk drive interface:** Supports up to four IDE (AT bus) large (up to 8.4 GB) hard disk drives or other enhanced IDE devices. Supports PIO Mode 4 (16.67 MB/s data transfer rate) and Ultra DMA/33 (33 MB/s data transfer rate). BIOS enabled/disabled

- **Floppy disk drive interface:** Supports up to two floppy disk drives, 5¼" (360 KB and 1.2 MB) and/or 3½" (720 KB, 1.44 MB, and 2.88 MB). BIOS enabled/disabled. Also supports Japanese "Floppy 3" mode

- **Enhanced parallel port:** Configurable to LPT1, LPT2, LPT3 or disabled. Standard DB-25 female connector provided. Supports SPP/EPP/ECP

- **Serial ports:** Two RS-232 ports with 16C550 UARTs (or compatible) with 16-byte FIFO buffer. Supports speeds up to 115.2 Kbps. Ports can be individually configured to COM1, COM2 or disabled

- **Watchdog timer:** Can generate a system reset or IRQ11. The watchdog timer is programmable, with each unit equal to one second (63 levels). The program uses I/O ports hex 043h and 443h to control the watchdog timer

- **Keyboard and PS/2 mouse connector:** A 6-pin mini-DIN connector is located on the mounting bracket for easy connection to a keyboard or PS/2 mouse. An on-board keyboard pin header connector is also available

- **ISA High Drive:** Up to 64 mA

Mechanical and environmental specifications

- **Operating temperature:** 0 ~ 60° C (32 ~ 140° F)

- **Power supply voltage:** +5 V @ max. 11.2 A
  +12 V @ max. 1.0 A
  -12 V @ max. 0.5 A

- **Board size:** 338 x 122 mm (13.3" x 4.8")

- **Board weight:** 0.5 kg (1.2 lbs)

Ordering Information

❑ **PCA-6275-00A**
Dual Pentium® II/III processor-based PCI full-size CPU card

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