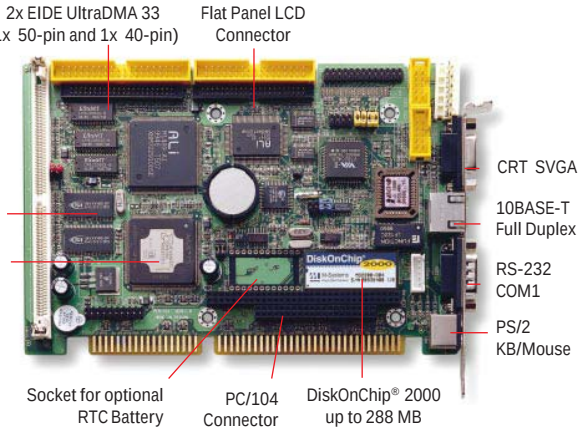
PIA-431

- Am5x86 P-75 installed 486DX5 at 133 Mhz
- LCD / CRT TP 6508Q, 32-bit PCI
- LAN 10 Mbps full duplex Realtek 8019A



AMD® Am5x86™ — Flat Panel / CRT SVGA, Ethernet and PC/104 Interface

General Specifications

CPU (installed)
AMD® Am5x86™ is an 486DX5-133 embedded CPU that easily outperforms an Intel Pentium 75. Jumper selectable speed (100/133) for ultra low power, low temperature operation

Chipset
ALi 1487, ALi 1489

BIOS
AWARD PCI/ISA PnP system BIOS

Green Function
power saving options supported in BIOS. DOZE / STANDBY / SUSPEND modes

Secondary Cache
128 KB Pipelined Burst SRAM

DRAM Memory
8~64 MB EDO RAM max, 8 / 16 / 32 MB surface mount (TSOP) and up to 32 MB additional EDO RAM in 72-pin SIMM socket

Bus Interface
ISA and PC/104 (speed 8.3 MHz)

PCI Enhanced IDE with Ultra DMA
supports 2 ports and up to 4 ATAPI devices, Ultra DMA transfer rates 33 MB/sec. One standard 40-pin IDE connector and one 44-pin IDE connector for 2.5" (laptop-size) HDD/Flash IDE drive including power

Watchdog Timer
128-level timer generates RESET or NMI when your application loses control over the system.

Real-time Clock
Standard onboard is a lithium battery while RTC clock is located in Ali chipset

Dallas DS-12B887 or compatible (factory option) with lithium battery backup for 10 years of data retention. CMOS data backup of BIOS setup and BIOS default.

High Speed Multi I/O

Chipset
ALi 5113

Serial ports
1 high speed RS-232C ports (COM1), 1 high speed RS-232C/422/485 port (COM2) jumper selectable. Both with 16C550 compatible UART and 16 byte FIFO with +5V / +12V power pins for POS

Floppy Disk Drive Interface
supports 2 floppy disk drives, 5¼" (360 KB or 1.2 MB) and 3½" (720 KB, 1.44 MB). BIOS enabled/disabled

Bidirectional Parallel Port
supports SPP, EPP and ECP mode. BIOS enabled/disabled

Keyboard and Mouse Connectors
external 6-pin mini DIN for PS/2 mouse, external 6-pin mini DIN for PS/2 Keyboard, onboard 5-pin header for AT Keyboard

Flash DiskOnChip®2000

Package
Single Chip Flash Disk in 32-pin DIP JEDEC

Capacity
2-288 MByte capacity

Data Reliability
ECC/EDC error correction

Memory Window
8 KByte

Network Interface

Chipset
Realtek 8019AS single chip

Type
10BASE-T, NE2000 compatible

Connectors, LEDs
RJ-45 on bracket with signalling LEDs 10BASE-T indicator, activity indicator both located on bracket

Display Controller

Chipset
TP 6508Q, 32-bit PCI

Memory
1 MB onboard

System Bus
32-bit PCI bus

Panel Data Bus
24-bit

Display
CRT and Flat Panel Mono/TFT/DSTN/EL

Compatibility
IBM VGA hardware

Environmental and Power

Power Requirements
single +5V @ 1.45 A (typical), ±12 V (onboard CPU with 8 MB EDO RAM)

Connectors
6-pin power source block

Board Dimensions
185 x 122 mm.

Board Weight
0.24 Kg

Operating Temperature
0 to 55°C (32 to 131°F)

Ordering

PIA-431/8 : Half-size ISA-bus Embedded 5x86-133 CPU Card with Flat Panel / CRT SVGA, Ethernet, DiskOnChip socket and 8 MB of surface mounted EDO DRAM onboard

PIA-431/16 : as above with 16 MB of surface mounted EDO DRAM onboard (OEM only)

PIA-431/32 : as above with 32 MB of surface mounted EDO DRAM onboard (OEM only)

(All above boards include a surface mounted AMD Am-5x86-133 CPU)

Note : all specifications are subject to change without notice