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PCA-6147

486 All-In-One CPU Card with Flash/ROM Disk

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Introduction

The PCA-6147 is an industrial grade 80486SX/DX/DX2/DX4 - 25/33/40/50/66/75/100 MHz all-in-one CPU card. It provides speed and performance in one compact package. An on-board DC-DC converter lets it directly support the DX4-100. You can configure the PCA-6147 for different CPUs simply by changing jumpers to adjust the clock speed. The PCA-6147 offers memory caching, disk-drive controllers, a watchdog timer and serial/parallel ports all in one packages. Its on-board POST diagnostic function makes it very easy to debug or setup. The PCA-6147's industrial grade construction allows it to withstand continuous operation in hard industrial environments at temperatures up to 140°F (60°C).

You can equip the PCA-6147 with any 486 CPU. In addition to the 486's 8 KB of on-chip cache memory the PCA-6147 includes an extra 256 KB of second level cache memory on-board. The card also has two serial ports, a parallel port, an IDE hard disk drive interface (which controls up to two hard disk drives) and a floppy disk controller (which supports up to two floppy disk drives).

An on-board watchdog timer can reset the CPU or generate an interrupt if a program cannot be executed normally due to EMI or a program bug. This allows secure operation in stand-alone or unattended environments.

Advantech designed the PCA-6147 with single-board-computer operations in mind. It features a three voltage power supply (+5 V, +12 V, -12 V), on-board support for a Flash/ROM disk (emulating a 360

KB/1.44 MB disk drive) and a connector for PC/104 modules.

The PCA-6147 provides four 72-pin SIMM (Single In-Line Memory Module) sockets for its on-board system DRAM. These sockets give you the flexibility to configure your system from 1 MB to 64 MB of DRAM using the most economical combination of SIMMs.

The PCA-6147's cache memory (8 KB on-chip and 256 KB second level) increases performance by breaking through the memory access bottleneck, allowing it to run at a Landmark (V1.14) speed greater than 200 MHz (80486DX-50 CPU).

Features

- 80486SX/DX/DX2/DX4 - 25/33/40/50/66/75/100 processor, AMI, BIOS
 - Full-size ISA bus CPU card, fully 486SX/DX/DX2/DX4 compatible
 - 8 KB on-chip and 256 KB 2nd-level cache memory
 - On-board POST (Power On Self Test) diagnostic LEDs
 - CPU voltage modules auto switch from 5 V to 3.3 V for use with the DX4 CPU
 - Built-in IDE (AT bus) hard disk drive interface, LBA mode supported
 - Two serial ports, one RS-232, one RS-232/422/485
 - One enhanced bidirectional parallel port. Supports EPP/ECP
 - 12-level watchdog timer (0.5 ~ 1008 sec.), jumperless setting
 - On-board keyboard connector
 - CMOS data backed up in EEPROM
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Specifications

- Under Construction
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Ordering Information

- **PCA-6147P** : 486 All-In-One CPU Card with Flash/ROM Disk
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