

# PROMETHEUS

## ZFX86 CPU, LOW POWER, BUILT-IN ETHERNET AND DATA ACQUISITION



- Low power 100MHz 486-class CPU with 32MB RAM
- Full featured, including 10/100 Ethernet, 4 serial, 2 USB, floppy, IDE and FlashDisk support
- Optional data acquisition featuring 16 16-bit A/D, 4 12-bit D/A, 24 DIO and two counter / timers
- Extremely rugged, with fanless operation from -40°C to +85°C

### DESCRIPTION

The space-saving Prometheus combines a full-featured 486 CPU with an intelligent, professional quality data acquisition circuit including analog I/O, digital I/O, and counter/timers, all on one board. Its low power consumption of 5 watts eliminates the need for a heat sink or fan and enables guaranteed operation over the range of -40 to +85°C. Prometheus has been successfully used in applications including satellites, military combat vehicles, and process control.

Built-in I/O includes a 10/100Mbps Ethernet port, 2 USB ports, 4 RS-232 ports with serial console capability, PS/2 keyboard/mouse, IDE port, parallel port, and floppy port. Prometheus also includes a real-time clock with backup battery and a programmable watchdog timer with both hardware and software retrigger capability.

For DOS applications, it includes a built-in flash file system that lets you store DOS operating system and application files right in the on-board flash memory without requiring any external storage. This saves time, reduces cost, and increases the ruggedness of your system.

### CPU SPECIFICATIONS

<b>Processor</b>	ZFMicro Devices ZFx86
<b>Memory</b>	32MB soldered
<b>Display</b>	None
<b>USB</b>	2 USB 1.1
<b>Serial</b>	4 RS232
<b>Networking</b>	10/100 Ethernet
<b>Mass Storage</b>	IDE, FlashDisk
<b>Keybd / Mouse</b>	PS/2
<b>Dimensions</b>	3.55"W x 3.775"H
<b>Input Power</b>	+5VDC±10%
<b>Operating temp</b>	-40°C to +85°C
<b>Weight</b>	3.0oz / 85g
<b>Analog Inputs</b>	16, 16-bit A/D
<b>Max Sample Rate</b>	100KHz
<b>Input Modes</b>	single ended, differential
<b>Input ranges</b>	±10V, ±5V, ±2.5V, ±1.25V, 0-10V, 0-5V, 0-2.5V, 0-1.25V,
<b>Analog Outputs</b>	4, 12-bit D/A
<b>Output ranges</b>	±10V, 0-10V
<b>Digital I/O</b>	24 lines, TTL
<b>Direction</b>	Programmable
<b>Counter / timers</b>	1 24-bit and 1 16-bit

## ORDERING INFORMATION

Part No.	Description
<b>PR-Z32-EA-ST</b>	Prometheus CPU with Ethernet and Data Acquisition, 32MB RAM
<b>PR-Z32-E-ST</b>	Prometheus CPU with Ethernet, 32MB RAM
<b>PR-Z32-LC-ST</b>	Prometheus CPU, 16MB RAM
<b>PR-Z32-EA-DK</b>	PR-Z32-EA-ST Development Kit
<b>PR-Z32-E-DK</b>	PR-Z32-E-ST Development Kit
<b>C-PRZ-Kit</b>	Prometheus Cable Kit

Prometheus is available in three versions:

EA-Full-featured model, with 10/100Mbps Ethernet and data acquisition

E-Includes Ethernet, no data acquisition

LC-No Ethernet or data acquisition; 16MB RAM; Extra low power consumption of 2 watts

## FOR MORE INFORMATION

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