

# PROMETHEUS LC

Low-Cost Low-Power ZFx86 PC/104 CPU



- ZFx86 100 MHz CPU
- 16MB RAM, 1MB Flash
- Disk-On-Board flash file storage built in
- 4 RS-232 Ports
- 2 USB 1.1 Ports
- -40 to +85°C operation

## DESCRIPTION

Our new Prometheus LC goes above and beyond the competition to provide an excellent solution for low-cost low-power-consumption applications. Its ZFx86 processor chip delivers 486-100MHz capability, enough for DOS, Linux, and QNX applications. The low 2-watt total power consumption provides extended life in battery-powered applications along with extra-low heat dissipation. System memory includes a generous 16MB RAM and 1MB Flash. A backup battery is included for the on-board real-time clock. The board operates over the extended temperature range of -40 to +85°C.

The extensive I/O includes 4 RS-232 ports (2 with 128-byte FIFOs) featuring up to 115.2kbaud data rates. The BIOS provides console redirection via COM1 or COM2, so you don't need a video board to communicate with the CPU. Two USB1.1 ports, 2 PS/2 ports, IrDA capability, and an IEEE1284 LPT port are also included. Both floppy and IDE drives are supported. The IDE port may be used with a notebook hard drive or a solid-state flashdisk module that mounts directly on the board. A watchdog timer with programmable time delay provides the capability to reset the system in the case of application failure. Both hardware and software retriggering are supported.

## 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

Diamond Systems Corporation  
1255 Terra Bella Avenue  
Mountain View, CA 94043  
Tel: 650-810-2500  
Fax: 650-810-2525  
[techinfo@diamondsystems.com](mailto:techinfo@diamondsystems.com)