

PRODUCT BRIEF

Ruggedized Industrial PC System for xPC Target™

PELICAN104

Key Features

- Fanless Pentium III processors from 350 MHz to 900MHz¹
- Fully compatible with xPC Target™ from The MathWorks™
- Fully customizable I/O
- Ethernet, Video, and PC104 interfaces
- 6-40V DC bus or mains input
- Compact form factor
- Multiple communication protocol support² (CAN, RS232, TCP/IP)
- Compact flash card for embedded OS and on-board data logging
- Data logging on host PC via add-on software
- Space for 8 PC104 form factor I/O cards
- On-board 256 Mb RAM
- Rugged aluminum chassis machined out of 6061 alloy providing shock and vibration resistance
- Temperature range of -40°C to +55°C

Optional components

- External floppy drive
- Add-on power driver board with H-bridges with current sense, low side drivers and general-purpose relays along with diagnostics feedback
- Custom add-on boards based on customer requirements for a combination of power and signal conditioning
- External high-speed data logger unit³
- Breakout boards and cables

Applications

- Rapid control prototyping
- Data acquisition
- Hardware-in-the-loop simulation and testing



PELICAN104 -RAPID PROTOTYPING HARDWARE

¹ Please call or e-mail for availability

² Support for CAN protocol via add-on card.

³ Flash disk based

Technical Details

Processor

- Support for 350 Mhz to 900 Mhz fanless processors
- Support for up to 256 Mb system RAM
- Integrated 10/100 dual-speed Ethernet
- Flat panel display, 2COM, 1 LPT integrated

Interfaces

- 2 CAN channels using CAN card/s
- Two RS232 channels
- One TCP/IP interface
- One floppy drive interface
- Internal PC104 interfaces for additional I/O cards

Memory

- 256Mb RAM
- Upto 2Gb compact flash card available

Analog I/O (Fully Customizable)

- 16-bit, 32 single ended mode or 16 differential mode analog inputs
- 12-bit, 4 channel analog outputs
- Programmable full scale range on inputs and outputs
- External A/D triggering and gating inputs

Digital I/O (Fully Customizable)

- 24 bi-directional lines with 8255 type driver
- 7 auxiliary I/O lines with programmable functions
- Buffered I/O
- One 16-bit timer counter
- User configurable pull-up/pull-down resistors

Physical Interface

- Multiple front panel connectors for signals and communications
- Front panel power
- Rear panel mouse, keyboard, video, parallel, and serial ports

Operating Conditions

- Temperature range of -40°C to +55°C
- RH 10-85% non-condensing
- 6 to 40VDC power input or AC mains input

Physical Characteristics

- Alloy 6061 aluminum chassis
- Shock and vibration resistant
- Size is approximately 320mm X 250mm X 85mm
- Top is removable for interior access and add-on card installation