DS-MPE-CAN2L



PCIe MiniCard I/O Expansion Module with Dual CANbus Ports



Description

The DS-MPE-CAN2L is a rugged, low cost dual port CAN 2.0 PCIe MiniCard module that is ideal for CAN expansion in embedded and OEM applications.

The module implements a CAN protocol bus controller that performs serial communications according to the CAN 2.0A and CAN 2.0B specifications. The protocol uses a multi-master bus configuration for the transfer of frames between nodes of the network and manages error handling with no burden on the host processor. Error features enabling diagnostics, maintenance, and system optimization. A listen-only mode enables CAN bus traffic analysis and automatic bitrate detection.

The DS-MPE-CAN2L product comes with the dual port PCIe MiniCard CAN module, two 6981182 can cables, and a mounting hardware kit.

Rugged Design

Extended temperature capability (-40°C to +85°C) enables the board to operate in environments with extreme temperature swings, such as vehicles or outdoor installations. In addition, the board may be customconfigured with 0-ohm resistors in place of jumper blocks for increased ruggedness in high-vibration environments.

- ♦ 2 CAN 2.0B ports
- 1Mbps maximum data rate
- ◆ 10 receive buffers for improved performance
- 10 transmit buffers plus 1 high priority transmit buffer
- ◆ 10 programmable acceptance filters
- Supports 11-bit and 29-bit identifiers
- ♦ 500V port-to-port and input-to-output isolation
- ♦ Driver supports dual-independent and dual-redundant modes
- ♦ Jumper selectable line termination and bias
- Latching connectors for increased ruggedness
- ♦ Support for Windows 7, XP, and Linux 2.6.xx
- ◆ PCIe MiniCard full size form factor (50.95 x 30mm)
- ◆ Operating temperature of -40°C to +85°C

Specifications

Number of Ports 2 CAN 2.0B ports

Data Rate 1Mbps Receive Buffers 10

1 high priority

Transmit buffers 10 standard priority

> Acceptance 10 programmable, 29-bit

Filters Identifiers Supports 11-bit and 29-bit

Dual-independent

Modes Dual-redundant

Isolation 500V port-to-port & input-to-output

Power input +3.3VDC ±5%

> Power 0.462W @ 3.3V

consumption

Windows 7, XP Software drivers

Linux 2.6.12, 2.6.27, 2.6.31, 2.6.32

Operating temperature

-40°C to +85°C

Operating humidity

5% to 95% non-condensing

Form Factor PCIe MiniCard full size

> **MTBF** 1,583,210 hours at 20°C

Dimensions 50.95mm x 30mm (2" x 1.18")

Weight 8.5g (0.3oz) Compliant

Ordering Information

DS-MPE-CAN2L Dual CAN 2.0 PCIe MiniCard Module

with cable kit

6981182 CANbus 2.0 cable