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 analysis features enabling diagnostics, system maintenance, and system optimization. A listen-only mode enables CAN bus traffic analysis and automatic bit-rate 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 custom-configured with 0-ohm resistors in place of jumper blocks for increased ruggedness in high-vibration environments.

Specifications

<table>
<thead>
<tr>
<th>Number of Ports</th>
<th>2 CAN 2.0B ports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Rate</td>
<td>1Mbps</td>
</tr>
<tr>
<td>Receive Buffers</td>
<td>10</td>
</tr>
<tr>
<td>Transmit Buffers</td>
<td>1 high priority</td>
</tr>
<tr>
<td>Acceptance Filters</td>
<td>10 programmable, 29-bit</td>
</tr>
<tr>
<td>Identifiers</td>
<td>Supports 11-bit and 29-bit</td>
</tr>
<tr>
<td>Modes</td>
<td>Dual-independent, Dual-redundant</td>
</tr>
<tr>
<td>Isolation</td>
<td>500V port-to-port &amp; input-to-output</td>
</tr>
<tr>
<td>Power input</td>
<td>+3.3VDC ±5%</td>
</tr>
<tr>
<td>Power consumption</td>
<td>0.462W @ 3.3V</td>
</tr>
</tbody>
</table>

Software drivers
Windows 7, XP
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)

RoHS
Compliant

Ordering Information

DS-MPE-CAN2L
Dual CAN 2.0 PCIe MiniCard Module with cable kit

6981182
CANbus 2.0 cable