

# DS-MPE-SER4M

## PCIe MiniCard I/O Expansion Module with 4 High Speed Serial Ports



- ◆ 4 high speed RS-232/422/485 serial ports
- ◆ Maximum baud rate: 1 Mbps RS-232 mode  
10Mbps RS-422/485 modes
- ◆ Protocols software or jumper selectable
- ◆ 256-byte TX/RX FIFO
- ◆ SP336 multi-mode transceivers support all modes
- ◆ +/-15KV ESD protection on all ports
- ◆ +3.3VDC input power
- ◆ Latching connectors for increased ruggedness
- ◆ Support for Windows XP and Linux 2.6.xx
- ◆ PCIe MiniCard full size form factor (50.95 x 30mm)
- ◆ Operating temperature of -40°C to +85°C

### Description

The DS-MPE-SER4M is a rugged, low cost 4-port high speed PCIe MiniCard module that is ideal for serial I/O expansion in embedded and OEM applications.

It offers four RS-232/422/485 serial ports in the PCIe MiniCard full size form factor with an extended operating temperature of -40°C to +85°C. Data rates on every port are up to 1Mbps in RS-232 mode, and 10Mbps in RS-422 and RS-485 modes. The board's protocols can be set with jumpers or programmatically selected with GPIO lines built into the UART and controlled via software. The serial I/O signals are provided on two miniature connectors with two ports per connector.

The DS-MPE-SER4M product comes with the 4-port PCIe MiniCard serial module, the CK-SER4M cable kit, and a hardware kit with jumpers and screws.

### 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

<b>Number of serial ports</b>	4
<b>Protocols</b>	RS-232/422/485 on each port
<b>Maximum baud rate</b>	RS-232: 1Mbps RS-422/485: 10Mbps
<b>UARTs</b>	16550 compatible
<b>FIFO</b>	256-byte TX/RX
<b>ESD protection</b>	+/- 15KV
<b>Power input</b>	+3.3VDC ±5%
<b>Power consumption</b>	0.462W @ 3.3V
<b>Software drivers</b>	Windows XP Linux 2.6.12, 2.6.27, 2.6.31, 2.6.32
<b>Operating temperature</b>	-40°C to +85°C
<b>Operating humidity</b>	5% to 95% non-condensing
<b>Form Factor</b>	PCIe MiniCard full size
<b>Dimensions</b>	50.95mm x 30mm (2" x 1.18")
<b>Weight</b>	8.5g (0.3oz)
<b>RoHS</b>	Compliant

### Ordering Information

<b>DS-MPE-SER4M</b>	4-port PCIe MiniCard Serial Module
<b>CK-SER4M</b>	Cable Kit with two dual port serial cables