DS-MPE-SER4M



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



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 $^{\circ}$ C to +85 $^{\circ}$ 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.

- ♦ 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

Specifications	
Number of serial ports	4
Protocols	RS-232/422/485 on each port
Maximum baud rate	RS-232: 1Mbps RS-422/485: 10Mbps
UARTs	16550 compatible
FIFO	256-byte TX/RX
ESD protection	+/-15KV
Power input	+3.3VDC ±5%
Power consumption	0.462W @ 3.3V
Software drivers	Windows 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
Dimensions	50.95mm x 30mm (2" x 1.18")
Weight	8.5g (0.3oz)
RoHS	Compliant

Ordering Information

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