Low Profile PCI Express 8-Port RS-422, RS-485 Serial Interface

Part: 7802e | **Model:** COMM+8.422.PCIE

The 7802e low profile PCI Express serial interface provides eight serial ports, each individually field-configurable for RS-422 or RS-485 communications. The board uses 16C954 UARTs with 128-byte Tx/Rx FIFOs that enables data rates to 921.6K bps for reliable high-speed communications in data intensive applications. This high-performance UART includes 9-bit framing support and is register compatible with legacy 16550 software applications. In addition, the board derives a 62.5 MHz clock from the PCI Express link. This ultra-high speed clock is divided by a flexible 8-bit clock prescalar with 1/8 steps to provide support for the widest range of standard and non-standard baud rates.

In RS-485 mode the board provides automatic control of the RS-485 driver in hardware, eliminating the need for application software control. This allows the 7802e to be used with standard serial communications applications and removes the risk of bus contention and data corruption. Additionally, RS-485 network termination, critical to robust multi-drop communication, can be selectively added to the circuit via DIP-switches.

Sealevel SeaCOM software driver and utilities make installation and operation easy using Microsoft Windows and Linux operating systems.

The 7802e is compatible with any low profile PCI Express slot. A standard profile bracket is also included. The board ships with a 36 inch cable that terminates to eight DB9M connectors.

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Features & Specifications
Low Profile PCI Express 8-Port RS-422, RS-485 Serial Interface

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Features

- Each port individually configurable for RS-422 or RS-485
- 16C954 buffered UARTs with 128-byte FIFOs
- Oscillator and clock prescalar support wide range of baud rates
- Supports 9-bit protocol framing
- Each port supports data rates to 921.6K bps
- RS-485 line termination, pull-up and pull-down resistors for each port are selectable via dipswitch
- RS-485 ECHO can be enabled/disabled via dipswitch
- Automatic RS-485 enable/disable in hardware
- PCI Express X1 compliant
- Compatible with all low profile PCI Express slots
- Included 36" cable terminates to eight DB9M connectors (Item# CA231)

Specifications

Operating Temperature	0°C to 70°C (32°F to 158°F)
Cable Connectors	DB9M (8)
Communications Chip	16C954
Dimensions	4.700" (L) x 2.536" (H)
Electrical Interface	RS-422, RS-485
Humidity Range	10 – 90% Relative Humidity, Non-Condensing
Host Interface(s)	PCI Express
Max Data Distance	4000 feet
Max Data Rate	921.6K bps
UART Series	950 UART
Board Connector	MDB68F
PC Bracket	Low Profile
# of Ports	8
RoHS Compliant	Yes
Serial Connector(s)	DB9M
Storage Temperature	-50°C to 105°C (-58°F to 221°F)
Oscillator	62.5 MHz