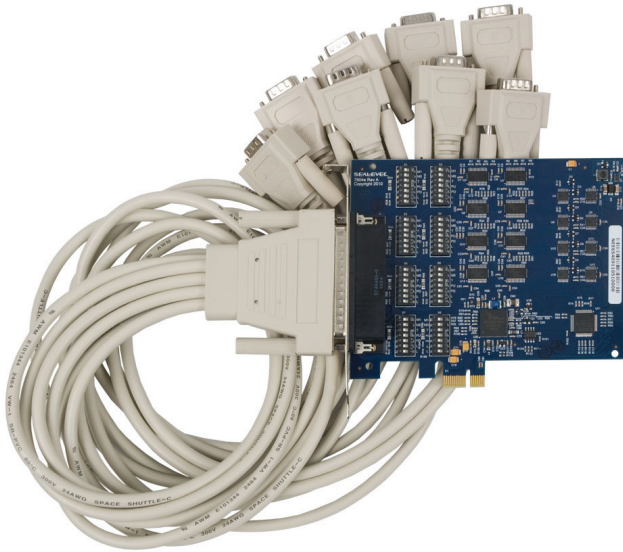# PCI Express RS-232, RS-422, RS-485 Serial Interface

8 Individually Field-Configurable Multifunction Serial Ports

Features

> Each port individually configurable for RS-232, 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
> PCI Express X1 compliant
> Compatible with all standard size PCI Express slots
> All modem control signals implemented in RS-232 mode
> Automatic RS-485 enable/disable in hardware
> Included 36" cable terminates to eight DB9M connectors (Item# CA145)

The 7804e PCI Express serial interface provides eight multifunction serial ports, each individually field-configurable for RS-232, RS-422, or RS-485. Each serial port utilizes a 16C954 UART with 128-byte Tx/Rx FIFOs which 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 16-bit clock prescalar 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 7804e 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. In RS-232 mode, all modem control signals are implemented for maximum compatibility with a variety of serial peripherals.

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

The 7804e is a PCI Express X1 board compatible with any PCI Express slot. The board ships with a 36 inch cable that terminates to eight DB9M connectors.

SEALEVEL®

PCI Express RS-232, RS-422, RS-485 Serial Interface

Specifications

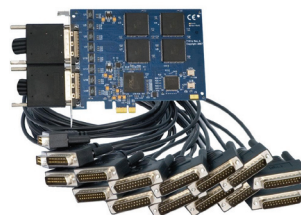|	
Host Interface	PCI Express
# of Ports	8
Electrical Interface	RS-232, RS-422, RS-485
RoHS	Yes
UART	950 UART
Serial Connector(s)	DB9M
Communications Chip	16C954
Oscillator	62.5 MHz
Max Data Rate	921.6K bps
Max Data Distance	50 feet (RS-232), 4000 feet (RS-485)
Cable Connector	DB9M (8)
Board Connector	DB78F
Dimensions	5.2" (L) x 4.4" (H)
Operating Temperature	0 - +70C
Storage Temperature	-50 - +105C
Humidity Range	10-90% R.H.

PCI Express Serial Boards

Sealevel PCI Express serial boards are designed for computers with X1 PCI Express slots, and are fully compatible with X2, X4, X8, X16, and X32 PCI Express slots. The boards utilize serial UARTs with 128-byte FIFOs for maximum reliability in data intensive applications. Software for standard PCI boards will also work with PCI Express boards, simplifying your transition to this next-generation PCI bus.
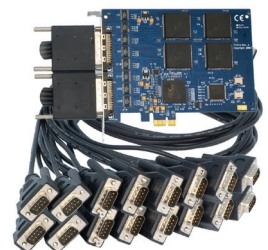

Low Profile PCI Express RS-232, RS-422, RS-485 Serial Interface

PCI Express RS-232, RS-422, RS-485 Serial Interface

PCI Express RS-232 Serial Interface

PCI Express RS-232 Serial Interface with DB9M Cable

Learn more about Sealevel's PCI Express serial boards and other asynchronous serial products at Sealevel.com.