

Available Soon



VEX-144 / VEX-144i / VXC-144U / VXC-144iU

PCI Express / Universal PCI, 4-Port RS-422/485 Communication Board

Features

- VXC versions supports 3.3 V/5 V PCI bus
- VEX versions supports PCI Express bus
- Built-in COM-Selector
- Provides 4 RS-422/485 ports
- 128-byte Hardware FIFO for Each Port
- +/-4 kV ESD Protection for VEX-144i/VXC-144iU
- 2500 V_{oc} Isolation for VEX-144i/VXC-144iU
- Short Card Design



Introduction

The VEX-144/VEX-144i/VXC-144U/VXC-144iU communication card provides 4 RS-422/485 serial ports. Each port supports for speed up to 115200 bps and can work for full-duplex communication.

Users may specify a COM port number manually by setting COM-Selector (DIP switch), or let the driver choose an available number automatically. The driver provides a maximum of 128 KB software buffer for each COM port under Windows. It's practical for large file transmission.

In harsh industrial environments, the on board ESD protection component diverts the potentially damaging charge away from sensitive circuit and protects the computer and equipment from being damaged by high potential voltage.

The VEX-144/VXC-144iU offers photo isolation to protect your computer and equipment against damages in harsh environment. The built-in photo coupler can help cutting down on ground loops, common mode voltages and block voltage spikes, provide electrical isolation, and offer significant protection from serious over-voltage conditions in one circuit affecting the other.

The serial communication card are designed for use with intelligent devices like bar code reader, serial printers, intelligent sensors, instrumentation equipment, computers and almost any device with an RS-422/485 port.

Hardware Specifications

| Serial Port | | | | | |
|-------------|---|-------------------|--|--------------|---|
| COM1-4 | Selectable 8-Wire RS-422 or 2-Wire RS-485 | | | UART | 16C950 compatible |
| Baud Rate | 50 - 115200 bps | Data Bit | 5, 6, 7, 8 | Parity | None, Even, Odd, Mark, Space |
| FIFO | Internal 128 bytes | ESD Protection | +/- 4 kV (VEX-144i/VXC-144iU) | Isolation | 2500 V _{oc} (VEX-144i/VXC-144iU) |
| General | | | | | |
| Bus | VEX versions: PCI Express x1; VXC versions: 3.3 V/5 V, 33 MHz, 32-bit | | | COM-Selector | Yes (8-bit DIP switch) |
| Connector | Female DB-37 x 1 | Power Consumption | VEX-144: 120 mA @ 5 V; VEX-144i: 880 mA @ 5 V; VXC-144U: 120 mA @ 5 V; VXC-144iU: 880 mA @ 5 V | | |

Pin Assignments

| Pin Assignment | Terminal | No. | Pin Assignment |
|----------------------|----------|-----|----------------------|
| N.C. | 01 | 20 | CTS3- (A) |
| TxD3- (A)/Data3- (A) | 02 | 21 | RxD3- (A) |
| GND/VEE3 | 03 | 22 | RTS3- (A) |
| CTS3+ (B) | 04 | 23 | RTS3+ (B) |
| TxD3+ (B)/Data3+ (B) | 05 | 24 | RxD3+ (B) |
| CTS4- (A) | 06 | 25 | TxD4- (A)/Data4- (A) |
| RxD4- (A) | 07 | 26 | GND/VEE4 |
| RTS4- (A) | 08 | 27 | CTS4+ (B) |
| RTS4+ (B) | 09 | 28 | TxD4+ (B)/Data+ (B) |
| RxD4+ (B) | 10 | 29 | CTS2- (A) |
| TxD2- (A)/Data2- (A) | 11 | 30 | RxD2- (A) |
| GND/VEE2 | 12 | 31 | RTS2- (A) |
| CTS2+ (B) | 13 | 32 | RTS2+ (B) |
| TxD2+ (B)/Data2+ (B) | 14 | 33 | RxD2+ (B) |
| CTS1- (A) | 15 | 34 | TxD1- (A)/Data1- (A) |
| RxD1- (A) | 16 | 35 | GND/VEE1 |
| RTS1- (A) | 17 | 36 | CTS1+ (B) |
| RTS1+ (B) | 18 | 37 | TxD1+ (B)/Data1+ (B) |
| RxD1+ (B) | 19 | | |

RS-422/485 Female DB-37 Connector

Software

- Drivers for 32-bit Windows 2000/XP/2003/Vista/7
- Drivers for 64-bit Windows XP/2003/Vista/7

Ordering Information

| | |
|--------------|--|
| VEX-144 CR | PCI Express, 4-Port RS-422/485 Communication Board (RoHS) |
| VEX-144i CR | PCI Express, 4-Port Isolated RS-422/485 Communication Board (RoHS) |
| VXC-144U CR | Universal PCI, 4-Port RS-422/485 Communication Board (RoHS) |
| VXC-144iU CR | Universal PCI, 4-Port Isolated RS-422/485 Communication Board (RoHS) |