VEX-142/VEX-142i/VXC-142AU/ VXC-142iAU

PCI Express/Universal PCI, 2-Port RS-422/485 Communication Board

CE | FC | RoHS | (WEEE)

Features ▶▶▶▶

- VXC versions supports 3.3 V/5 V PCI bus
- Built-in COM-Selector
- 128-byte hardware FIFO for each port
- +/-4 kV ESD protection for i version

- VEX versions supports PCI Express bus
- Provides 2 RS-422/485 ports
- 2500 V$_{DC}$ Isolation for i version
- Short Card Design

Introduction

The VEX-142/VEX-142i/VXC-142AU/VXC-142iAU communication card provides 2 RS-232 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-142i/VXC-142iAU 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.
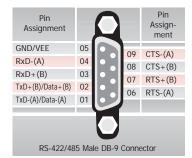
The serial communication card are designed for use with intelligent devices like bar code reader, serial printers, intelligent sensors, instrumentation equipment, computers and almost any device with an RS-422/485 port.

Hardware Specifications

Models	VEX-142	VEX-142i	VXC-142AU	VXC-142iAU
Serial Port				
COM1/2	Selectable 8-Wire RS-422 or 2-Wire RS-485			
UART	16C950 compatible			
Baud Rate	50 ~ 115200 bps			
Data Bit	5, 6, 7, 8			
Stop Bit	1, 1.5, 2			
Parity	None, Even, Odd, Mark, Space			
FIFO	Internal 128 bytes			
ESD Protection	–	+/- 4 kV	–	+/- 4 kV
Isolation	–	2500 V$_{DC}$	–	2500 V$_{DC}$
General				
Bus Type	PCI Express x1		3.3 V/5 V, 33 MHz, 32-bit	
COM-Selector	Yes			
Connectors	Male DB-9 x 2			
Power Consumption	120 mA @ 5 V	440 mA @ 5 V	100 mA @ 5 V	480 mA @ 5 V
Operating Temperature	0 °C ~ +60 °C			
Humidity	0 ~ 90% RH, non-condensing			

Software

- Driver for 32-bit and 64-bit Windows XP/2003/Vista/7
- Driver for Linux

Pin Assignments

Pin Assignment				Pin Assignment
GND/VEE	05		09	CTS-(A)
RxD-(A)	04		08	CTS+(B)
RxD+(B)	03		07	RTS+(B)
TxD+(B)/Data+(B)	02		06	RTS-(A)
TxD-(A)/Data-(A)	01			

RS-422/485 Male DB-9 Connector

Ordering Information

VEX-142 CR	PCI Express Bus, Serial Communication Board with 2 RS-422/485 ports (RoHS)
VEX-142i CR	PCI Express Bus, Serial Communication Board with 2 Isolated RS-422/485 ports (RoHS)
VXC-142AU CR	Universal PCI Bus, Serial Communication Board with 2 RS-422/485 ports (RoHS)
VXC-142iAU CR	Universal PCI Bus, Serial Communication Board with 2 Isolated RS-422/485 ports (RoHS)