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

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

CE FC RoHS

Features ▶▶▶▶

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

Software

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

Hardware Specifications

Models	VEX-144	VEX-144i	VXC-144U	VXC-144iU
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			
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	PCI Express x1		3.3 V/5 V, 33 MHz, 32-bit	
COM-Selector	Yes (8-bit DIP switch)			
Connector	Female DB-37 x 1			
Power Consumption	120 mA @ 5 V	880 mA @ 5 V	120 mA @ 5 V	880 mA @ 5 V
Operating Temperature	0 °C ~ +60 °C			
Humidity	0 ~ 90% RH, non-condensing			

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

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)

Accessories

CA-9-3705	DB-37 Male (D-sub) to 4-Port DB-9 Male (D-sub) cable. 0.3 M (90°)
CA-9-3715D	DB-37 Male (D-sub) to 4-Port DB-9 Male (D-sub) cable. 1.5 M (180°)

KOLBINGER - PCQT   -   +43 2239 3160
AT-2384 Breitenfurt/Vienna, Hauptstrasse 93, office@kolbinger.at , www.pcqt.at