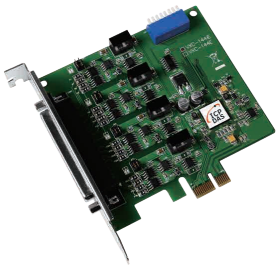
VXC-144U/VXC-144iU



VEX-144/VEX-144i



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

Serial Communication Card with 4 RS-422/485 ports

Features

- 128-byte Hardware FIFO for Each Port
- Supports 3.3 V/5 V PCI bus for U versions
- ±4 kV ESD Protection for i versions
- Supports PCI Express x1 for VEX series
- Built-in COM-Selector
- 128 KB Software Buffer (max.) for Each COM Port Under Windows
- Provides 4 RS-422/485 ports
- 2500 V_{DC} Isolation for i versions
- Short Card Design

Introduction

The VXC-144/VEX-144 series card provides 4 RS-422/RS-485 serial ports. Each port can be configured as either RS-485 for half-duplex or RS-422 for full-duplex communication. It supports for speed up to 115200 bps and supports full-duplex communication.

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

The data lines of each serial ports on i version VXC/VEX cards come with photocouplers design. The on-board photo couplers use a short optical transmission path to transfer a signal between elements of a circuit, and keep the data lines electrically isolated. It 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.

In harsh industrial environments, the on-board ESD protection component (for i version) diverts the potentially damaging charge away from sensitive circuit to protects the computer and equipment from the sudden and momentary electric current.

Applications

- Industrial Machinery
- Building Automation
- Restaurant Appliances
- Laboratory Equipment & Research
- Industrial Communication

Hardware Specifications

Models	VXC-144U	VXC-144iU	VEX-144	VEX-144i
Hardware				
Connector	DB-37 (Female)			
COM-Selector	Yes (8-bit DIP switch)			
COM Ports				
Ports	4 x RS-422/485 (RS-422: TxD+, TxD-, RxD+, RxD-, RTS+, RTS-, CTS+, CTS-, GND / RS-485: Data+, Data-, GND)			
Baud Rate	50 ~ 115200 bps			
Parity	None, Even, Odd, Mark, Space			
Data Bit	5, 6, 7, 8			
Stop Bit	1, 1.5, 2			
FIFO Size	Internal 128 bytes			
Isolation	–	2500 V_{DC}	–	2500 V_{DC}
Power				
Consumption	120 mA @ 5 V	880 mA @ 5 V	120 mA @ 5 V	880 mA @ 5 V
Mechanical				
Dimensions (mm)	84 x 142 x 22 (W x L x D)	95 x 142 x 22 (W x L x D)	101 x 114 x 22 (W x L x D)	
Environment				
Operating Temperature	0 ~ +60°C			
Storage Temperature	-20 ~ +70°C			
Humidity	5 ~ 85% RH, Non-condensing			

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Pin Assignments

Pin Assignment	Terminal No.		Terminal No.	Pin Assignment
N.C.	01		20	CTS3-(A)
TxD3-(A)/Data3-(A)	02		21	RxD3-(A)
GND	03		22	RTS3-(A)
CTS3+(B)	04		23	RTS3+(B)
N.C.	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

Pin Assignment	Terminal No.		Terminal No.	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 Female DB-37 to Male DB-9 Connector

Software

Drivers

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

Ordering Information

VXC-144U CR	Universal PCI, Serial Communication Board with 4 RS-422/485 ports (RoHS) Includes One CA-4002 Connector
VXC-144iU CR	Universal PCI, Serial Communication Board with 4 Isolated RS-422/485 ports (RoHS) Includes One CA-4002 Connector
VEX-144 CR	PCI Express, Serial Communication Board with 4 RS-422/485 ports (RoHS) Includes One CA-4002 Connector
VEX-144i CR	PCI Express, Serial Communication Board with 4 Isolated RS-422/485 ports (RoHS) Includes One CA-4002 Connector

Accessories

 CA-9-3705 CR	Male DB-37 to 4-port Male DB-9 Cable, 0.3 M (90°)

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