



Features

- Provides 4 RS-422/485 ports
- 128-byte Hardware FIFO for Each Port
- Built-in COM-Selector
- +/-4 kV ESD Protection
- Short Card Design
- Up to 128 KB Software FIFO for Each COM Port Under Windows
- DOS, Windows NT/2K/XP/2003 and Linux Driver Supported

VXC-144U/VXC-144iU Only

- Supports 3.3 V/5 V PCI Bus, Plug and Play

VXC-144E/VXC-144iE Only

- Supports PCI Express x 1, Plug and Play

VXC-144iU/VXC-144iE Only

- 2500 V_{rms} Isolation

Introduction

The VXC-144U/VXC-144E card provides 4 non-isolated RS-422/RS-485 serial ports and the VXC-144iU/VXC-144iE card provides 4 Isolated RS-422/RS-485 serial ports which withstand isolation voltage up to 3 kV. Each port can be configured as either RS-485 for half-duplex or RS-422 for full-duplex communication. It equips a 128-byte hardware FIFO for each port, offers speed up to 115200 bps and long distance communication link.

Users can select a specified 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.

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 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-232 port.

Applications

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

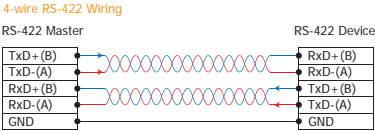
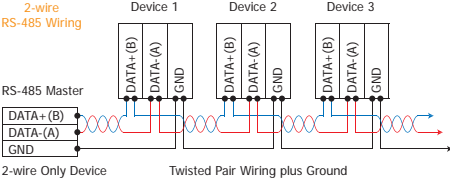
Software

- Driver for Windows NT 4.0
- Driver for Windows 2000/XP/2003/Vista (32-bit)
- Driver for Linux

Hardware Specifications

Models	VXC-144U	VXC-144iU	VXC-144E	VXC-144iE
Communication Port				
COM1 – COM4	RS-422/485	The RS-422 and RS-485 cannot be used simultaneously		
	RS-422	TxD+, TxD-, RxD+, RxD-, RTS+, RTS-, CTS+, CTS-, GND		
	RS-485	Data+, Data-, GND		
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			
Isolated	-	2500 V _{rms}	-	2500 V _{rms}
General				
Bus Type	Universal PCI, 3.3 V and 5 V, 33 MHz, 32-bit, Plug and Play mechanism		PCI Express x1, Plug and Play	
COM-Selector	Yes (8-bit DIP switch)			
Connector	Female DB-37			
Power Consumption	120 mA @ 5 V	880 mA @ 5 V	120 mA @ 5 V	880 mA @ 5 V
Operating Temperature	0 °C ~ +50 °C			
Storage Temperature	-20 °C ~ +70 °C			
Humidity	0 – 90% RH, non-condensing			
Dimensions (L x W x D)	142 mm x 84 mm x 22 mm	142 mm x 95 mm x 22 mm	114 mm x 101 mm x 22 mm	

Wiring



Pin Assignments

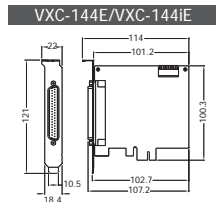
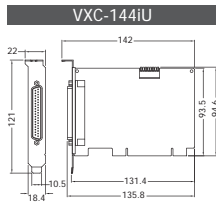
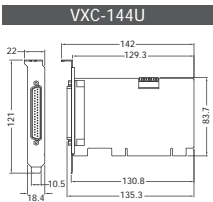
Pin Assignment	Terminal	No.	Pin Assignment
N.C.	01	20	CTS3-(A)
TxD3-(A)/Data3-(A)	02	21	RxD3-(A)
GND/VEE3	03	22	RTS3-(A)
CTS3+(B)	04	23	RTS3+(B)
TxD3+(B)/Data3+(B)	05	24	RxD3+(B)
CTS4-(A)	06	25	TxD4-(A)/Data4-(A)
RxD4-(A)	07	26	GND/VEE4
RTS4-(A)	08	27	CTS4+(B)
RTS4+(B)	09	28	TxD4+(B)/Data+(B)
RxD4+(B)	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

Pin Assignment	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

Dimensions (Unit: mm)



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
VXC-144E CR	PCI Express, Serial Communication Board with 4 RS-422/485 ports (RoHS). Includes One CA-4002 Connector
VXC-144IE CR	PCI Express, Serial Communication Board with 4 Isolated RS-422/485 ports (RoHS) Includes One CA-4002 Connector

Accessories

CA-4002	37-Pin Male D-Sub Connector with Plastic Cover
CA-9-3715D	Male DB-37 to 4 Male DB-9 Cable, 1.5 m For VXC Series (180°)