

2.2. VXC Series Communication Boards



Features

- Built-in COM-Selector
- Short Card Design
- Provides 2 RS-232 ports
- +/-4 kV ESD Protection
- Supports 3.3 V/5 V PCI bus
- 128-byte Hardware FIFO for Each Port
- 128 KB Software Buffer (max.) for Each Port Under Windows
- 2500 V_{rms} Isolation for VXC-112iU

Introduction

The VXC-112 series communication card provides 2 RS-232 serial ports. Each port equips a 128-byte hardware FIFO, offers speed up to 115200 bps and can work for half-duplex or full-duplex communication.

Users can select a specified 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 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

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

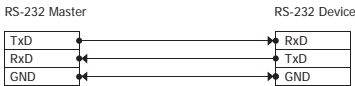
Hardware Specifications

Models	VXC-112U	VXC-112iU
Communication Port		
COM1, COM2	RS-232 (TxD, RxD, RTS, CTS, DTR, DSR, DCD, RI, 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}
General		
Bus Type	Universal PCI, 3.3 V/5 V, 33 MHz, 32-bit, Plug and Play mechanism	
COM-Selector	Yes (8-bit DIP switch)	
Connector	2 x DB-9 (Male)	
Power Consumption	100 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)	134 mm x 90 mm x 22 mm	

Wiring

DTE Device (Computer)		DB-9	DTE to DCE Connections		DCE Device (Modem)		DB-9
Pin#	DB-9	RS-232 Signal Names	Signal Direction		Pin#	DB-9	RS-232 Signal Names
#1	Carrier Detector	DCD	←	→	#1	Carrier Detector	DCD
#2	Receive Data	RxD	←	→	#2	Transmit Data	TxD
#3	Transmit Data	TxD	←	→	#3	Receive Data	RxD
#4	Data Terminal Ready	DTR	←	→	#4	Data Set Ready	DSR
#5	Signal Ground/Common (SG)	GND	←	→	#5	Signal Ground/Common (SG)	GND
#6	Data Set Ready	DSR	←	→	#6	Data Terminal Ready	DTR
#7	Request to Send	RTS	←	→	#7	Clear to Send	CTS
#8	Clear to Send	CTS	←	→	#8	Request to Send	RTS
#9	Ring Indicator	RI	←	→	#9	Ring Indicator	RI
Soldered to DB-9 Metal Shield		FGND	←	→	Soldered to DB-9 Metal Shield		FGND

3-wire RS-232 Wiring

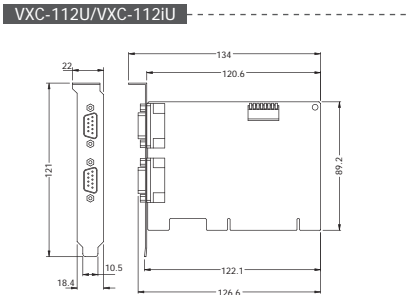


Pin Assignments

Pin Assignment	Terminal	No.	Pin Assignment
GND	05	09	RI
DTR	04	08	CTS
TxD	03	07	RTS
RxD	02	06	DSR
DCD	01		

Male DB-9 Connector

Dimensions (Unit: mm)



Ordering Information

VXC-112U CR	Universal PCI Bus, Serial Communication Board with 2 RS-232 ports (RoHS)
VXC-112IU CR	Universal PCI Bus, Serial Communication Board with 2 Isolated RS-232 ports (RoHS)

Accessories

CA-0910F	9-Pin Female-Female D-Sub Cable 1 m
CA-0915	9-Pin Male-Female D-Sub Cable, 1.5 m
CA-PC09F	9-Pin Female D-Sub Connector with Plastic Cover
DN-09-2F	I/O Connector Block with DIN-Rail Mounting and Two 9-Pin Male Header. Includes CA-0910F x 2 (9-Pin Female-Female D-Sub Cable 1 m)