CP-116E-A

16-port RS-232/422/485 PCI Express board with 4 kV surge protection, 0 to 55°C operating temperature



Features and Benefits

- PCI Express 1.0 compliant
- 921.6 kbps maximum baudrate for fast data transmission
- 128-byte FIFO and on-chip H/W, S/W flow control
- Variety of connection cables and boxes available for RS-232/422/485
- Drivers provided for a broad selection of operating systems, including Windows, Linux, and UNIX
- Easy maintenance with built-in LEDs and management software

Certifications



Introduction

The CP-116E-A is a smart PCI Express multiport serial board designed for POS and ATM applications, and for use by industrial automation system manufacturers and system integrators. The CP-116E-A is compatible with all popular operating systems, and each of its 16 serial ports supports data rates of up to 921.6 kbps and provides full modem control signals, ensuring compatibility with a wide range of serial peripherals. In addition, the CP-116E-A works with PCI Express x1, allowing the board to be installed in any PCI Express slot.

Intelligent RS-485 for Easy Installation and Troubleshooting

Setting up an RS-485 network is relatively straightforward. The challenge comes when the power is turned on and the devices connected to the network start transmitting and receiving data. In most cases, engineers will need to further tune the system by configuring pull high/low resistors and terminators at strategic points along the network.

Moxa's Intelligent RS-485 technology supports two essential features to make it easy: (1) One-Click Installation automatically analyzes the network topology and then adjusts terminators and pull high/low resistors. (2) One-Click Troubleshooting tells you what to change to make a deficient network viable.

Specifications

Serial Interface

Comm. Controller	16C550C compatible
Bus	PCI Express 1.0
Connector	VHDCI 68
FIFO	128 bytes
Max. No. of Boards per PC	4
No. of Ports	16
Serial Standards	RS-232, RS-422, RS-485
Baudrate	50 bps to 921.6 kbps (supports non-standard baudrates)
Data Bits	5, 6, 7, 8
Stop Bits	1, 1.5, 2

Parity	None, Even, Odd, Space, Mark	
Flow Control	None, RTS/CTS, XON/XOFF	
Surge	4 kV	
Serial Signals		
RS-232	TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND	
RS-422	Tx+, Tx-, Rx+, Rx-, GND	
RS-485-4w	Tx+, Tx-, Rx+, Rx-, GND	
RS-485-2w	Data+, Data-, GND	
Serial Software Features		
Windows Drivers	DOS, Windows 95/98/ME/NT/2000, Windows XP/2003/Vista/2008/7/8/8.1/10 (x86/x64), Windows 2008 R2/2012/2012 R2/2016/2019 (x64), Windows Embedded CE 5.0/6.0, Windows XP Embedded	
Linux Drivers	Linux kernel 2.4.x, Linux kernel 2.6.x, Linux kernel 3.x, Linux kernel 4.x, Linux kernel 5.x	
UNIX Drivers	Solaris 10, UnixWare 7, SCO OpenServer 5, SCO OpenServer 6	
Power Parameters		
Input Current	2,733 mA @ 3.3 VDC	
Physical Characteristics		
Dimensions	97.9 x 88.9 mm (3.86 x 3.50 in)	
LED Interface		
LED Indicators	Built-in Tx, Rx LEDs for each port	
Environmental Limits		
Operating Temperature	0 to 55°C (32 to 131°F)	
Storage Temperature (package included)	-20 to 85°C (-4 to 185°F)	
Ambient Relative Humidity	5 to 95% (non-condensing)	
Standards and Certifications		
EMC	EN 55032/35	
ЕМІ	CISPR 32, FCC Part 15B Class B	
EMS	IEC 61000-4-2 ESD: Contact: 4 kV; Air: 8 kV IEC 61000-4-3 RS: 80 MHz to 1 GHz: 3 V/m IEC 61000-4-4 EFT: Power: 1 kV IEC 61000-4-5 Surge: Power: 2 kV; Signal: 4 kV IEC 61000-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 61000-4-8 PFMF	
Declaration		
Green Product	RoHS, CRoHS, WEEE	
MTBF		
Time	310,993 hrs	
Standards	Telcordia (Bellcore) Standard TR/SR	

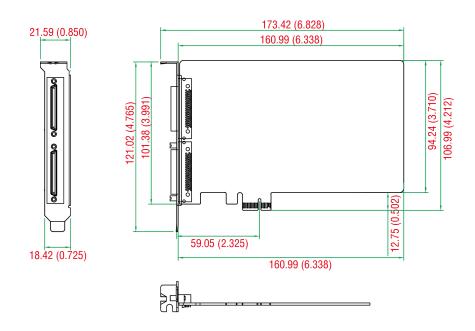


Warranty

Warranty Period	5 years
Details	See www.moxa.com/warranty
Package Contents	
Device	1 x CP-116E-A serial board
Documentation	1 x quick installation guide 1 x warranty card

Dimensions

Unit: mm (inch)



Ordering Information

Model Name	Serial Standards	No. of Serial Ports	Max. No. of Boards per PC
CP-116E-A w/o cable	RS-232/422/485	16	4

Accessories (sold separately)

Cables

CBL-M68M25x8-100	SCSI VHDCI 68 to 8 x DB25 male serial cable, 1 m
CBL-M68M9x8-100	SCSI VHDCI 68 to 8 x DB9 male serial cable, 1 m
CBL-F9M9-150	DB9 female to DB9 male serial cable, 1.5 m
CBL-F9M9-20	DB9 female to DB9 male serial cable, 20 cm

Connection Boxes

OPT 8B+	VHDCI 68 to 8 x DB25 male connection box
OPT 8A+	VHDCI 68 to 8 x DB25 female connection box
OPT8-M9+	VHDCI 68 to 8 x DB9 male connection box
OPT8-RJ45+	VHDCI 68 to 8 x RJ45 (8-pin) connection box
OPT 8S+	VHDCI 68 to 8 x DB25 female connection box with surge protection



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