# CP-168EL-A

## 8-port RS-232 PCI Express serial boards



#### **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
- · Low-profile form factor fits small-sized PCs
- Drivers provided for a broad selection of operating systems, including Windows, Linux, and UNIX
- Easy maintenance with built-in LEDs and management software

### Certifications

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## Introduction

The CP-168EL-A is a smart, 8-port PCI Express board designed for POS and ATM applications. It is a top choice of industrial automation engineers and system integrators, and supports many different operating systems, including Windows, Linux, and even UNIX. In addition, each of the board's eight RS-232 serial ports supports a fast 921.6 kbps baudrate. The CP-168EL-A provides full modem control signals to ensure compatibility with a wide range of serial peripherals, and its PCI Express x1 classification allows it to be installed in any PCI Express slot.

#### **Smaller Form Factor**

The CP-168EL-A is a low-profile board that is compatible with any PCI Express slot. The board requires only a 3.3 VDC power supply, which means that the board fits any host computer, ranging from shoebox to standard-sized PCs.

#### **Drivers Provided for Windows, Linux, and UNIX**

Moxa continues to support a wide variety of operating systems, and the CP-168EL-A board is no exception. Reliable Windows and Linux/UNIX drivers are provided for all Moxa boards, and other operating systems, such as WEPOS, are also supported for embedded integration.

## **Specifications**

Serial Interface	
Comm. Controller	16C550C compatible
Bus	PCI Express 1.0
Connector	VHDCI 68
FIFO	128 bytes
Max. No. of Boards per PC	8
No. of Ports	8
Serial Standards	RS-232
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	
Serial Signals		
RS-232	TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND	
Serial Software Features		
Linux Drivers	Linux kernel 2.4.x, Linux kernel 2.6.x, Linux kernel 3.x	
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 (x64), Windows Embedded CE 5.0/6.0, Windows XP Embedded	
UNIX Drivers	Solaris 10, UnixWare 7, SCO OpenServer 5, SCO OpenServer 6	
Power Parameters		
Input Current	1,225 mA @ 3.3 VDC	
Physical Characteristics		
Dimensions	64.42 x 102 mm (2.54 x 4.02 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 55032/24	
EMI	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; Signal: 0.5 kV IEC 61000-4-5 Surge: Power: 2 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	2,351,336 hrs	
Standards	Telcordia (Bellcore) Standard TR/SR	
Warranty		
Warranty Period	5 years	
Details	See www.moxa.com/warranty	

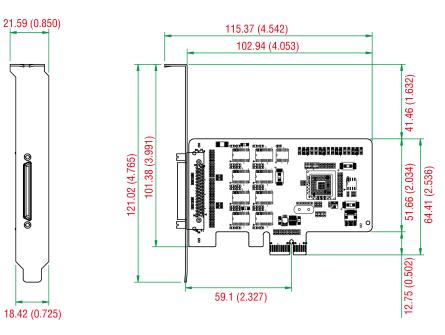


## Package Contents

Device	1 x CP-168EL-A serial board
Documentation	1 x document and software CD 1 x quick installation guide 1 x warranty card

## **Dimensions**

Unit: mm (inch)



# **Ordering Information**

Model Name	Serial Standards	No. of Serial Ports	Form Factor
CP-168EL-A	RS-232	8	Low profile

# Accessories (sold separately)

Brackets	
149000008000	Bracket for VHDCI Package
Cables	
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
CBL-M68M25x8-100	SCSI VHDCI 68 to 8 x DB25 male cable, 1 m
CBL-M68M9x8-100	SCSI VHDCI 68 to 8 x DB9 male cable, 1 m
Connection Boxes	
OPT8A+	VHDCI 68 to 8 x DB25 female connection box
OPT8B+	VHDCI 68 to 8 x DB25 male connection box
OPT8S+	VHDCI 68 to 8 x DB25 female connection box w/ surge protection
OPT8-M9+	VHDCI 68 to 8 x DB9 male connection box
OPT8-RJ45+	VHDCI 68 to 8 x RJ45 (8-pin) connection box



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