# **CP-168EL-A**

# 8-port RS-232 PCI Express serial board



- > PCI Express x1 compliant
- > 921.6 kbps maximum baudrate for super fast data transmission
- > 128-byte FIFO and on-chip H/W, S/W flow control
- > Choose from a wide range of connection cables and boxes
- > Low profile form factor fits small-sized PCs
- > Drivers provided for a broad selection of operating systems, including the latest Windows and Linux
- > 15 kV ESD protection on the board













## Overview

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 8 RS-232 serial ports supports a super 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 COM and

Linux/Unix TTY drivers are provided for all Moxa boards, and other operating systems, such as WEPOS, are also supported for embedded integration.

## **Specifications**

### Hardware

Comm. Controller: 16C550C compatible

Bus: PCI Express x1 Connector: VHDCI 68 Serial Interface **Number of Ports: 8** Serial Standards: RS-232 Max. No. of Boards per PC: 4 Serial Line Protection ESD Protection: 15 kV on the board

**Performance** 

Baudrate: 50 bps to 921.6 kbps

**Serial Communication Parameters** 

Data Bits: 5. 6. 7. 8 Stop Bits: 1, 1.5, 2

Parity: None, Even, Odd, Space, Mark Flow Control: RTS/CTS, XON/XOFF

Serial Signals

RS-232: TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND

Operating Systems

Windows Real COM Drivers: Windows 95/98/ME/NT/2000, Windows XP/2003/Vista/2008/7/8/8.1 (x86/x64), Windows 2008 R2/2012/2012

R2 (x64), DOS

Fixed TTY Drivers: QNX 6, SCO OpenServer, UnixWare 7, Solaris 10

Linux Real TTY Drivers: Linux 2.4.x, 2.6.x, 3.x

Note: Please refer to Moxa's website for the latest driver support information.

### **Physical Characteristics**

**Dimensions:** 64.42 x 102 mm (2.54 x 4.02 in)

**Environmental Limits** 

Operating Temperature: 0 to 55°C (32 to 131°F) Storage Temperature: -20 to 85°C (-4 to 185°F) Ambient Relative Humidity: 5 to 95% (non-condensing)

Altitude: Up to 2000 m

Note: Please contact Moxa if you require products guaranteed to function properly at higher altitudes.

#### Standards and Certifications

EMC: CE. FCC

EMI: EN 55022, EN 61000-3-2, EN 61000-3-3, FCC Part 15 Subpart B

EMS: EN 55024, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5. IEC 61000-4-6. IEC 61000-4-8. IEC 61000-4-11 (DIPS)

Green Product: RoHS, CRoHS, WEEE MTBF (mean time between failures)

Time: 6,824,634 hrs

Database: Telcordia (Bellcore), GB **Power Requirements** 

Power Consumption: 1225 mA @ 3.3 V

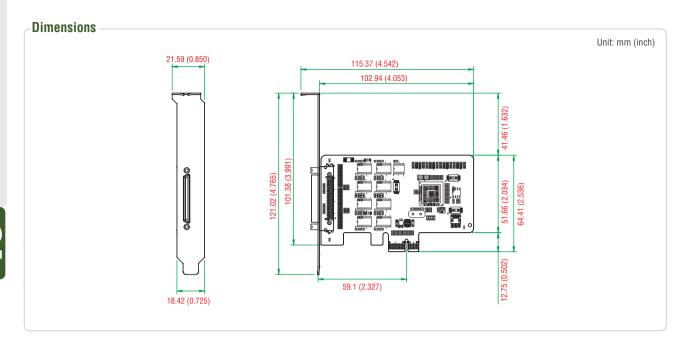
Warranty

Warranty Period: 5 years

Details: See www.moxa.com/warranty

Date: 01/2015 Rev.01

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# Ordering Information

### **Available Models**

CP-168EL-A: 8-port RS-232 low profile PCI Express x1 serial board

# **Package Checklist**

- 1 CP-168EL-A board
- Standard bracket and low profile bracket
- Documentation and software CD
- Quick installation guide (printed)
- Warranty card

# **Connection Options** (can be purchased separately)

### OPT8-M9+

DB9 male x 8 (150 cm cable)







PIN	RS-232		
1	DCD		
2	RxD		
3	TxD		
4	DTR		

PIN	RS-232	
5	GND	
6	DSR	
7	RTS	
8	CTS	



#### OPT8B+

DB25 male x 8 (150 cm cable)

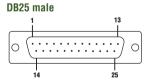






PIN	RS-232
2	TxD
3	RxD
4	RTS
5	CTS





### OPT8A+

DB25 female x 8, 150 cm Cable



### OPT8S+

DB25 female x 8 (150 cm cable) 25 kV ESD protection



PIN	RS-232	PIN	RS-232
2	RxD	6	DTR
3	TxD	7	GND
4	CTS	8	DCD
5	DTC	20	DCD

