

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



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 and Linux/

Unix 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

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: Tx/D, Rx/D, RTS, CTS, DTR, DSR, DCD, GND

Physical Characteristics

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

Driver Support

Windows: 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), DOS

Linux: Linux 2.4.x, 2.6.x, 3.x

Unix-like Systems: QNX 6, SCO OpenServer, UnixWare 7, Solaris 10

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

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)

Standards and Certifications

EMC: EN 55022/24

EMI: CISPR 22, 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

IEC 61000-4-11

MTBF (mean time between failures)

Time: 2,351,336 hrs

Standard: Telcordia (Bellcore) TR/SR

Power Requirements

Input Current: 1,225 mA @ 3.3 VDC

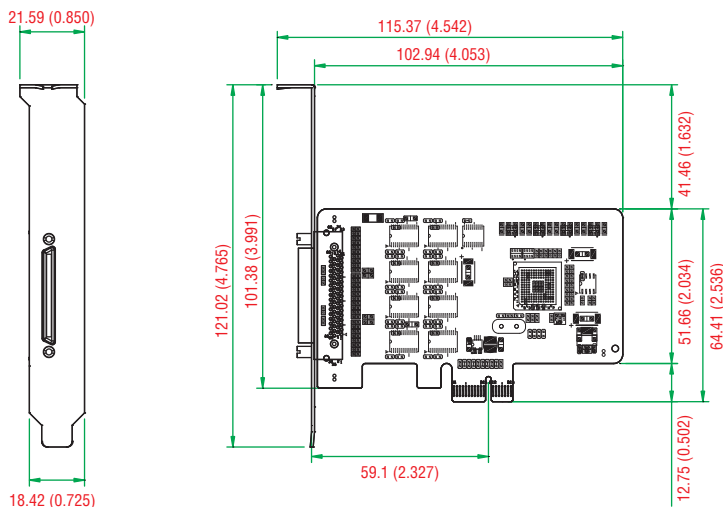
Warranty

Warranty Period: 5 years

Details: See www.moxa.com/warranty

Dimensions

Unit: mm (inch)



Ordering Information

Available Models

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

Connection Options (can be purchased separately)

Low Profile Bracket: Bracket for VHDCI connector (1490000008000)

CBL-M68M9x8-100: SCSI VHDCI 68 to 8 x DB9-M cable, 100 cm

CBL-M68M25x8-100: SCSI VHDCI 68 to 8 x DB25-M cable, 100 cm

Optional Connectors (choose one per board)

OPT8-M9+: VHDCI 68 to 8 x DB9-M connection box

OPT8B+: VHDCI 68 to 8 x DB25-M connection box

OPT8A+: VHDCI 68 to 8 x DB25-F connection box

OPT8-RJ45+: VHDCI 68 to 8 x RJ45 (8-pin) connection box

OPT8S+: VHDCI 68 to 8 x DB25-F connection box w/ surge protection

Package Checklist

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

OPT8-M9+

DB9 male x 8 (150 cm cable)



CBL-M68M9x8-100

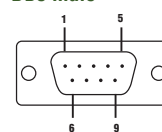
DB9 male x 8 (100 cm cable)



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

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

DB9 male



OPT8B+

DB25 male x 8 (150 cm cable)



CBL-M68M25x8-100

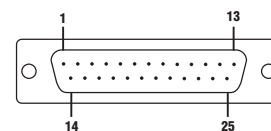
DB25 male x 8 (100 cm cable)



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

PIN	RS-232
6	DSR
7	GND
8	DCD
20	DTR

DB25 male



OPT8A+

DB25 female x 8, 150 cm cable



OPT8S+

DB25 female x 8 (150 cm cable)



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

PIN	RS-232
6	DTR
7	GND
8	DCD
20	DSR

DB25 female

