

CP-168EL

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 Windows (2000, XP/2003/Vista/2008 x86/x64), Windows CE 5.0, Windows XP Embedded, DOS, Linux 2.4, Linux 2.6 (x86/x64) FreeBSD 4/5, QNX 6, SCO Open Server 5/6, UnixWare 7
- > 15 KV ESD protection on the board

The certification logos shown here apply to some or all of the products in this section. For details, see "Regulatory Approvals" under "Specifications" below.



Overview

The CP-168EL 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 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 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 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: MU860 (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

Driver Support

Operating Systems: Windows (2000, XP/2003/Vista/2008 x86/x64), Windows CE 5.0, Windows XP Embedded, DOS, Linux 2.4, Linux 2.6 (x86/x64), FreeBSD 4/5, QNX 6, SCO Open Server 5/6, UnixWare 7

Physical Characteristics

Dimensions: 67.21 x 102 mm (2.65 x 4.02 in)

Environmental Limits

Operating Temperature: 0 to 55°C (32 to 131°F)

Operating Humidity: 5 to 95% RH

Storage Temperature: -20 to 85°C (-4 to 185°F)

Regulatory Approvals

FCC: Part 15 Class B

EMS: EN55024, EN61000-3-2, EN61000-3-3, EN61000-6-2, 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

Power Requirements

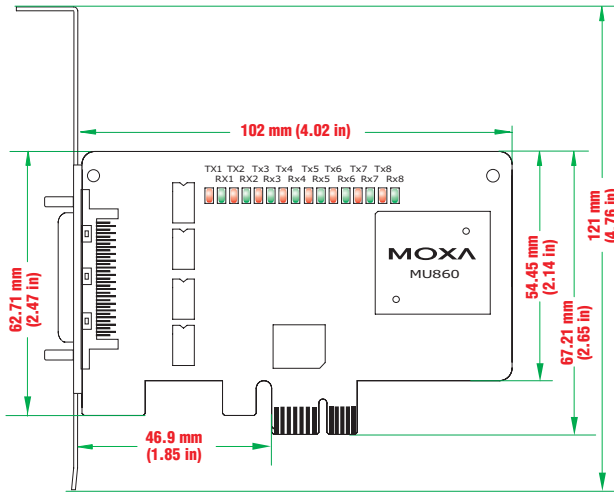
Power Consumption: 630 mA @ 3.3 V

Warranty

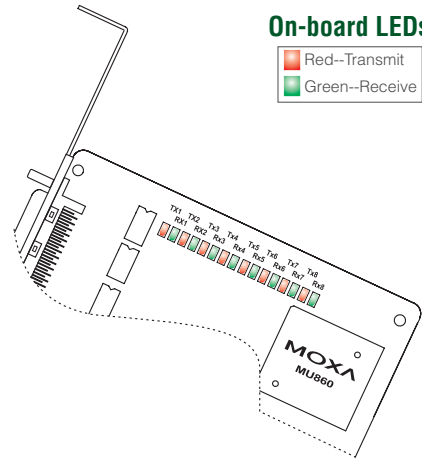
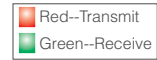
Warranty Period: 5 years

Details: See www.moxa.com/warranty

Dimensions



On-board LEDs



Ordering Information

Available Models

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

Package Checklist

- CP-168EL board
- Standard bracket and low profile bracket
- Document and Software CD
- Quick Installation Guide (printed)
- Warranty Card

Connection Options (can be purchased separately)

OPT8-M9+

DB9 male x 8 (150 cm cable)



CBL-M68M9x8-100 (OPT8D+)

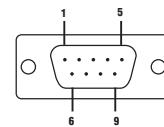
DB9 male x 8 (100 cm cable)



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 (OPT8C+)

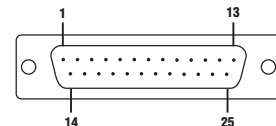
DB25 male x 8 (100 cm cable)



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)
25 KV ESD protection



OPT8F+/Z+ (RS-422)

DB25 female x 8 (150 cm cable)
110 or 230 VAC power adaptor
(115.2 Kbps max. baudrate)



OPT8F+ with 500 V isolation

OPT8K+ (RS-422/485)

DB25 female x 8 (150 cm cable)
110 or 230 VAC power adaptor



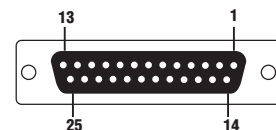
OPT8K+ with 2 KV isolation

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

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

PIN	RS-422/RS-485-4w	RS-485-2w
2	RxD+(B)	Data+(B)
3	TxD+(B)	
7	GND	GND
14	RxD-(A)	Data-(A)
16	TxD-(A)	

DB25 female



OPT8-RJ45+

8-pin RJ45 (30 cm cable)



PIN	RS-232
1	DSR
2	RTS
3	GND
4	TxD

PIN	RS-232
5	RxD
6	DCD
7	CTS
8	DTR

8-pin RJ45

