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 Windows 7 x86/x64, XP/2003/Vista/2008 x86/x64, 2000, DOS, Linux 2.4/2.6,QNX 6, SCO Open Server 5/6, UnixWare 7
> 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

Driver Support
Operating Sytems: Windows 2000, Windows XP/2003/Vista/2008/7 x86/x64, DOS, Linux 2.4, 2.6 x86/x64, QNX 6, SCO Open Server 5/6, UnixWare 7
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)
Operating Humidity: 5 to 95% RH
Storage Temperature: -20 to 85°C (-4 to 185°F)

Regulatory Approvals
FCC: Part 15 Class B
EMS: EN55022, EN55024, EN61000-3-2, EN61000-3-3, 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
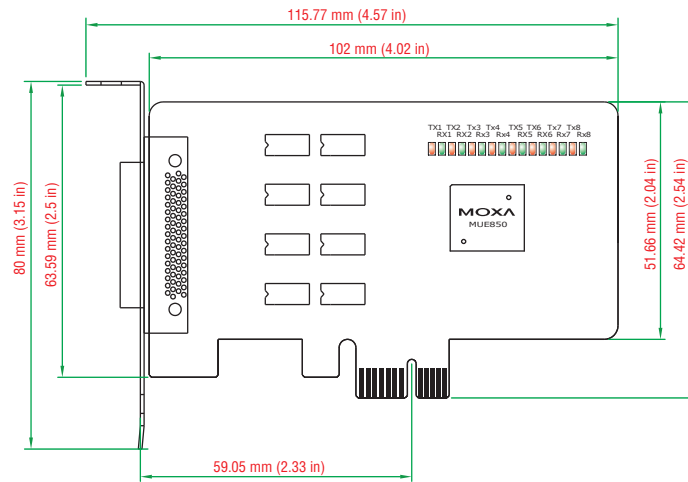
Power Requirements
Power Consumption: 1225 mA @ 3.3 V

Warranty
Warranty Period: 5 years
Details: See www.moxa.com/warranty

MOXA®

Dimensions

115.77 mm (4.57 in)
102 mm (4.02 in)
80 mm (3.15 in)
63.59 mm (2.5 in)
51.66 mm (2.04 in)
64.42 mm (2.54 in)
59.05 mm (2.33 in)

TX1 TX2 Tx3 Tx4 TX5 TX6 Tx7 Tx8
RX1 RX2 Rx3 Rx4 RX5 RX6 Rx7 Rx8

MOXA
MUE850

Ordering Information

Available Models

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

Package Checklist

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

Connection Options (can be purchased separately)
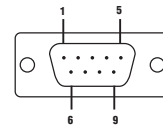
OPT8-M9+
DB9 male x 8 (150 cm cable)

CBL-M68M9x8-100
DB9 male x 8 (100 cm cable)

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

DB25 male
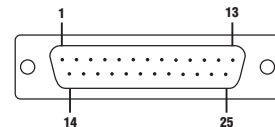
OPT8A+
DB25 female x 8, 150 cm Cable

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

DB25 female

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