

# CP-168EL

## 8-port RS-232 PCI Express Smart Serial Board



### Features

- > PCI Express x1 compliant
- > Serial communication speed up to 921.6 Kbps
- > 128-byte FIFO and on-chip H/W, S/W flow control
- > Various connection cables/boxes for RS-232/422/485
- > Low profile board for compact-sized PCs
- > Drivers provided for Windows Vista/2003/XP/2000, Linux, Unix
- > On-board 15 KV ESD protection



### : Overview

The CP-168EL is a Smart PCI Express Multiport Serial Board designed for POS and ATM applications, and for use by industrial automation system manufacturers and system integrators. The board is compatible with all popular operating systems, and each of its 8 RS-

232 serial ports supports data rates up to 921.6 Kbps, and provides full modem control signals, ensuring compatibility with a wide range of serial peripherals. In addition, the CP-168EL works with PCI Express x1, allowing the board to be installed in any PCI Express slot.

### : Specifications

#### Hardware

**Connectors:** SCSI VHDCI 68  
**Comm. Controller:** MU860 (16C550C compatible)

#### Interface

**Bus Interface:** PCI Express x1  
**Number of Ports:** 8 (only one IRQ required)  
**Max. No. of Boards:** 4

#### Signals

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

#### Performance

**Baudrate:** 50 bps to 921.6 Kbps

#### Configuration

**Data Bits:** 5, 6, 7, 8  
**Stop Bit(s):** 1, 1.5, 2

**I/O address/IRQ:** BIOS assigned  
**Parity:** None, Even, Odd, Space, Mark  
**Flow Control:** RTS/CTS, XON/XOFF

#### Power and Environment

**Power Requirement:** 630 mA (3.3V)  
**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)

**ESD Protection:** Embedded 15 KV ESD Protection

#### Regulatory Approvals

EN55022 Class B, EN55024, EN6100-3-2, EN61000-3-3, FCC Part 15 Class B

**Warranty:** 5 years

### : Ordering Information

**CP-168EL:** 8-port RS-232 PCI Express x1 Serial Board

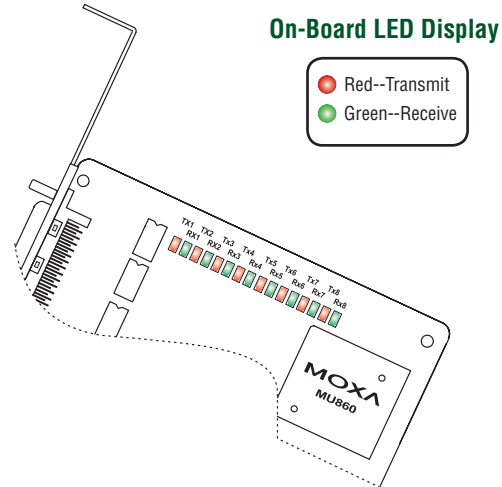
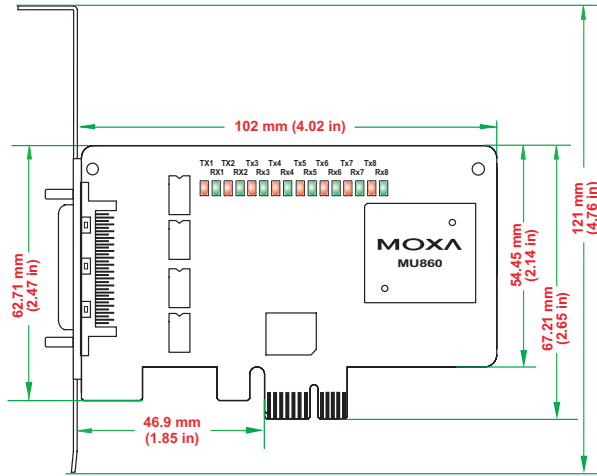
#### Package Checklist

- CP-168EL board with standard bracket, and Low Profile bracket
- Document & Software CD-ROM
- Quick Installation Guide

#### Optional Accessories (choose one per board)

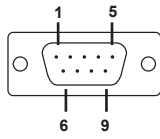
\*Refer to Page 8-11

**Dimensions (unit = mm)**



**Connection Options**

**Male DB9**



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

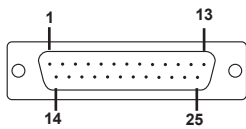
**OPT8-M9+**  
Male DB9 x 8, 150 cm Cable



**CBL-M68M9x8-100 (OPT8D+)**  
Male DB9 x 8, 100 cm Cable



**Male DB25**



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

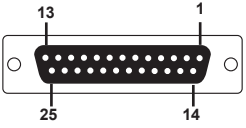
**OPT8B+**  
Male DB25 x 8, 150 cm Cable



**CBL-M68M25x8-100 (OPT8C+)**  
Male DB25 x 8, 100 cm Cable



**Female DB25**



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
2	RxD+(B)
3	TxD+(B)
7	GND
14	RxD-(A)
16	TxD-(A)

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

**OPT8A+**  
Female DB25 x 8, 150 cm Cable



**OPT8S+**  
Female DB25 x 8, 150 cm Cable  
25 KV ESD Surge Protection



**OPT8F+/Z+ (RS-422)**  
Female DB25 x 8, 150 cm Cable  
110 or 230 VAC power Adaptor  
(max. speed 115.2 Kbps)



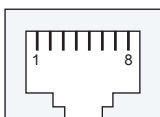
**OPT8K+/OPT8I+ (RS-422/485)**  
Female DB25 x 8, 150 cm Cable  
110 or 230 VAC power Adaptor



\* OPT8F+ with 2 KV Isolation

\* OPT8I with 2 KV Isolation

**8-pin RJ45**



PIN	RJ45	PIN	RJ45
1	DSR	5	RxD
2	RTS	6	DCD
3	GND	7	CTS
4	TxD	8	DTR

**OPT8-RJ45+**  
8-pin RJ45 x 8, 30 cm Cable

