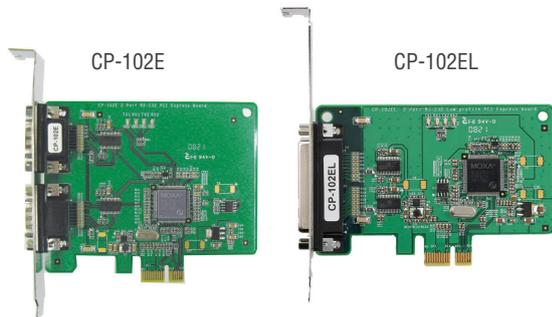# CP-102E/EL

2-port RS-232 PCI Express boards

CP-102E   CP-102EL

> 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
> 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

PComm Lite

Compatible with Windows 7 | Designed for Microsoft® Windows® XP x64 Edition | RoHS | CE | FC

: Overview

The CP-102E and low profile CP-102EL are 2-port PCI Express boards designed for POS and ATM applications. Moxa's PCI Express boards are a top choice of industrial automation engineers and system integrators, particularly since the boards support many different operating systems, including Windows and Linux. The CP-102E/EL's 2 RS-232 serial ports support a super fast 921.6 kbps baudrate, and provide full modem control signals to ensure compatibility with a wide range of serial peripherals. In addition, the boards' x1 classification allows them to be installed in any PCI Express slot.

: Smaller Form Factor

The CP-102EL is a low profile board that is compatible with any PCI Express slot. The CP-102EL board only requires 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-102E/EL boards are no exception. Reliable Windows COM and Linux TTY drivers are provided for all Moxa boards, and other operating systems, such as WEPOS, are also supported for embedded integration applications.

: Specifications

Hardware
Comm. Controller: 16C550C compatible
Bus: PCI Express x 1
Connectors:
CP-102E: DB9 male
CP-102EL: DB25 female

Serial Interface
Number of Ports: 2
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:
CP-102E: 85.04 x 100 mm (3.35 x 3.94 in)
CP-102EL: 67.21 x 100 mm (2.65 x 3.94 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 Class 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: 3,901,175 hrs
Database: Telcordia (Bellcore), GB

Power Requirements

Power Consumption:
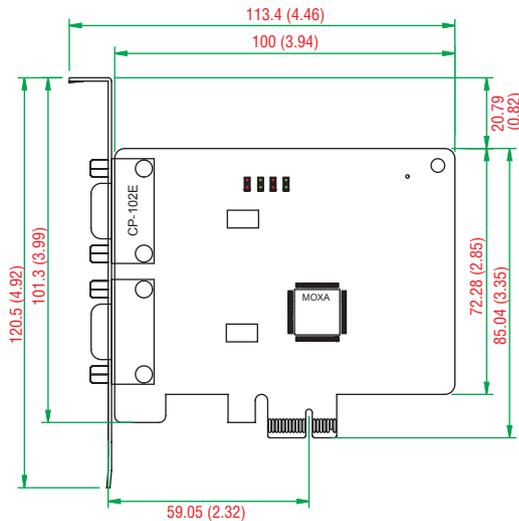CP-102E: 520 mA @ 3.3 V
CP-102EL: 552 mA @ 3.3 V

Warranty

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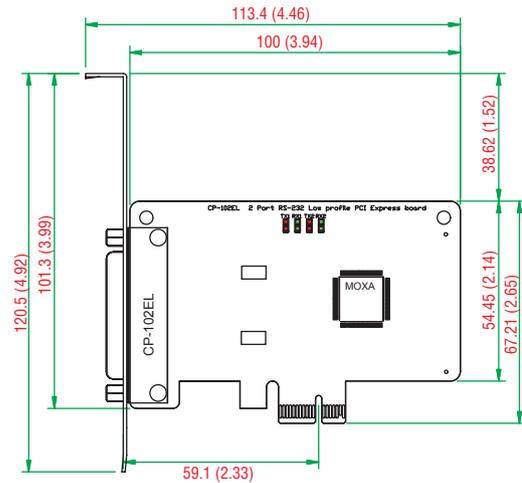**Details:** See www.moxa.com/warranty

Dimensions

Unit: mm (inch)

CP-102E

CP-102EL

: Ordering Information

Available Models

CP-102E: 2-port RS-232 PCI Express x1 serial board
CP-102EL-DB9M: 2-port RS-232 low profile PCI Express serial board (includes DB9 male cable)

Package Checklist

- 1 CP-102E or CP-102EL board
- Low profile bracket (CP-102EL only)
- Documentation and software CD
- Quick installation guide (printed)
- Warranty card

Connection Options (CP-102EL only, can be purchased separately)

CBL-M25M9x2-50
DB25 male to DB9 male x 2
(50 cm cable)

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

DB9 male