CP-114EL/EL-I

4-port RS-232/422/485 PCI Express boards with optional 2 kV isolation

CP-114EL

CP-114EL-I

PComm Lite
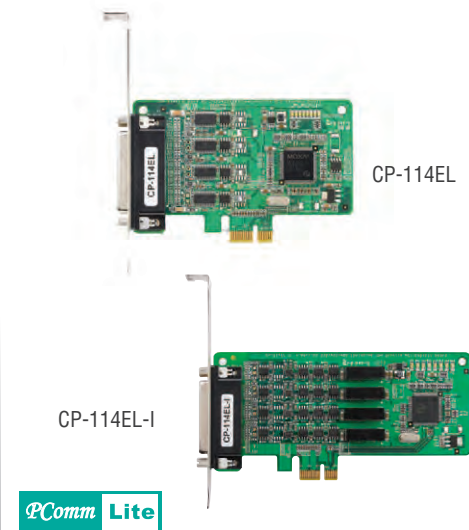
> **PCI Express x1 compliant**
> **921.6 kbps maximum baudrate for super fast data transmission**
> **128-byte FIFO and on-chip H/W, S/W flow control**
> **Low profile form factor fits small-sized PCs**
> **Drivers provided for a broad selection of operating systems, including the latest Windows and Linux**
> **15 kV ESD protection on the board**

: Overview

The CP-114EL and CP-114EL-I are smart, 4-port PCI Express boards designed for POS and ATM applications. The boards are a top choice of industrial automation engineers and system integrators, and support many different operating systems, including Windows and Linux. In addition, each of the boards' 4 RS-232/422/485 serial ports supports a super fast 921.6 kbps baudrate. The CP-114EL and CP-114EL-I provide full modem control signals to ensure compatibility with a wide range of serial peripherals, and their PCI Express "x1" classification allows the boards to be installed in any PCI Express slot.

: Smaller Form Factor

The CP-114EL and CP-114EL-I are low profile boards that are compatible with any PCI Express slot. The boards require only a 3.3 VDC power supply, which means that the boards fit 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-114EL/EL-I 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.

: Specifications

Hardware
Comm. Controller: 16C550C compatible
Bus: PCI Express x1
Connector: DB44 female

Serial Interface
Number of Ports: 4
Serial Standards: RS-232/422/485
Max. No. of Boards per PC: 4

Serial Line Protection
ESD Protection: 15 kV on the board
Electrical Isolation: 2 kV (CP-114EL-I only)

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
RS-422: TxD+(B), TxD-(A), RxD+(B), RxD-(A), GND
RS-485-4w: TxD+(B), TxD-(A), RxD+(B), RxD-(A), GND
RS-485-2w: Data+(B), Data-(A), 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-114EL: 67.21 x 103 mm (2.69 x 4.06 in)
CP-114EL-I: 67.21 x 135 mm (2.69 x 5.31 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: 684,289 hrs
Database: Telcordia (Bellcore), GB
Power Requirements
Power Consumption:
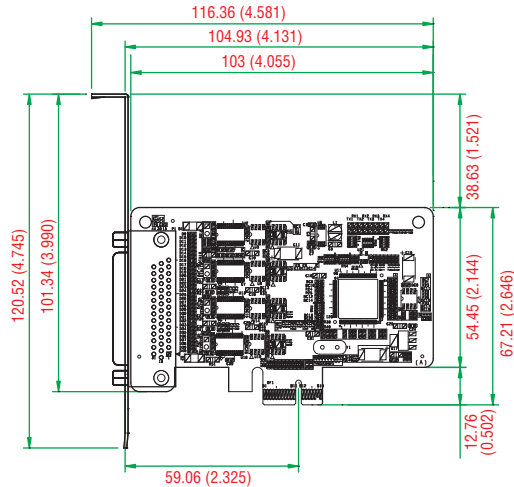CP-114EL: 835 mA @ 3.3 V
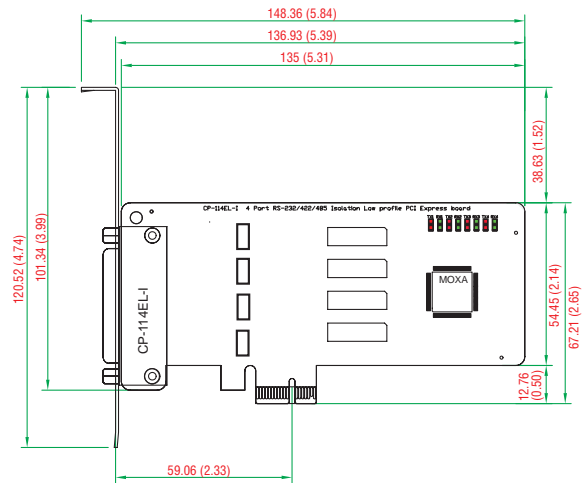CP-114EL-I: 1170 mA @ 3.3 V
Warranty
Warranty Period: 5 years
Details: See www.moxa.com/warranty

Dimensions

Unit: mm (inch)

CP-114EL

CP-114EL-I

: Ordering Information

Available Models
CP-114EL: 4-port RS-232/422/485 low profile PCI Express x1 serial board
CP-114EL-I: 4-port RS-232/422/485 low profile PCI Express x1 serial board with electrical isolation
CP-114EL-DB9M: 4-port RS-232/422/485 low profile PCI Express x1 serial board (includes DB9 male cable)
CP-114EL-DB25M: 4-port RS-232/422/485 low profile PCI Express x1 serial board (includes DB25 male cable)
CP-114EL-I-DB9M: 4-port RS-232/422/485 low profile PCI Express x1 serial board with electrical isolation (includes DB9 male cable)
CP-114EL-I-DB25M: 4-port RS-232/422/485 low profile PCI Express x1 serial board with electrical isolation (includes DB25 male cable)

Package Checklist
- 1 CP-114EL or CP-114EL-I board
- Standard bracket and low profile bracket
- Documentation and software CD
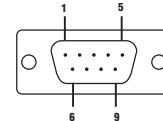- Quick installation guide (printed)
- Warranty card

Connection Options (can be purchased separately)

CBL-M44M9x4-50
DB44 male to DB9 male x 4 (50 cm cable)

PIN	RS-232	RS-422	RS-485-4w	RS-485-2w
1	DCD	TxD–(A)	TxD–(A)	–
2	RxD	TxD+(B)	TxD+(B)	–
3	TxD	RxD+(B)	RxD+(B)	Data+(B)
4	DTR	RxD–(A)	RxD–(A)	Data–(A)
5	GND	GND	GND	GND
6	DSR	–	–	–
7	RTS	–	–	–
8	CTS	–	–	–
9	–	–	–	–

DB9 male

CBL-M44M25x4-50
DB44 male to DB25 male x 4 (50 cm cable)

PIN	RS-232	RS-422	RS-485-4w	RS-485-2w
2	TxD	RxD+(B)	RxD+(B)	Data+(B)
3	RxD	TxD+(B)	TxD+(B)	–
4	RTS	–	–	–
5	CTS	–	–	–
6	DSR	–	–	–
7	GND	GND	GND	GND
8	DCD	TxD–(A)	TxD–(A)	–
20	DTR	RxD–(A)	RxD–(A)	Data–(A)
22	–	–	–	–

DB25 male

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