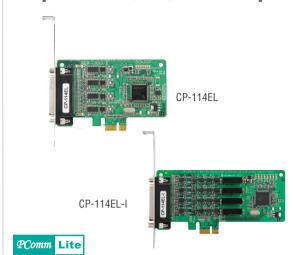
# CP-114EL/EL-I

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



- > 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















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 and

Linux 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** 

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

#### **Physical Characteristics**

Dimensions:

CP-114EL: 67.21 x 103 mm (2.65 x 4.06 in) CP-114EL-I: 67.21 x 135 mm (2.65 x 5.31 in)

**Driver Support** 

Windows: Windows 95/98/ME/NT/2000, Windows XP/2003/ Vista/2008/7/8/8.1/10 (x86/x64), Windows 2008 R2/2012/2012 R2 (x64), DOS

**Linux:** Linux 2.4.x, 2.6.x, 3.x

Unix-like Systems: QNX 6. SCO OpenServer, UnixWare 7, Solaris 10 Note: Please refer to Moxa's website for the latest driver support information.

**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)

**Standards and Certifications** 

EMC: EN 55022/24

EMI: CISPR 22, FCC Part 15B Class B

EMS:

IEC 61000-4-2 ESD: Contact: 4 kV; Air: 8 kV IEC 61000-4-3 RS: 80 MHz to 1 GHz: 3 V/m IEC 61000-4-4 EFT: Power: 1 kV: Signal: 0.5 kV IEC 61000-4-5 Surge: Power: 2 kV

IEC 61000-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m

IEC 61000-4-8 PFMF IEC 61000-4-11

MTBF (mean time between failures)

Time:

CP-114EL: 2,347,197 hrs CP-114EL-I: 603,671 hrs

Standard: Telcordia (Bellcore) TR/SR

#### **Power Requirements**

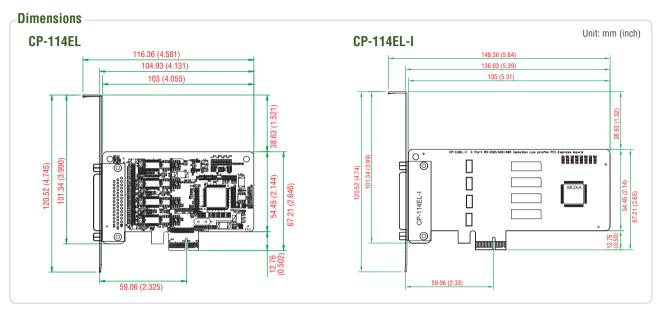
Input Current:

CP-114EL: 835 mA @ 3.3 VDC CP-114EL-I: 1,170 mA @ 3.3 VDC

Warranty

Warranty Period: 5 years

Details: See www.moxa.com/warranty



## : 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 (CBL-M44M9x4-50 cable included)

CP-114EL-DB25M: 4-port RS-232/422/485 low profile PCI Express x1 serial board (CBL-M44M25x4-50 cable included)

**CP-114EL-I-DB9M:** 4-port RS-232/422/485 low profile PCI Express x1 serial board with electrical isolation (CBL-M44M9x4-50 cable included)

CP-114EL-I-DB25M: 4-port RS-232/422/485 low profile PCI Express x1 serial board with electrical isolation (CBL-M44M25x4-50 cable included)

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## Connection Options (can be purchased separately)

Low Profile Bracket: Bracket for DB44 connector (1490000001000)

**CBL-M44M9x4-50**: M44 to 4 x DB9-M cable, 50 cm

CBL-M44M25x4-50: M44 to 4 x DB25-M cable, 50 cm

### CBL-M44M9x4-50

DB44 male to DB9 male x 4 (50 cm cable)



PIN	H3-232	H3-422	H3-483-4W	H3-483-2W
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	-	-	-	-



Package Checklist

Low profile bracket

Warranty card

1 CP-114EL or CP-114EL-I board

Documentation and software CD

Quick installation guide (printed)

1 connection cable (optional)

## **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

