# **CP-114EL Series**

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



#### **Features and Benefits**

- PCI Express 1.0 compliant
- 921.6 kbps maximum baudrate for 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 Windows, Linux, and UNIX
- · Easy maintenance with built-in LEDs and management software

#### Certifications



#### Introduction

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, Linux, and UNIX. In addition, each of the boards' 4 RS-232/422/485 serial ports supports a 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**

#### Serial Interface

Comm. Controller	16C550C compatible
Bus	PCI Express 1.0
Connector	DB44 female
FIFO	128 bytes
Max. No. of Boards per PC	8
No. of Ports	4
Serial Standards	RS-232, RS-422, RS-485
Baudrate	50 bps to 921.6 kbps (supports non-standard baudrates)
Data Bits	5, 6, 7, 8
Stop Bits	1, 1.5, 2
Parity	None, Even, Odd, Space, Mark

Flow Control	None, RTS/CTS, XON/XOFF
Isolation	CP-114EL-I Series: 2 kV
Serial Signals	
RS-232	TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND
RS-422	Tx+, Tx-, Rx+, Rx-, GND
RS-485-4w	Tx+, Tx-, Rx+, Rx-, GND
RS-485-2w	Data+, Data-, GND
Serial Software Features	
Windows Drivers	DOS, 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), Windows Embedded CE 5.0/6.0, Windows XP Embedded
Linux Drivers	Linux kernel 2.4.x, Linux kernel 2.6.x, Linux kernel 3.x, Linux kernel 4.x, Linux kernel 5.x
UNIX Drivers	QNX 6, Solaris 10, UnixWare 7, SCO OpenServer 5, SCO OpenServer 6
Power Parameters	
Input Current	CP-114EL Series: 835 mA @ 3.3 VDC CP-114EL-I Series: 1,170 mA @ 3.3 VDC
Physical Characteristics	
Dimensions	CP-114EL Series: 67.21 x 103 mm (2.65 x 4.06 in) CP-114EL-I Series: 67.21 x 135 mm (2.65 x 5.31 in)
LED Interface	
LED Indicators	Built-in Tx, Rx LEDs for each port
Environmental Limits	
Operating Temperature	0 to 55°C (32 to 131°F)
Storage Temperature (package included)	-20 to 85°C (-4 to 185°F)
Ambient Relative Humidity	
	5 to 95% (non-condensing)
Standards and Certifications	5 to 95% (non-condensing)
	5 to 95% (non-condensing) EN 55032/24
Standards and Certifications	
Standards and Certifications EMC	EN 55032/24
Standards and Certifications  EMC  EMI	EN 55032/24  CISPR 32, FCC Part 15B Class B  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
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Standards and Certifications  EMC  EMI  EMS  Declaration  Green Product	EN 55032/24  CISPR 32, FCC Part 15B Class B  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



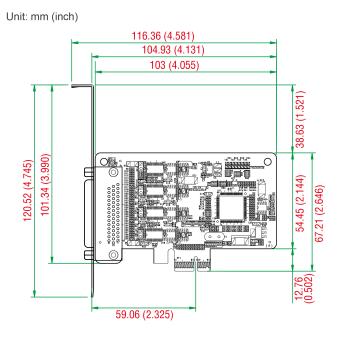
# Warranty

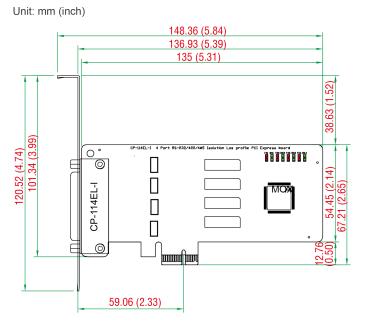
Warranty Period	5 years
Details	See www.moxa.com/warranty
Package Contents	
Device	1 x CP-114EL Series serial board
Cable	1 x M44 to 4 x DB9-M cable, 50 cm (-DB9M models) 1 x M44 to 4 x DB25-M cable, 50 cm (-DB25M models)
Documentation	1 x document and software CD 1 x quick installation guide 1 x warranty card

# **Dimensions**

**CP-114EL** 

# CP-114EL-I





# **Ordering Information**

Model Name	Serial Standards	No. of Serial Ports	Isolation	Included Cable
CP-114EL	RS-232/422/485	4	-	-
CP-114EL-I	RS-232/422/485	4	2 kV	-
CP-114EL-DB9M	RS-232/422/485	4	-	CBL-M44M9x4-50
CP-114EL-DB25M	RS-232/422/485	4	-	CBL-M44M25x4-50
CP-114EL-I-DB9M	RS-232/422/485	4	2 kV	CBL-M44M9x4-50
CP-114EL-I-DB25M	RS-232/422/485	4	2 kV	CBL-M44M25x4-50

# **Accessories (sold separately)**

**Brackets** 

3095010000007 Bracket for DB44 pack

Cables



CBL-F9M9-150	DB9 female to DB9 male serial cable, 1.5 m
CBL-F9M9-20	DB9 female to DB9 male serial cable, 20 cm
CBL-M44M9x4-50	DB44 male to DB9 male serial cable, 50 cm
CBL-M44M25x4-50	M44 to 4 x DB25 male serial cable, 50 cm
Connectors	
Mini DB9F-to-TB	DB9 female to terminal block connector

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