# CP-104EL-A

# 4-port RS-232 PCI Express serial board



- > 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
- > Easy maintenance with on-board LEDs and management software
- > 15 KV ESD protection on the board

















## Overview

The CP-104EL-A is a smart, 4-port PCI Express board designed for POS and ATM applications. It is a top choice of industrial automation engineers and system integrators, and supports many different operating systems, including Windows, Linux, and even Unix. In addition, each of the board's 4 RS-232 serial ports supports a super

fast 921.6 Kbps baudrate. The CP-104EL-A provides full modem control signals to ensure compatibility with a wide range of serial peripherals, and its PCI Express "x1" classification allows it to be installed in any PCI Express slot.

# : Smaller Form Factor

The CP-104EL-A is a low profile board that is compatible with any PCI Express slot. The board requires only 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-104EL-A board is no exception. Reliable Windows COM and Linux/Unix 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 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

**Driver Support** 

Operating Systems: Windows (2012 x64, 8/7/XP/2003/Vista/2008 x86/x64, 2000, 9X/ME/NT), DOS, Linux 2.4.x, Linux 2.6.x, QNX 6, SCO

OpenServer 5/6, UnixWare 7, Solaris 10 x86/x64

Note: Please refer to Moxa's website for the latest driver support information.

#### **Physical Characteristics**

**Dimensions:** 67.21 x 103 mm (2.65 x 4.06 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, EN 61000-6-2, EN 61000-6-4, 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:** 7,723,378 hrs

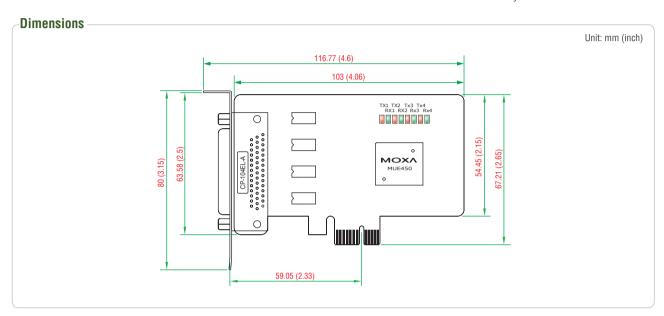
Database: Telcordia (Bellcore). GB **Power Requirements** 

Power Consumption: 805 mA @ 3.3 V

Warranty

Warranty Period: 5 years

Details: See www.moxa.com/warranty



# **Ordering Information**

### **Available Models**

CP-104EL-A-DB9M: 4-port RS-232 PCI low profile Express x1 serial board (includes DB9 male cable)

CP-104EL-A-DB25M: 4-port RS-232 low profile PCI Express x1 serial board (includes DB25 male cable)

# **Package Checklist**

- 1 CP-104EL-A board
- DB9-M or DB25-M connection cable
- 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	PIN
1	DCD	5
2	RxD	6
3	TxD	7
4	DTR	8



-232



# CBL-M44M25x4-50

DB44 male to DB25 male x 4 (50 cm cable)



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

