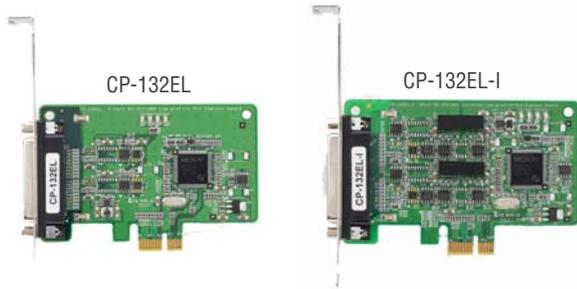# CP-132EL/EL-I

2-port RS-422/485 PCI Express boards with optional 2 KV isolation

CP-132EL

CP-132EL-I

> 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 Windows (2000, XP/2003/Vista/2008 x86/x64), Linux 2.4, Linux 2.6 (x86/x64), Windows XP Embedded, SCO OpenServer 5/6, UnixWare 7
> 15 KV ESD protection on the board

The certification logos shown here apply to some or all of the products in this section. For details, see "Regulatory Approvals" under "Specifications" below.

Overview

The CP-132EL and CP-132EL-I are 2-port PCI Express boards designed for industrial automation applications that require a long distance, multi-point, PC-based data acquisition solution.

RS-485 multidrop for up to 31 devices within 1.2 km

The CP-132EL/EL-I boards have 2 RS-422/485 serial ports, each of which can achieve data rates up to 921.6 Kbps. In RS-485 mode, the boards can connect up to 31 daisy-chained RS-485 devices within a range of 1.2 km. For long distance RS-485 communication, choose the CP-132EL-I model, which comes with 2 KV optical isolation protection to prevent equipment damage.

Drivers Provided for Windows and Linux

Moxa continues to support a wide variety of operating systems, and the CP-132EL/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: DB25 female

Serial Interface

Number of Ports: 2
Serial Standards: RS-422/485
Max. No. of Boards per PC: 4

Serial Line Protection

ESD Protection: 15 KV on the board
Optical Isolation: 2 KV (CP-132EL-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: XON/XOFF

Serial Signals

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

Driver support

Operating Systems: Windows (2000, XP/2003/Vista/2008 x86/x64), Linux 2.4, Linux 2.6 (x86/x64), QNX 6, Windows XP Embedded, SCO OpenServer 5/6, UnixWare 7

Physical Characteristics

Dimensions:
CP-132EL: 67.21 x 101.97 mm (2.65 x 4.08 in)
CP-132EL-I: 67.21 x 103.97 mm (2.65 x 4.16 in)

Environmental Limits

Operating Temperature: 0 to 55°C (32 to 131°F)
Operating Humidity: 5 to 95% RH
Storage Temperature: -20 to 85°C (-4 to 185°F)

Regulatory Approvals

FCC: Part 15 Class B
EMS: EN55024, EN61000-3-2, EN61000-3-3, EN61000-6-2, 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
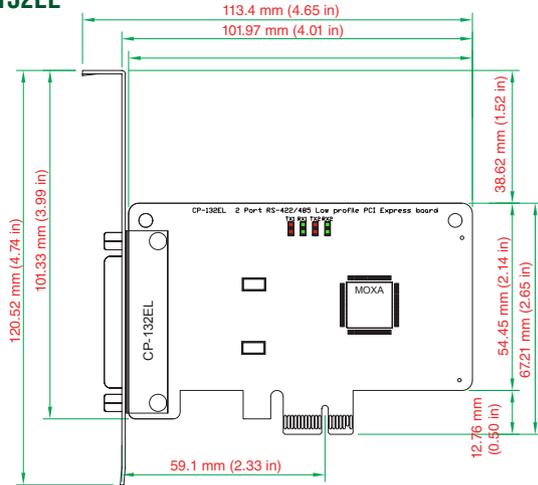
Power Requirements

Power Consumption:
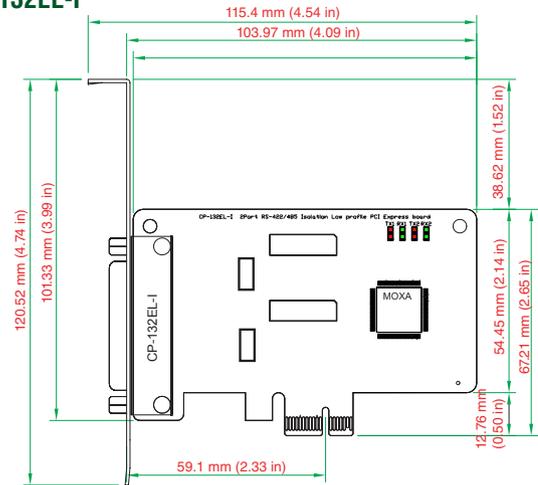CP-132EL: 548 mA @ 3.3 V
CP-132EL-I: 636 mA @ 3.3 V

Warranty

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

Dimensions

CP-132EL

CP-132EL-I

: Ordering Information

Available Models

CP-132EL-DB9M: 2-port RS-422/485 low profile PCI Express x1 serial board (includes DB9 male cable)
CP-132EL-I-DB9M: 2-port RS-422/485 low profile PCI Express x1 serial board with optical isolation (includes DB9 male cable)

Package Checklist

- CP-132EL or CP-132EL-I board
- Low profile bracket
- Document and Software CD
- Quick Installation Guide (printed)
- Warranty Card

Connection Options (can be purchased separately)

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

PIN	RS-422/RS-485-4w	RS-485-2w
1	TxD-(A)	---
2	TxD+(B)	---
3	RxD+(B)	Data+(B)
4	RxD-(A)	Data-(A)
5	GND	GND
6	---	---
7	---	---
8	---	---

DB9 male