CP-132EL Series

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

RS-485 Multidrop for up to 31 Devices Within 1.2 km

The CP-132EL/EL-I boards have two 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 electrical isolation protection to prevent equipment damage.

Drivers Provided for Windows, Linux, and UNIX

Moxa continues to support a wide variety of operating systems, and the CP-132EL/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 | DB25 female |
| FIFO | 128 bytes |
| Max. No. of Boards per PC | 8 |
| No. of Ports | 2 |
| Serial Standards | 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, XON/XOFF |
|--|---|
| Isolation | CP-132EL-I-DB9M: 2 kV |
| Serial Signals | |
| 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 |
| UNIX Drivers | Solaris 10, UnixWare 7, SCO OpenServer 5, SCO OpenServer 6, QNX 6 |
| Power Parameters | |
| Input Current | CP-132EL-IDB9M: 548 mA @ 3.3 VDC CP-132EL-I-DB9M: 636 mA @ 3.3 VDC |
| Physical Characteristics | |
| Dimensions | CP-132EL-DB9M: 67.21 x 101.97 mm (2.65 x 4.08 in) CP-132EL-I-DB9M: 67.21 x 103.97 mm (2.65 x 4.16 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 | |
| EMC | EN 55032/24 |
| EMI | CISPR 32, 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 |
| Declaration | |
| Green Product | RoHS, CRoHS, WEEE |
| MTBF | |
| Time | CP-132EL-DB9M: 4,147,133 hrs CP-132EL-I-DB9M: 1,681,099 hrs |
| Standards | Telcordia (Bellcore) Standard TR/SR |

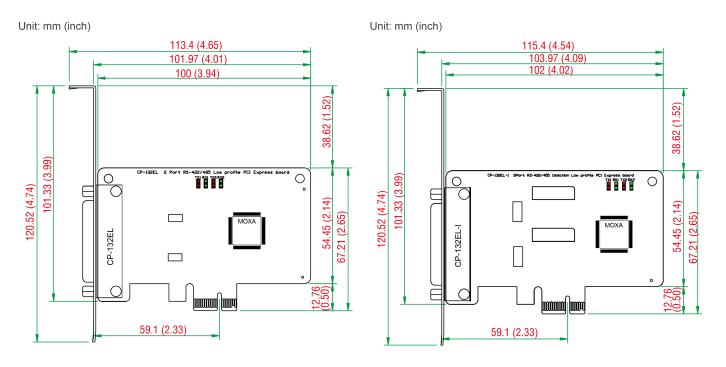


Warranty

| Warranty Period | 5 years |
|------------------|---|
| Details | See www.moxa.com/warranty |
| Package Contents | |
| Device | 1 x CP-132EL Series serial board |
| Documentation | 1 x document and software CD 1 x quick installation guide 1 x warranty card |

Dimensions

CP-132EL-I



Ordering Information

| Model Name | Serial Standards | No. of Serial Ports | Isolation | Included Cable |
|-----------------|------------------|---------------------|-----------|----------------|
| CP-132EL-DB9M | RS-422/485 | 2 | - | CBL-M25M9x2-50 |
| CP-132EL-I-DB9M | RS-422/485 | 2 | 2 kV | CBL-M25M9x2-50 |

Accessories (sold separately)

Brackets

| 3095010000007 | Bracket for DB44 pack |
|-----------------|--|
| Cables | |
| CBL-M25M9x2-50 | M25 to 2 x DB9 male cable, 50 cm |
| Connectors | |
| Mini DB9F-to-TB | DB9 female to terminal block connector |



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