

CP-118EL-A

8-port RS-232/422/485 PCI Express serial board



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
- Variety of connection cables and boxes available for RS-232/422/485
- 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-118EL-A is a smart, 8-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 eight serial ports can be configured independently for RS-232, RS-422, or RS-485 (either 2-wire or 4-wire), and the ports supports a fast 921.6 kbps baudrate. The CP-118EL-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-118EL-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-118EL-A board is no exception. Reliable Windows and Linux/UNIX 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 | VHDCI 68 |
| FIFO | 128 bytes |
| Max. No. of Boards per PC | 8 |
| No. of Ports | 8 |
| 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 |
| 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 R2/2016/2019 (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 | Solaris 10, UnixWare 7, SCO OpenServer 5, SCO OpenServer 6 |
| Power Parameters | |
| Input Current | 1,285 mA @ 3.3 VDC |
| Physical Characteristics | |
| Dimensions | 68.9 x 88 mm (2.71 x 3.46 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 55032/35 |
| 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 | 1,359,482 hrs |
| Standards | Telcordia (Bellcore) Standard TR/SR |

Warranty

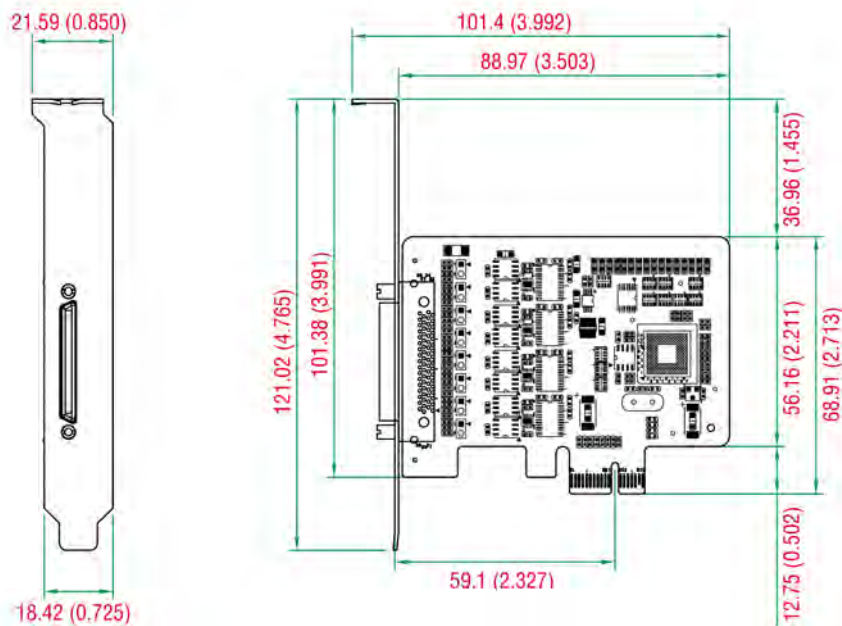
| | |
|-----------------|--|
| Warranty Period | 5 years |
| Details | See www.moxa.com/warranty |

Package Contents

| | |
|---------------|---|
| Device | 1 x CP-118EL-A serial board |
| Documentation | 1 x quick installation guide 1 x warranty card |

Dimensions

Unit: mm (inch)



Ordering Information

| Model Name | Serial Standards | No. of Serial Ports | Operating Temp. |
|----------------------|------------------|---------------------|-----------------|
| CP-118EL-A w/o Cable | RS-232/422/485 | 8 | 0 to 55°C |

Accessories (sold separately)

Cables

| | |
|------------------|--|
| CBL-M68M9x8-100 | SCSI VHDCI 68 to 8 x DB9 male serial cable, 1 m |
| CBL-M68M25x8-100 | SCSI VHDCI 68 to 8 x DB25 male serial cable, 1 m |

Connectors

| | |
|-----------------|--|
| Mini DB9F-to-TB | DB9 female to terminal block connector |
|-----------------|--|

Connection Boxes

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|------------|--|
| OPT 8B+ | VHDCI 68 to 8 x DB25 male connection box |
| OPT 8S+ | VHDCI 68 to 8 x DB25 female connection box with surge protection |
| OPT 8A+ | VHDCI 68 to 8 x DB25 female connection box |
| OPT8-M9+ | VHDCI 68 to 8 x DB9 male connection box |
| OPT8-RJ45+ | VHDCI 68 to 8 x RJ45 (8-pin) connection box |

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