CP-118EL-A

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

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 R2/2012/2012 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

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 55032/24
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	1,359,482 hrs
Standards	Telcordia (Bellcore) Standard TR/SR

Warranty

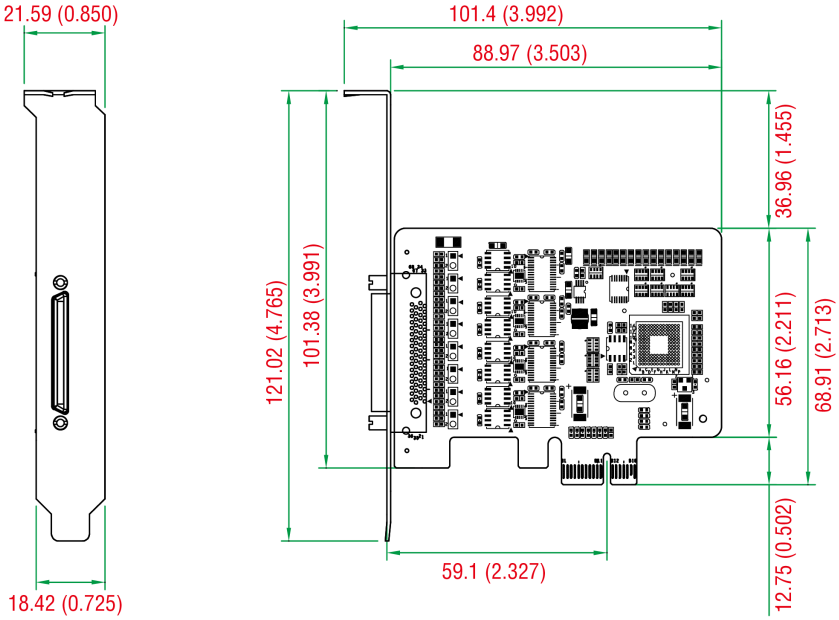
Warranty Period	5 years
Details	See www.moxa.com/warranty

Package Contents

Device	1 x CP-118EL-A serial board
Documentation	1 x document and software CD 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)

Brackets

1490000008000	Bracket for VHDCI Package

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

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

© Moxa Inc. All rights reserved. Updated Jan 17, 2020.

This document and any portion thereof may not be reproduced or used in any manner whatsoever without the express written permission of Moxa Inc. Product specifications subject to change without notice. Visit our website for the most up-to-date product information.