CP-134EL-A-I Series

4-port RS-422/485 PCI Express boards with 4 kV surge and 2 kV electrical 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
- Variety of connection cables and boxes available for RS-232/422/485
- Drivers provided for a broad selection of operating systems, including Windows, Linux, and UNIX
- Easy maintenance with built-in LEDs and management software

Certifications

CE FC

Introduction

The CP-134EL-A-I is a smart PCI Express multiport serial board designed for POS and ATM applications, and for use by industrial automation system manufacturers and system integrators. The CP-134EL-A-I is compatible with all popular operating systems, and each of its eight serial ports supports data rates of up to 921.6 kbps and provides full modem control signals, ensuring compatibility with a wide range of serial peripherals. In addition, the CP-134EL-A-I works with PCI Express x1, allowing the board to be installed in any PCI Express slot.

Intelligent RS-485 for Easy Installation and Troubleshooting (Patent Pending)

Setting up an RS-485 network is relatively straightforward. The challenge comes when the power is turned on and the devices connected to the network start transmitting and receiving data. In most cases, engineers will need to further tune the system by configuring pull high/low resistors and terminators at strategic points along the network. Moxa's new Intelligent RS-485 technology supports two essential features to make it easy: (1) One-Click Installation automatically analyzes the network topology and then adjusts terminators and pull high/low resistors. (2) One-Click Troubleshooting tells you what to change to make a deficient network viable.

Specifications

Serial Interface

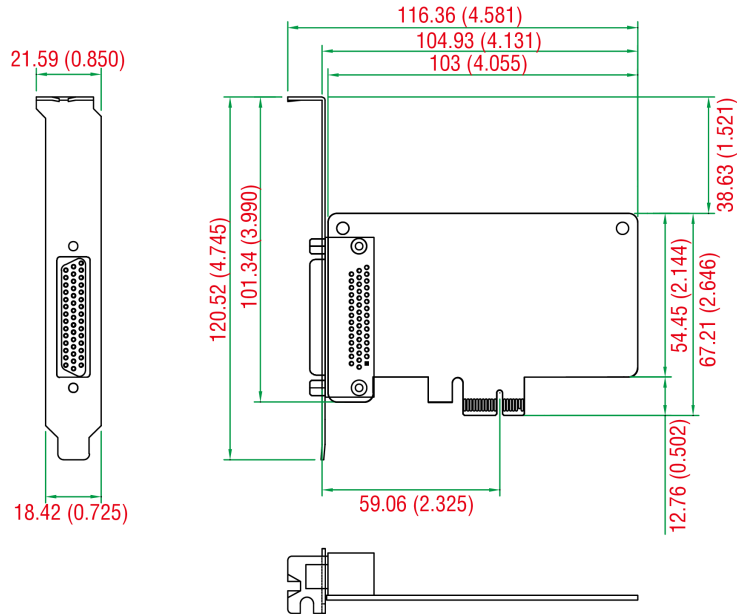|	
Comm. Controller	16C550C compatible
Bus	PCI Express 1.0
Connector	DB44 female
FIFO	128 bytes
Max. No. of Boards per PC	8
No. of Ports	4
Serial Standards	RS-422, RS-485
Baudrate	50 bps to 921.6 kbps (supports non-standard baudrates)
Data Bits	5, 6, 7, 8
Stop Bits	1, 1.5, 2
Parity	None, Even, Odd, Space, Mark
Flow Control	None, XON/XOFF

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Isolation	2 kV
Surge	4 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

Linux Drivers	Linux kernel 2.4.x, Linux kernel 2.6.x, Linux kernel 3.x
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
UNIX Drivers	Solaris 10, UnixWare 7, SCO OpenServer 5, SCO OpenServer 6

Power Parameters

Input Current	3,414 mA @ 3.3 VDC

Physical Characteristics

Dimensions	67.21 x 103 mm (2.65 x 4.06 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; Signal: 4 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	433,077 hrs
Standards	Telcordia (Bellcore) Standard TR/SR

Warranty

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

Package Contents

Device	1 x CP-134EL-A-I Series serial board
Cable	1 x M44 to 4 x DB9-M cable, 50 cm (CP-134EL-A-I-DB9M) 1 x M44 to 4 x DB25-M cable, 50 cm (CP-134EL-A-I-DB25M) x M44 to 4 x DB9-M cable, 50 cm
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	Included Cable
CP-134EL-A-I	RS-422/485	4	–
CP-134EL-A-I-DB9M	RS-422/485	4	CBL-M44M9x4-50
CP-134EL-A-I-DB25M	RS-422/485	4	CBL-M44M25x4-50

Accessories (sold separately)

Brackets

1490000001000	Bracket for DB44 pack

Connectors

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

Cables

CBL-M44M25x4-50	M44 to 4 x DB25 male cable, 50 cm
CBL-M44M9x4-50	4-port DB44 male to DB9 male cable, 50 cm

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