CP-134U/U-I

4-port RS-422/485 smart Universal PCI serial boards

with 2 KV isolation protection



- > Over 700 Kbps data throughput for top performance
- > 921.6 Kbps maximum baudrate for super fast data transmission
- > ADDC® provides automatic data direction control for RS-485
- > 128-byte FIFO and on-chip H/W, S/W flow control
- > Compatible with 3.3/5V PCI and PCI-X
- > Drivers provided for Windows (Vista, 2003, XP, 2000), WinCE 5.0, Linux, and Unix
- > 15 KV ESD protection on the board
- > Added bonus! Ports 1 and 2 support RS-232 and RS-422/485















The certification logos shown here apply to some or all of the products in this section. Please see the Specifications section or Moxa's website for details.

: Overview

The CP-134U and CP-134U-I 4-port universal PCI boards are designed for industrial automation applications that require a long distance, multi-point, PC-based data acquisition solution.

On-chip Automatic Data Direction Control for precision RS-485 communication

RS-485 communication requires precise timing control to enable and disable the line driver. The Moxa Turbo Serial Engine™ chip that powers the CP-134U board comes with on-chip ADDC®, which makes RS-485 as easy to use as RS-232.

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

The CP-134U universal PCI board has 4 RS-422/485 serial ports, each of which can achieve data rates up to 921.6 Kbps. In RS-485 mode, the board 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-134U-I, which comes with 2 KV optical 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-134U and CP-134U-I boards are no exception. Reliable Windows COM and Linux/Unix 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: MU860 (16C550C compatible)

Bus: 32-bit Universal PCI Connector: DB44 female **Serial Interface** Number of Ports: 4

Serial Standards: RS-232/422/485 Number of Boards: 4 per PC (max.) Serial Line Protection ESD Protection: 15 KV on the board

Optical Isolation: 2 KV (CP-134U-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: RTS/CTS, XON/XOFF I/O Address: Assigned by BIOS IRQ: Assigned by BIOS

Serial Signals

RS-232: TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND

RS-422: TxD+(B), TxD-(A), RxD+(B), RxD-(A), RTS+(B), RTS-(A),

CTS+(B), CTS-(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 x86/x64, 9X/ME/NT), Windows CE 5.0, Windows XP Embedded, DOS, Linux 2.4/2.6, FreeBSD 4/5, QNX 6

Physical Characteristics

Dimensions:

CP-134U: $82.5 \times 120 \text{ mm} (3.24 \times 4.72 \text{ in})$ CP-134U-I: $115 \times 120 \text{ mm} (4.52 \times 4.72 \text{ in})$

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: EN55022, EN55024, EN61000-3-2, EN61000-3-3, IEC61000-4-2, IEC61000-4-3, IEC61000-4-4, IEC61000-4-5, IEC61000-4-6, IEC61000-4-8, IEC61000-4-11, FCC Part 15 Class B

Power Requirements

Power Consumption:

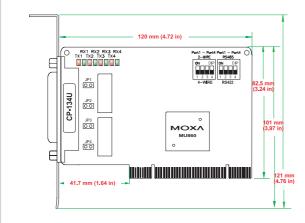
CP-134U: 180 mA @ +5 V CP-134U-I: 850 mA @ +5 V

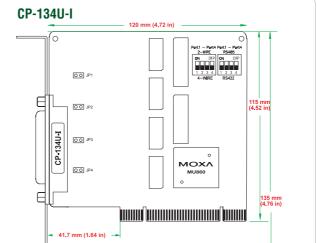
Warranty

Warranty Period: 5 years

Details: See www.moxa.com/warranty

Dimensions CP-134U





: Ordering Information

Available Models

CP-134U: 4-port RS-422/485 smart Universal PCI serial board (DB9 male or DB25 male cable included)

CP-134U-I: 4-port RS-422/485 smart Universal PCI serial board with 2 KV optical isolation protection (DB9 male or DB25 male cable included)

Package Checklist

- CP-134U or CP-134U-I board
- DB9 or DB25 cable included
- Document and Software CD
- Quick Installation Guide (printed)
- Warranty Card

Connection Options (can be purchased separately)

CBL-M44M9x4-50

DB44 male to DB9 male x 4 (50 cm cable)



PIN	RS-232	RS-422	RS-485-4w	RS-485-2w
1	DCD	TxD-(A)	TxD-(A)	
2	RxD	TxD+(B)	TxD+(B)	
3	TxD	RxD+(B)	RxD+(B)	Data+(B)
4	DTR	RxD-(A)	RxD-(A)	Data-(A)
5	GND	GND	GND	GND
6	DSR	RTS-(A)		
7	RTS	RTS +(B)		
8	CTS	CTS+(B)		
9		CTS-(A)		



CBL-M44M25x4-50

DB44 male to DB25 male x 4 (50 cm cable)



PIN	RS-232	RS-422	RS-485-4w	RS-485-2w
2	TxD	RxD+(B)	RxD+(B)	Data+(B)
3	RxD	TxD+(B)	TxD+(B)	
4	RTS	RTS+(B)		
5	CTS	CTS+(B)		
6	DSR	TRS-(A)		
7	GND	GND	GND	GND
8	DCD	TxD-(A)	TxD-(A)	
20	DTR	RxD-(A)	RxD-(A)	Data-(A)
22		CTS-(A)		

DB25 male

