# **CP-134U Series**

## 4-port RS-422/485 Universal PCI serial boards with optional 2 kV isolation



#### **Features and Benefits**

- Over 700 kbps data throughput for top performance
- 921.6 kbps maximum baudrate for fast data transmission
- ADDC® provides automatic data direction control for RS-485 signals
- 128-byte FIFO and on-chip H/W, S/W flow control
- Compatible with 3.3/5 V PCI and PCI-X
- Drivers provided for a broad selection of operating systems, including Windows, Linux, and UNIX
- Ports 1 and 2 support RS-232 and RS-422/485
- Wide-temperature model available for -40 to 85°C environments

#### **Certifications**



#### Introduction

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

### On-Chip Automatic Data Direction Control for Precise 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 four 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 electrical isolation protection to prevent equipment damage.

#### **Drivers Provided for Windows, Linux, and UNIX**

We continue to support a wide variety of operating systems, and the CP-134U and CP-134U-I boards are no exception. Reliable Windows, Linux, and 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	MU860 (16C550C compatible)
Bus	32-bit Universal PCI
Connector	DB44 female
FIFO	128 bytes
Max. No. of Boards per PC	8
No. of Ports	4
Serial Standards	2 x RS-232/422/485, 2 x RS-422/485
Baudrate	50 bps to 921.6 kbps
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			
Isolation	CP-134U-I Series: 2 kV			
Serial Signals				
RS-232	TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND			
RS-422	Tx+, Tx-, Rx+, Rx-, RTS+, RTS-, CTS+, CTS-, 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	QNX 6, SCO OpenServer, UnixWare 7, Solaris 10, FreeBSD			
Power Parameters				
Input Current	CP-134U Series: 180 mA @ 5 VDC CP-134U-I Series: 850 mA @ 5 VDC			
Physical Characteristics				
Dimensions	CP-134U Series: 82.5 x 120 mm (3.24 x 4.72 in) CP-134U-I Series: 115 x 120 mm (4.52 x 4.72 in)			
LED Interface				
LED Indicators	Built-in Tx, Rx LEDs for each port			
Environmental Limits				
Operating Temperature	Standard Models: 0 to 55°C (32 to 131°F) Wide Temp. Models: -40 to 85°C (-40 to 185°F)			
Storage Temperature (package included)	-40 to 85°C (-40 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			
Declaration				
Green Product	RoHS, CRoHS, WEEE			
MTBF				
Time	480,209 hrs			
Standards	Telcordia SR332			



## Warranty

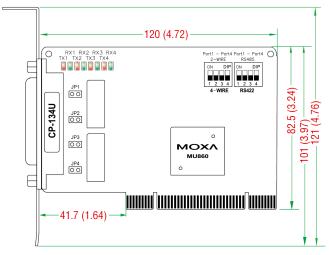
Warranty Period	5 years
Details	See www.moxa.com/warranty
Package Contents	
Device	1 x CP-134U Series serial board

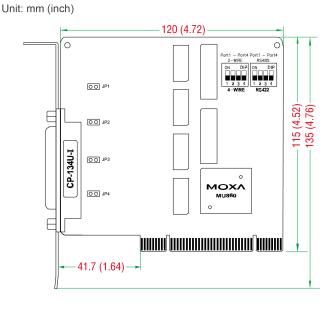
Device	1 x CP-134U Series serial board
Cable	1 x M44 to 4 x DB9-M cable, 50 cm (-DB9M models) 1 x M44 to 4 x DB25-M cable, 50 cm (-DB25M models)
Documentation	1 x document and software CD 1 x quick installation guide 1 x substance disclosure table 1 x warranty card

## **Dimensions**

CP-134U-I

Unit: mm (inch)





## **Ordering Information**

Model Name	Serial Standards	No. of Serial Ports	Serial Isolation Protection	Operating Temp.	Included Cable
CP-134U w/o Cable	2 x RS-232/422/485 2 x RS-422/485	4	-	0 to 55°C	-
CP-134U-T	2 x RS-232/422/485 2 x RS-422/485	4	-	-40 to 85°C	-
CP-134U-DB9M	2 x RS-232/422/485 2 x RS-422/485	4	-	0 to 55°C	CBL-M44M9x4-50
CP-134U-DB25M	2 x RS-232/422/485 2 x RS-422/485	4	-	0 to 55°C	CBL-M44M25x4-50
CP-134U-I w/o Cable	2 x RS-232/422/485 2 x RS-422/485	4	2 kV	0 to 55°C	-
CP-134U-I-T	2 x RS-232/422/485 2 x RS-422/485	4	2 kV	-40 to 85°C	-
CP-134U-I-DB9M	2 x RS-232/422/485 2 x RS-422/485	4	2 kV	0 to 55°C	CBL-M44M9x4-50
CP-134U-I-DB25M	2 x RS-232/422/485 2 x RS-422/485	4	2 kV	0 to 55°C	CBL-M44M25x4-50

# **Accessories (sold separately)**

## **Brackets**

149000001000	Bracket for DB44 pack
Cables	
CBL-M44M25x4-50	M44 to 4 x DB25 male serial cable, 50 cm
CBL-M44M9x4-50	DB44 male to DB9 male serial cable, 50 cm

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