CP-132UL Series

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



Features and Benefits

- Over 800 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
- Transmit data up to 1.2 km with RS-422/485
- 128-byte FIFO and on-chip 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
- MD1 low-profile form factor fits small-sized PCs
- Wide-temperature model available for -40 to 85°C environments

Certifications



Introduction

The CP-132UL and CP-132UL-I are 2-port Universal PCI boards 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. Our Turbo Serial Engine™ chip that powers the CP-132UL/UL-I boards 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-132UL/UL-I Universal PCI boards have two RS-422/485 serial ports, both of which can achieve data rates of up to 921.6 kbps. In RS-485 mode, the boards 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-132UL-I model, which comes with 2 kV electrical isolation protection to prevent equipment damage.

Top Serial Performance

With over 30 years of experience in serial board design, we have perfected the design of our high-performance serial data transmission chip. The Turbo Serial Engine™ chip provides serial boards with a 128-byte FIFO, on-chip software flow control, and burst data mode. Thanks to the Turbo Serial Engine™, we are able to offer smart serial boards with exceptional performance.

Drivers Provided for Windows, Linux, and UNIX

We continue to support a wide variety of operating systems, and the CP-132UL/UL-I boards are no exception. Reliable Windows, Linux, and UNIX drivers are provided for all of Moxa's 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	DB25 female
FIFO	128 bytes
Max. No. of Boards per PC	8



2	
RS-422, RS-485	
50 bps to 921.6 kbps	
5, 6, 7, 8	
1, 1.5, 2	
None, Even, Odd, Space, Mark	
None, XON/XOFF	
CP-132UL-I Series: 2 kV	
Tx+, Tx-, Rx+, Rx-, RTS+, RTS-, CTS+, CTS-, GND	
Tx+, Tx-, Rx+, Rx-, GND	
Data+, Data-, GND	
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 kernel 2.4.x, Linux kernel 2.6.x, Linux kernel 3.x, Linux kernel 4.x, Linux kernel 5.x	
QNX 6, SCO OpenServer, UnixWare 7, Solaris 10, FreeBSD	
CP-132UL Series: 120 mA @ 5 VDC CP-132UL-I Series: 490 mA @ 5 VDC	
64.4 x 120 mm (2.53 x 4.72 in)	
Built-in Tx, Rx LEDs for each port	
Standard Models: 0 to 55°C (32 to 131°F) Wide Temp. Models: -40 to 85°C (-40 to 185°F)	
-40 to 85°C (-40 to 185°F)	
5 to 95% (non-condensing)	
EN 55032/24	
CISPR 32, FCC Part 15B Class B	
IEC 61000-4-2 ESD: Contact: 4 kV; Air: 8 kV IEC 61000-4-3 RS: 80 MHz to 1 GHz: 3 V/m	
RoHS, CRoHS, WEEE	



MTBF

Time	1,647,832 hrs		
Standards	Telcordia SR332		
Warranty			
Warranty Period	5 years		
Details	See www.moxa.com/warranty		
Package Contents			
Device	1 x CP-132UL Series serial board		
Cable	1 x M25 to 2 x DB9-M cable, 50 cm (-DB9M models)		
Documentation	1 x document and software CD 1 x quick installation guide 1 x substance disclosure table		

1 x warranty card

Dimensions

CP-132UL-I

Unit: mm (inch)

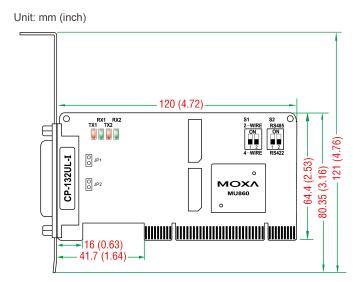
120 (4.72)

120 (4.72)

131 (1.82)

14 (0.63)

41.7 (1.64)



Ordering Information

Model Name	Serial Standards	No. of Serial Ports	Serial Isolation Protection	Operating Temp.	Included Cable
CP-132UL-DB9M	RS-422/485	2	-	0 to 55°C	CBL-M25M9x2-50
CP-132UL-T	RS-422/485	2	-	-40 to 85°C	-
CP-132UL-I-DB9M	RS-422/485	2	2 kV	0 to 55°C	CBL-M25M9x2-50
CP-132UL-I-T	RS-422/485	2	2 kV	-40 to 85°C	-

Accessories (sold separately)

Brackets

149000001000	Low-profile bracket for DB44 pack
Cables	
CBL-M25M9x2-50	M25 to 2 x DB9 male serial cable, 50 cm



Connectors

Mini DB9F-to-TB

DB9 female to terminal block connector

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