

# CP-132N Series

## 2-port RS-422/485 Mini PCI Express boards



### Features and Benefits

- Mini PCIe interface support
- 921.6 kbps maximum baudrate for fast data transmission
- 128-byte FIFO and on-chip H/W, S/W flow control
- Drivers provided for a broad selection of operating systems, including Windows and Linux

### Certifications



## Introduction

The CP-132N is a Mini PCI Express multiport serial board designed for various applications and users such as system integrators and industrial automation system and industrial PC manufacturers.

The CP-132N is compatible with all popular operating systems and supports data rates up to 921.6 kbps. It also provides 1 kV line-to-line surge protection and 2.5 kV isolation (for the I model), ensuring compatibility with a wide range of industrial environments. Furthermore, the CP-132N is embedded with a DIP switch for easy adjusting of the terminal and pull-high/low resistors for various environments and applications.

### RS-485 Multidrop for up to 31 Devices Within 1.2 km

The CP-132N Series boards have two RS-422/485 serial ports, each of which can achieve data rates 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-132N-I-T model, which comes with 2.5 kV electrical isolation protection to prevent equipment damage.

### A New Family of Mini PCI Express Multiport Serial Boards for Faster Time to Market

Moxa's new Mini PCI Express multiport serial board family fulfills the need for customized expansion and enables faster time to market for OEMs and system integrators. It includes Isolated and non-Isolated RS-232/422/485 communication cards for various applications.

The serial boards feature high performance 16C950 compatible UARTs and are available in 4-port and 2-port versions compatible with all popular operating systems. They support data rates of up to 921.6 kbps and have 128-byte transmit and receive FIFOs. The serial boards can operate in the -40 to 85°C temperature range. Door brackets are included in the package for all models, enabling the installation of the serial boards in a Moxa IPC expansion slot.

## Specifications

### Serial Interface

Comm. Controller	16C550C compatible
Bus	Mini PCI Express
Connector	DB9 male
FIFO	128 bytes
No. of Ports	2
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
Isolation	2.5 kV (I models)
<b>Serial Signals</b>	
RS-422	Tx+, Tx-, Rx+, Rx-, GND
RS-485-4w	Tx+, Tx-, Rx+, Rx-, GND
RS-485-2w	Data+, Data-, GND
<b>Serial Software Features</b>	
Windows Drivers	Windows 7/8/8.1/10/11 (x86/x64), Windows 2008 R2/2012/2012 R2/2016/2019 (x64), Windows Server 2022
Linux Drivers	Linux kernel 4.x, Linux kernel 5.x
<b>Power Parameters</b>	
Input Current	CP-132N-T: 487 mA @ 3.3 VDC CP-132N-I-T: 533 mA @ 3.3 VDC
<b>Physical Characteristics</b>	
Dimensions	30 x 50.95 mm (1.18 x 2 in)
<b>Environmental Limits</b>	
Operating Temperature	-40 to 85°C (-40 to 185°F)
Storage Temperature (package included)	-20 to 85°C (-4 to 185°F)
Ambient Relative Humidity	5 to 95% (non-condensing)
<b>Standards and Certifications</b>	
EMC	EN 55032/35
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: 1 kV IEC 61000-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 61000-4-8 PFMF
<b>Declaration</b>	
Green Product	RoHS, CRoHS, WEEE
<b>MTBF</b>	
Time	CP-132N-T: 4,128,967 hrs CP-132N-I-T: 3,583,931 hrs
Standards	Telcordia (Bellcore) Standard TR/SR
<b>Warranty</b>	
Warranty Period	5 years
Details	See <a href="http://www.moxa.com/warranty">www.moxa.com/warranty</a>

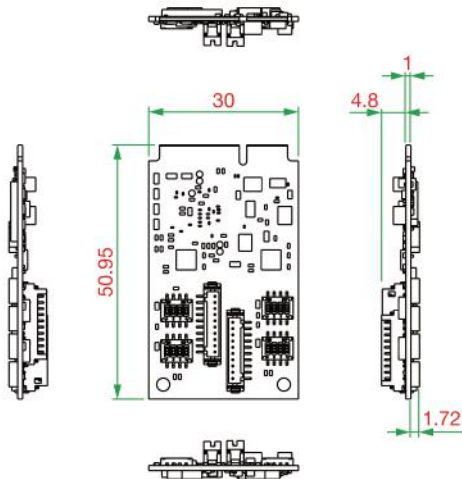
## Package Contents

Device	1 x CP-132N Series serial board
Cable	2 x 10-pin female to 1 DB9 male serial cable, 25 cm
Installation Kit	Door/CP-100N Port12
Documentation	1 x quick installation guide 1 x warranty card

## Dimensions

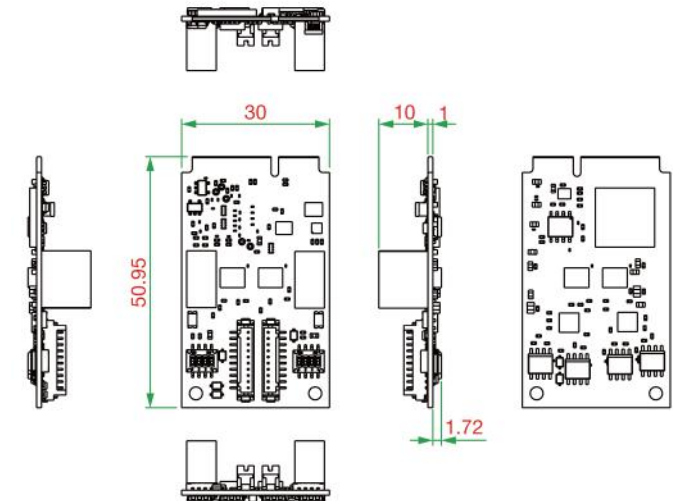
### CP-132N-T

Unit: mm



### CP-132N-I-T

Unit: mm



## Ordering Information

Model Name	Serial Standards	No. of Serial Ports	Serial Isolation Protection
CP-132N-T	RS-422/485	2	—
CP-132N-I-T	RS-422/485	2	2.5 kV

## Accessories (sold separately)

### Connectors

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

CBL-M9HSF1x10H-15-01	10-pin female to 1 DB9 male serial cable, 15 cm Applicable Models: CP-132N-I-T
CBL-M9HSF1x10H-15-02	10-pin female to 1 DB9 male serial cable, 15 cm Applicable Models: CP-132N-T

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