CP-114N Series

4-port RS-232/422/485 Mini PCI Express boards



Features and Benefits

- · Mini PCle 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-114N is a Mini PCI Express multiport serial board designed for varies applications such as industrial automation system and industrial PC manufacturers. The CP-114N is compatible with any Mini PCI Express slot. The board requires only a 3.3 VDC power supply, which means it can work with host computers ranging from DIN-rail PCs to standard-sized PCs.

The CP-114N is a top choice of industrial automation engineers and system integrators and supports Windows and Linux operating systems. In addition, the four RS-232/422/485 serial ports support a fast 921.6 kbps baudrate. The CP-114N provides full-modem control signals to ensure compatibility with a wide range of serial peripherals. The board also provides 1 kV line-to-line surge protection, ensuring compatibility in a wide range of industrial environments.

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 backets 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	4
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, RTS/CTS, XON/XOFF		
Serial Standards	RS-232/422/485 (software selectable)		
Serial Signals			
RS-232	TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND		
RS-422	Tx+, Tx-, Rx+, Rx-, GND		
RS-485-2w	Data+, Data-, GND		
RS-485-4w	Tx+, Tx-, Rx+, Rx-, GND		
Serial Software Features			
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		
Power Parameters			
Input Current	557 mA @ 3.3 VDC		
Physical Characteristics			
Dimensions	30 x 50.95 mm (1.18 x 2 in)		
Environmental Limits			
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)		
Standards and Certifications			
EMC	EN 55032/35		
ЕМІ	CISPR 32, FCC Part 15B Class A		
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		
Declaration			
Green Product	RoHS, CRoHS, WEEE		
MTBF			
Time	3,077,789 hrs		
Standards	Telcordia (Bellcore) Standard TR/SR		
Warranty			
Warranty Period	5 years		
Details	See www.moxa.com/warranty		
Package Contents			
Device	1 x CP-114N Series serial board		
Cable	2 x 20-pin female to 20-pin female serial cable, 25 cm		

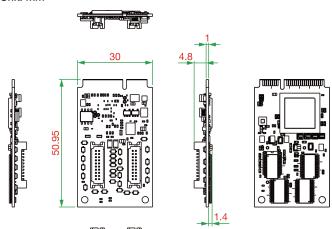


Installation Kit	Door/CP-100N Port12, Door/CP-100N Port34
Documentation	1 x quick installation guide 1 x warranty card

Dimensions

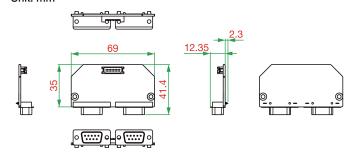
CP-114N-T

Unit: mm



CP-114N-T With IO

Unit: mm



Ordering Information

Model Name	Serial Standards	No. of Serial Ports	Serial Isolation Protection
CP-114N-T	RS-232/422/485	4	-

Accessories (sold separately)

Connectors

Mini DB9F-to-TB	DB9 female to terminal block connector
Cables	
CBL-HSF2x10-15	20-pin female to 20-pin female serial cable, 15 cm

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