CP-114UL

4-port RS-232/422/485 Smart Universal PCI Serial Board



Features

- > Over 800 Kbps data throughput for top performance
- 128-byte FIFO and on-chip H/W, S/W flow control
- Universal PCI compatible with 3.3/5V PCI and PCI-X
- Serial communication speed up to 921.6 Kbps
- Windows Vista/2003/XP/2000, and Linux driver support
- MD1 Low Profile for compact-sized PCs
- Easy maintenance with on-board LED display, and management software
- > 15 KV ESD protection on-board



















: Overview

The CP-114UL is a smart, 4-port serial board designed for long distance, multi-point, PC-based data acquisition applications. Industrial automation system integrators will be eager to use this board for many of their industrial automation projects.

On-chip ADDC™ for Precision RS-485 Communication

RS-485 communication requires precise timing control to enable and disable the line driver, and the MOXA Turbo Serial Engine™ chip that

powers the CP-114UL card comes with on-chip ADDC™ (Automatic Data Direction Control) to make RS-485 as easy to use as RS-232.

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

The CP-114UL Universal PCI board has 4 RS-232/422/485 serial ports, each of which can achieve data rates up to 921.6 Kbps. In RS-485 mode, the serial port can connect up to 31 daisy-chained RS-485 devices within a range of 1.2 km.

* Top Performance with 128-byte FIFO and on-chip H/W, S/W Flow Control

MOXA's 20 plus years of experience in serial board design has culminated in the design of a top performance serial data transmission chip. Called the MOXA Turbo Serial Engine™, the chip equips the

CP-114UL board with a 128-byte FIFO, on-chip hardware and software flow control, and burst data mode, making the CP-114UL the top performing smart multiport serial board in the world.

* Supports All Major Windows and Linux/Unix Drivers

One of MOXA's highest priorities is to provide drivers for all mainstream operating systems. Reliable, well-tested Windows COM and Linux/Unix TTY drivers are available for use with the CP-114UL.

Other operating systems, such as Windows XP embedded and WEPOS, are also supported to accomodate embedded integration applications.

Ordering Information

CP-114UL-DB9: 4-port RS-232/422/485 Low Profile Universal PCI Board with male DB9 cable

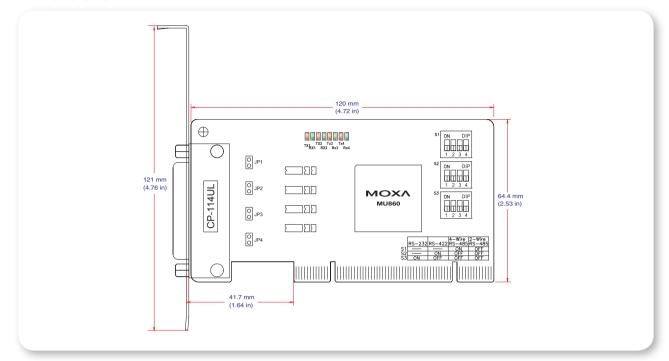
CP-114UL-DB25: 4-port RS-232/422/485 Low Profile Universal PCI Board with male DB25 cable

CP-114UL: 4-port RS-232/422/485 Low Profile Universal PCI Board (without cable)

Package Checklist

- · CP-114UL board with standard bracket, and low profile bracket
- Document & Software CD-ROM
- Quick Installation Guide

Dimensions



Connection Options

Male DB9

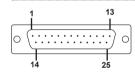


CBL-M44M9x4-50 DB44 to male DB9 x 4, 50 cm Cable



PIN	RS-232	RS-422	4-wire RS-485	2-wire RS-485
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			
7	RTS			
8	CTS			
9				

Male DB25



CBL-M44M25x4-50DB44 to male DB25 x 4,
50 cm Cable



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

: Specifications

Hardware

Connector: Female DB44

Comm. Controller: MU860 (16C550C compatible)

Interface

Bus Interface: 32-bit Universal PCI **Number of Ports:** 4 (only one IRQ required)

Max No. of Boards: 4

Signals

 $\begin{array}{l} \textbf{RS-232:} \ \, \textbf{TXD}, \ \, \textbf{RXD}, \ \, \textbf{RTS}, \ \, \textbf{CTS}, \ \, \textbf{DTR}, \ \, \textbf{DSR}, \ \, \textbf{DCD}, \ \, \textbf{GND} \\ \textbf{RS-422:} \ \, \textbf{TXD+(B)}, \ \, \textbf{TXD-(A)}, \ \, \textbf{RXD+(B)}, \ \, \textbf{RXD-(A)}, \ \, \textbf{GND} \\ \textbf{4-wire} \ \, \textbf{RS-485:} \ \, \textbf{TXD+(B)}, \ \, \textbf{TXD-(A)}, \ \, \textbf{RXD+(B)}, \ \, \textbf{RXD-(A)}, \ \, \textbf{GND} \end{array}$

2-wire RS-485: Data+(B), Data-(A), GND

Performance

Baudrate: 50 bps to 921.6 Kbps

Configuration

Data Bits: 5, 6, 7, 8 Stop Bit(s): 1, 1.5, 2

I/O address/IRQ: BIOS assigned Parity: None, Even, Odd, Space, Mark Flow Control: RTS/CTS, XON/XOFF

Power and Environment

Power Requirement:

CP-114UL: 320 mA (+5V, RS-232) Operating Temperature: 0 to 55°C Operating Humidity: 5 to 95% RH Storage Temperature: -20 to 85°C

ESD Protection: Embedded 15 KV ESD Protection

Regulatory Approvals

EN55022 Class B, EN55024, EN61000-3-2, EN61000-3-3, FCC Part 15 Class B

Warranty: 5 years