CP-134U V2/CP-134U-I V2

4-port RS-422/485 Universal PCI Smart Serial Boards with 2 KV Isolation Protection

CP-134U V2

CP-134U-I V2

8

Multiport Serial Boards
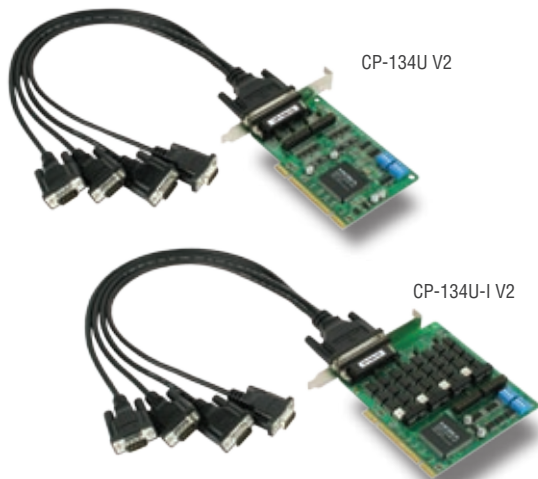
Features

> **Ports 1 and 2 support RS-232 and RS-422/485**
> **Over 700 Kbps data throughput, for top performance**
> **4-port RS-422/485 interface with ADDC™ and up to 921.6 Kbps**
> **Built-in 15 KV ESD and optional 2 KV optical isolation protection**
> **128-byte FIFO and on-chip H/W, S/W flow control**
> **Universal PCI compatible with 3.3/5V PCI and PCI-X**
> **Drivers provided for Windows Vista/2003/XP/2000/98/ME, Linux, Unix**

: Overview

MOXA's CP-134U V2 Series of Smart Multiport Serial Boards are designed to be used by industrial automation system integrators for long distance, multi-point, PC-based data acquisition applications.

On-chip Automatic Data Direction Control for Precision RS-485 Communication

RS-485 communication requires precise timing control for enabling and disabling the line driver. The MOXA Turbo Serial Engine™ chip that powers the CP-134U V2 card 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 V2 Universal PCI board comes with 4 RS-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. For long distance RS-485 communication, optional 2 KV optical isolation protection is available (CP-134U-I V2) to prevent equipment damage.

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

Our 18 plus years of experience in serial board design is now concentrated in MOXA's new top performance serial data transmission chip, called Turbo Serial Engine™, which equips the CP-134U/CP-134U-I V2 series boards with a 128-byte FIFO, on-chip hardware and software flow control, and burst data mode. This makes the CP-134U V2 series the top performing series of smart multiport serial boards in the world.

: Support for Major Windows and Linux/Unix OS drivers

The CP-134U V2 boards continue to support all mainstream operating systems by providing reliable drivers for Windows COM ports and Linux/Unix TTY ports. In addition, the CP-134U V2 also supports other operating systems, such as Windows XP embedded and WEPOS for integration with embedded applications.

: Ordering Information

CP-134U V2: 4-port RS-422/485 Universal PCI Smart Serial Board (DB9 or DB25 cable included)
CP-134U-I V2: 4-port RS-422/485 board with 2 KV Optical Isolation Protection (DB9 or DB25 cable included)

Optional Accessories (choose one per board)
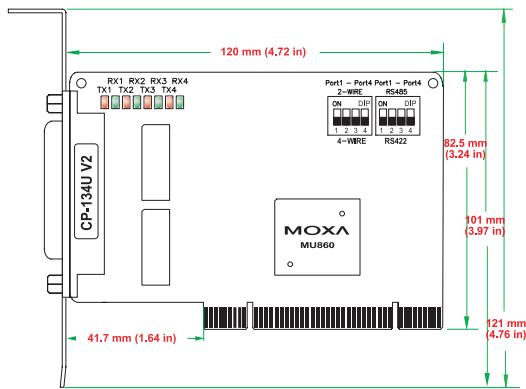**CBL-M44M9x4-50:** 4-port male DB9 connection cable
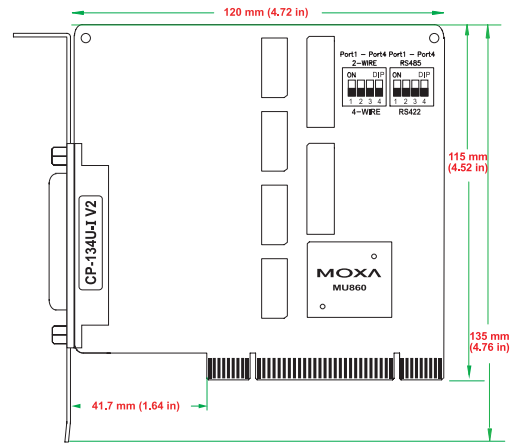**CBL-M44M25x4-50:** 4-port male DB25 connection cable

Package Checklist
• Document & Software CD-ROM
• Quick Installation Guide
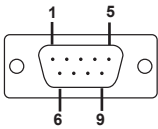
Dimensions (unit = mm)

CP-134U V2

CP-134U-I V2

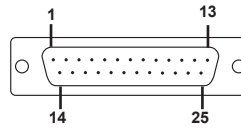**On-Board LED Display** ● Red--Transmit ● Green--Receive

∷ 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	RTS-(A)	---	---
7	RTS	RTS+(B)	---	---
8	CTS	CTS+(B)	---	---
9	---	CTS-(A)	---	---

Male DB25

CBL-M44M25x4-50
DB44 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	RTS+(B)	---	---
5	CTS	CTS+(B)	---	---
6	DSR	RTS-(A)	---	---
7	GND	GND	GND	GND
8	DCD	TxD-(A)	TxD-(A)	---
20	DTR	RxD-(A)	RxD-(A)	Data-(A)
22	---	CTS-(A)	---	---

∷ Specifications

Hardware

Connectors: 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

RS-232: TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND
RS-422: TxD+(B), TxD-(A), RxD+(B), RxD-(A), RTS+(B),
RTS-(A), CTS+(B), CTS-(A), GND
4-wire RS-485: TxD+(B), TxD-(A), RxD+(B), RxD-(A), GND
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 Bits: 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 Requirements:
CP-134U V2: 180 mA (+5V)
CP-134U-I V2: 850 mA (+5V)
Operating Temperature: 0 to 55°C (32 to 131°F)
Operating Humidity: 5 to 95% RH
Storage Temperature: -20 to 85°C (-4 to 185°F)
ESD Protection: Embedded 15 KV ESD Protection
Optical Isolation: 2 KV (CP-134U-I V2)

Regulatory Approvals

EN55022 Class B, EN55024, EN6100-3-2, EN61000-3-3,
FCC Part 15 Class B

Warranty: 5 years