CP-134U Series



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



Features and Benefits

- Over 700 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
- 128-byte FIFO and on-chip H/W, 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
- Ports 1 and 2 support RS-232 and RS-422/485
- Wide-temperature model available for -40 to 85°C environments

Certifications



Introduction

The CP-134U and CP-134U-I 4-port universal PCI boards are 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. The Moxa Turbo Serial Engine™ chip that powers the CP-134U board 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 universal PCI board has four RS-422/485 serial ports, each of which can achieve data rates up to 921.6 kbps. In RS-485 mode, the board 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-134U-I, which comes with 2 kV electrical isolation protection to prevent equipment damage.

Drivers Provided for Windows, Linux, and UNIX

We continue to support a wide variety of operating systems, and the CP-134U and CP-134U-I boards are no exception. Reliable Windows, Linux, and UNIX drivers are provided for all Moxa 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 | DB44 female |
| FIFO | 128 bytes |
| Max. No. of Boards per PC | 8 |
| No. of Ports | 4 |
| Serial Standards | 2 x RS-232/422/485, 2 x RS-422/485 |
| Baudrate | 50 bps to 921.6 kbps |
| Data Bits | 5, 6, 7, 8 |



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|--|---|--|--|
| Stop Bits | 1, 1.5, 2 | | |
| Parity | None, Even, Odd, Space, Mark | | |
| Flow Control | None, RTS/CTS, XON/XOFF | | |
| Isolation | CP-134U-I Series: 2 kV | | |
| Serial Signals | | | |
| RS-232 | TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND | | |
| RS-422 | Tx+, Tx-, Rx+, Rx-, RTS+, RTS-, CTS+, CTS-, GND | | |
| RS-485-4w | Tx+, Tx-, Rx+, Rx-, GND | | |
| RS-485-2w | Data+, Data-, GND | | |
| Serial Software Features | | | |
| Windows Drivers | 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 Drivers | Linux kernel 2.4.x, Linux kernel 2.6.x, Linux kernel 3.x, Linux kernel 4.x, Linux kernel 5.x | | |
| UNIX Drivers | QNX 6, SCO OpenServer, UnixWare 7, Solaris 10, FreeBSD | | |
| Power Parameters | | | |
| Input Current | CP-134U Series: 180 mA @ 5 VDC CP-134U-I Series: 850 mA @ 5 VDC | | |
| Physical Characteristics | | | |
| Dimensions | CP-134U Series: 82.5 x 120 mm (3.24 x 4.72 in) CP-134U-I Series: 115 x 120 mm (4.52 x 4.72 in) | | |
| LED Interface | | | |
| LED Indicators | Built-in Tx, Rx LEDs for each port | | |
| Environmental Limits | | | |
| Operating Temperature | Standard Models: 0 to 55°C (32 to 131°F) Wide Temp. Models: -40 to 85°C (-40 to 185°F) | | |
| Storage Temperature (package included) | -40 to 85°C (-40 to 185°F) | | |
| Ambient Relative Humidity | 5 to 95% (non-condensing) | | |
| Standards and Certifications | | | |
| EMC | EN 55032/24 | | |
| 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 | | |
| Declaration | | | |
| Green Product | RoHS, CRoHS, WEEE | | |
| MTBF | | | |
| Time | 480,209 hrs | | |
| Standards | Telcordia SR332 | | |



Warranty

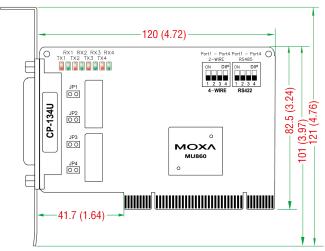


| Warranty Period | 5 years |
|------------------|--|
| Details | See www.moxa.com/warranty |
| Package Contents | |
| Device | 1 x CP-134U Series serial board |
| Cable | 1 x M44 to 4 x DB9-M cable, 50 cm (-DB9M models) 1 x M44 to 4 x DB25-M cable, 50 cm (-DB25M models) |
| Documentation | 1 x document and software CD 1 x quick installation guide 1 x substance disclosure table 1 x warranty card |

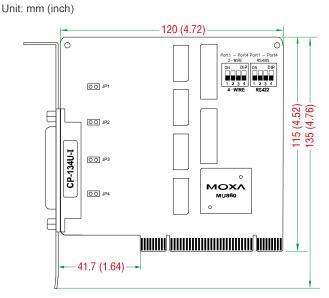
Dimensions

CP-134U-I

Unit: mm (inch)



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Ordering Information

| Model Name | Serial Standards | No. of Serial Ports | Serial Isolation Protection | Operating Temp. | Included Cable |
|---------------------|--------------------------------------|---------------------|--------------------------------|-----------------|-----------------|
| CP-134U w/o Cable | 2 x RS-232/422/485 2 x RS-422/485 | 4 | - | 0 to 55°C | - |
| CP-134U-T | 2 x RS-232/422/485 2 x RS-422/485 | 4 | - | -40 to 85°C | - |
| CP-134U-DB9M | 2 x RS-232/422/485 2 x RS-422/485 | 4 | - | 0 to 55°C | CBL-M44M9x4-50 |
| CP-134U-DB25M | 2 x RS-232/422/485 2 x RS-422/485 | 4 | - | 0 to 55°C | CBL-M44M25x4-50 |
| CP-134U-I w/o Cable | 2 x RS-232/422/485 2 x RS-422/485 | 4 | 2 kV | 0 to 55°C | - |
| CP-134U-I-T | 2 x RS-232/422/485 2 x RS-422/485 | 4 | 2 kV | -40 to 85°C | - |
| CP-134U-I-DB9M | 2 x RS-232/422/485 2 x RS-422/485 | 4 | 2 kV | 0 to 55°C | CBL-M44M9x4-50 |
| CP-134U-I-DB25M | 2 x RS-232/422/485 2 x RS-422/485 | 4 | 2 kV | 0 to 55°C | CBL-M44M25x4-50 |

Accessories (sold separately)



Brackets

| 149000001000 | Bracket for DB44 pack |
|-----------------|---|
| Cables | |
| CBL-M44M25x4-50 | M44 to 4 x DB25 male serial cable, 50 cm |
| CBL-M44M9x4-50 | DB44 male to DB9 male serial cable, 50 cm |

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