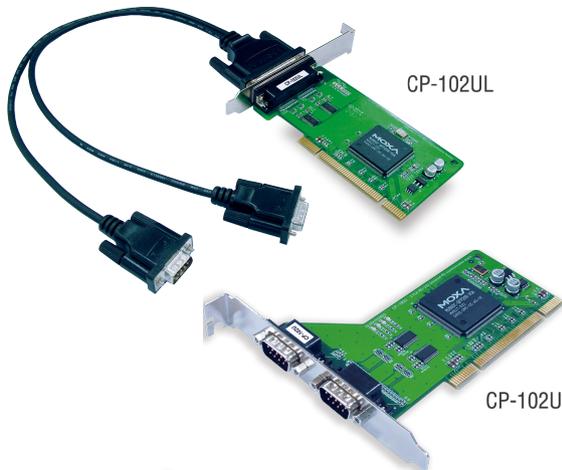


CP-102U/UL

2-port RS-232 Universal PCI serial boards



- > Excellent data throughput at over 800 kbps
- > 921.6 kbps maximum baudrate for super fast data transmission
- > 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 the latest Windows and Linux
- > MD1 low profile form factor (CP-102UL) fits compact PCs
- > Wide temperature model available for -40 to 85°C environments



Overview

The CP-102U and CP-102UL are 2-port universal PCI boards designed for POS and ATM applications. They are designed especially for industrial automation engineers and system integrators to support many different operating systems, including Windows, Linux, and even Unix. In addition, each RS-232 serial port supports up to 921.6 kbps

baudrate. The CP-102U and CP-102UL implements full modem control signals to ensure compatibility with a wide range of serial peripherals, and they work with both 3.3 V and 5 V PCI buses, allowing the boards to be installed in virtually any PC.

Designed for Standard and Compact PCs

The CP-102UL is a low-profile board requiring a 5 VDC power supply. It is compatible with both a 3.3 V and 5 V PCI bus, allowing the CP-

102UL to be tucked inside compact PCs.

Top Serial Performance

With 20-plus years of experience in serial board design, Moxa is now concentrating on a new high-performance serial data transmission chip. The Turbo Serial Engine™ chip provides serial boards with a

128-byte FIFO, on-chip hardware and software flow control, and burst data mode. With Turbo Serial Engine™, Moxa is able to offer advanced smart serial boards with unbeatable transmission performance.

Drivers Provided for Windows, Linux, and Unix

Moxa continues to support a wide variety of operating systems, and the CP-102U/UL boards are no exception. Reliable Windows and

Linux/Unix drivers are provided for all Moxa boards, with support for many operating systems, including WEPOS, for embedded integration.

Specifications

Hardware

Comm. Controller: MU860 (16C550C compatible)

Bus: 32-bit Universal PCI

Connector:

CP-102U: DB9 male x 2

CP-102UL: DB25 female

Serial Interface

Number of Ports: 2 (only one IRQ required)

Serial Standards: RS-232

Max. No. of Boards per PC: 8

Performance

Baudrate: 50 bps to 921.6 kbps (supports non-standard baudrates)

Serial Communication Parameters

Data Bits: 5, 6, 7, 8

Stop Bits: 1, 1.5, 2

Parity: None, Even, Odd, Space, Mark

Flow Control: RTS/CTS, XON/XOFF, RTS Toggle (RS-232 only)

Serial Signals

RS-232: TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND

Physical Characteristics

Dimensions:

CP-102U: 80 x 120 mm (3.15 x 4.72 in)

CP-102UL: 64.5 x 120 mm (2.53 x 4.72 in)

Driver Support

Windows: Windows 95/98/ME/NT/2000, Windows XP/2003/ Vista/2008/7/8/8.1/10 (x86/x64), Windows Server 2008 R2/2012/2012 R2/2016 (x64), DOS, Windows Embedded CE 5.0/6.0, Windows XP Embedded

Linux: Linux 2.4.x, 2.6.x, 3.x

Unix-like Systems: QNX 6, SCO OpenServer, UnixWare 7, Solaris 10, FreeBSD

Note: Please refer to Moxa's website for the latest driver support information.

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: -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:

CP-102U:

IEC 61000-4-2 ESD: Contact: 4 kV; Air: 8 kV

IEC 61000-4-3 RS: 80 MHz to 1 GHz: 3 V/m

CP-102UL:

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

IEC 61000-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m

IEC 61000-4-8 PFMF

IEC 61000-4-11

MTBF (mean time between failures)

Time:

CP-102U: 574,050 hrs

CP-102UL: 576,401 hrs

Standard:

CP-102U: MIL-HDBK-217F

CP-102UL: Telcordia (Bellcore) TR/SR

Power Requirements

Input Current: 93 mA @ 5 VDC

Warranty

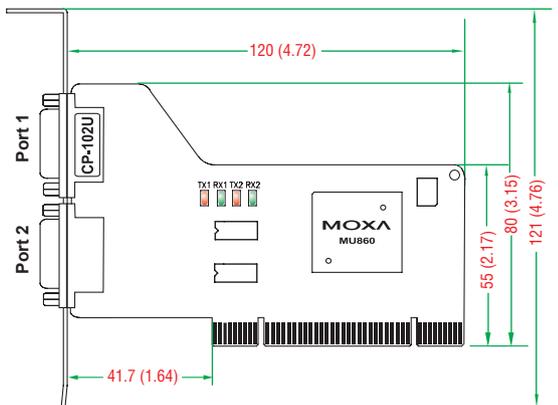
Warranty Period: 5 years

Details: See www.moxa.com/warranty

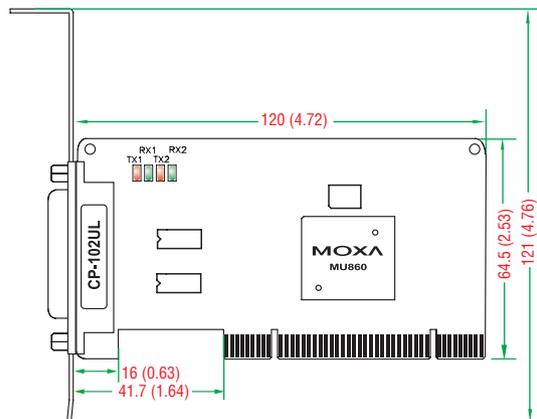
Dimensions

Unit: mm (inch)

CP-102U



CP-102UL



Ordering Information

Available Models

CP-102U: 2-port RS-232 Universal PCI serial board, 0 to 55°C operating temperature

CP-102UL-DB9M: 2-port RS-232 low profile Universal PCI serial board, 0 to 55°C operating temperature (CBL-M25M9x2-50 cable included)

CP-102U-T: 2-port RS-232 Universal PCI serial board, -40 to 85°C operating temperature

CP-102UL-T: 2-port RS-232 low profile Universal PCI serial board, -40 to 85°C operating temperature

Connection Options (can be purchased separately)

Low Profile Bracket: Bracket for DB44 connector (1490000001000)

CBL-M25M9x2-50: M25 to 2 x DB9-M cable, 50 cm

Package Checklist

- 1 CP-102U or CP-102UL board
- Low profile bracket (CP-102UL only)
- 1 connection cable (optional)
- Documentation and software CD
- Quick installation guide (printed)
- Warranty card

CBL-M25M9x2-50

DB25 male to DB9 male x 2 (50 cm cable)



PIN	RS-232
1	DCD
2	RxD
3	TxD
4	DTR
5	GND
6	DSR
7	RTS
8	CTS

DB9 male

