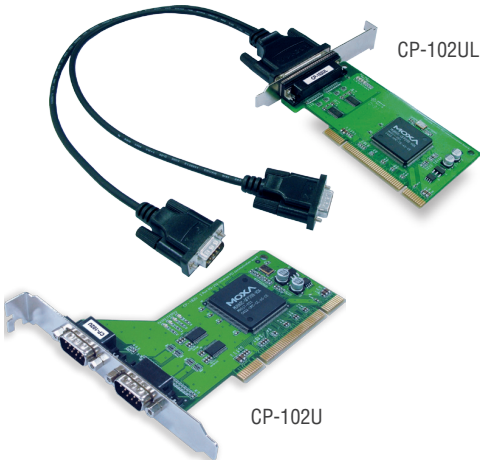
CP-102U/UL

2-port RS-232 Universal PCI serial boards



- Excellent data throughput at over 800Kbps
- Superb data transmission baudrate of up to 921.6Kbps
- 128-byte FIFO and on-chip H/W, S/W flow control
- Compatible with 3.3/5V PCI and PCI-X
- Drivers provided for a broad selection of operating systems, including the latest Windows and Linux
- 15 KV ESD on-board protection
- 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 3.3V and 5V 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 3.3V and 5V 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 COM and Linux/Unix TTY 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
Connectors:
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: 4

Serial Line Protection

ESD Protection: 15 KV on the board

Performance

Baudrate: 50 bps to 921.6 Kbps

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
I/O Address: Assigned by BIOS
IRQ: Assigned by BIOS

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

Driver Support
Operating Systems: Windows (2012 x64, 8/7/XP/2003/Vista/2008 x86/x64, 2000, 9X/ME/NT), Windows CE 5.0/6.0, Windows XP Embedded, DOS, Linux 2.4.x, Linux 2.6.x, FreeBSD 4/5, QNX 6, SCO OpenServer 5/6, UnixWare 7, Solaris 10 x86/x64
Note: Please refer to Moxa's website for the latest driver support information.

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)

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)
Altitude: Up to 2000 m
Note: Please contact Moxa if you require products guaranteed to function properly at higher altitudes.

Standards and Certifications
EMC: CE, FCC
EMI: EN 55022, FCC Part 15 Subpart B Class B
EMS: EN 55024, IEC 61000-4-2, IEC 61000-4-3
Green Product: RoHS, CRoHS, WEEE

MTBF (mean time between failures)
Time: 219,971 hrs
Database: Telcordia (Bellcore), GB

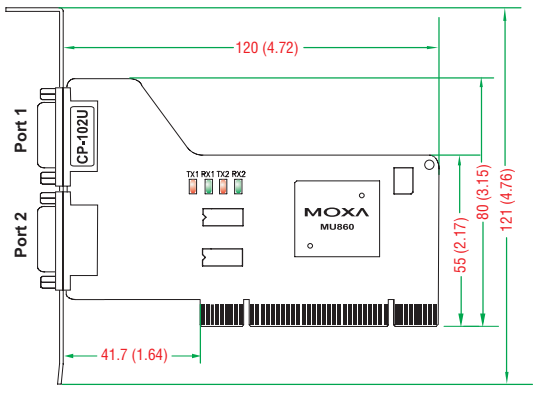
Power Requirements
Power Consumption: 93 mA @ +5 V

Warranty
Warranty Period: 5 years
Details: See www.moxa.com/warranty

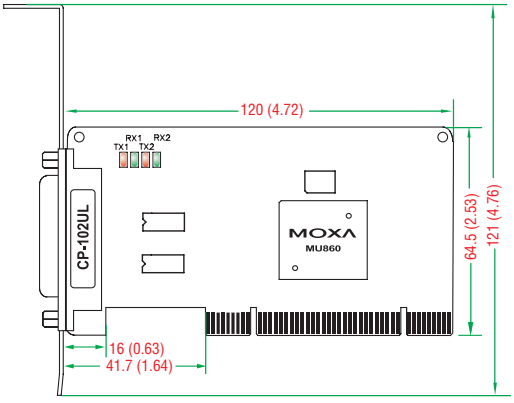
Dimensions

Unit: mm (inch)

CP-102U



CP-102UL



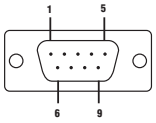
Ordering Information

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 (includes DB9 male cable)
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

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

Connection Options (can be purchased separately)

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