# **CP-102U/UL**

# 2-port RS-232 Universal PCI serial boards



- > Over 800 Kbps data throughput for top performance
- > 921.6 Kbps maximum baudrate for super fast data transmission
- > 128-byte FIFO and on-chip H/W, S/W flow control
- Compatible with 3.3/5V PCI and PCI-X
- > Drivers provided for Windows (2000, XP/2003/Vista/2008 x86/ x64, 9X/ME/NT), Windows CE 5.0/6.0, Windows XP Embedded, DOS, Linux 2.4, Linux 2.6 (x86/x64), FreeBSD 4/5, QNX 6, SCO Open Server 5/6, UnixWare 7
- > 15 KV ESD protection on the board
- > The CP-102UL's MD1 low profile form factor fits small-sized 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 a top choice of industrial automation engineers and system integrators, and support many different operating systems, including Windows, Linux, and even Unix. In addition, each of the boards' RS-232 serial ports supports a super

fast 921.6 Kbps baudrate. The CP-102U and CP-102UL provide 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 available PC server.

# Designed for Standard and Small-sized PCs

The CP-102UL is a low profile board that only requires a 5 VDC power supply. It is compatible with both a 3.3V and 5V PCI bus, which means that the CP-102UL fits any host computer, ranging from shoebox to standard-sized PCs.

# **Top Serial Performance**

Moxa's 20-plus years of experience in serial board design is now concentrated in 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. Thanks to the Turbo Serial Engine™, Moxa is able to offer the world's best performing smart serial boards.

# 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, and other

operating systems, such as WEPOS, are also supported 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: 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 (2000, XP/2003/Vista/2008 x86/x64, 9X/ME/NT), Windows CE 5.0/6.0, Windows XP Embedded, DOS, Linux 2.4, Linux 2.6 (x86/x64), FreeBSD 4/5, QNX 6, SCO Open Server 5/6, UnixWare 7

#### **Physical Characteristics**

#### **Dimensions:**

CP-102U: 120 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) Operating Humidity: 5 to 95% RH

Storage Temperature: -20 to 85°C (-4 to 185°F)

### **Regulatory Approvals**

FCC: Part 15 Class B

**EMS:** EN55022, EN55024, EN61000-3-2, EN61000-3-3, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC

61000-4-6, IEC 61000-4-8, IEC 61000-4-11 (DIPS)

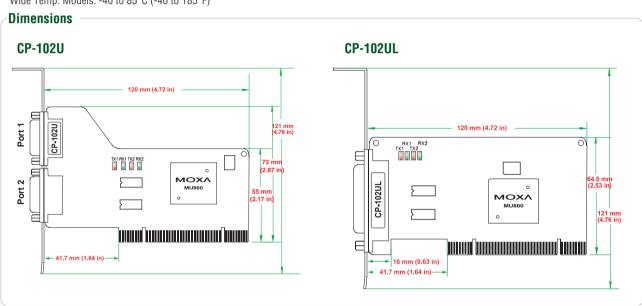
#### **Power Requirements**

Power Consumption: 93 mA @ +5 V

#### Warranty

Warranty Period: 5 years

Details: See www.moxa.com/warranty



# **:** Ordering Information

#### **Available Models**

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

 $\begin{tabular}{ll} \textbf{CP-102UL-DB9M:} & 2\text{-port RS-}232 \ low \ profile \ Universal \ PCI \ serial \ board, 0 \ to 55°C \ operating \ temperature \ (includes \ DB9 \ male \ cable) \end{tabular}$ 

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**

- CP-102U or CP-102UL board
- Document and Software CD
- Low profile bracket (CP-102UL only)
- · 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

