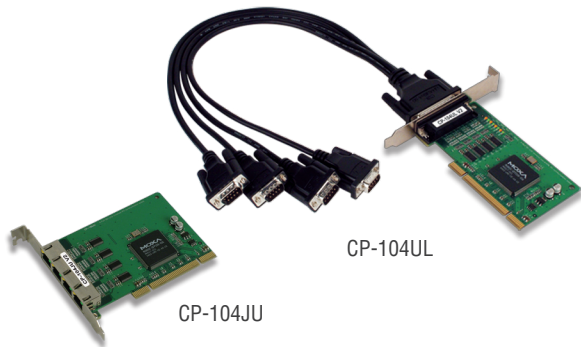


# CP-104UL/JU

## 4-port RS-232 smart 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 (7 x86/x64, XP/2003/Vista/2008 x86/x64, 2000, 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, Solaris 10 x86/x64
- > 15 KV ESD protection on the board
- > Wide temperature model available for -40 to 85°C environments



### Introduction

The CP-104UL and CP-104JU 4-port universal PCI boards are 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-104UL and CP-104JU 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.

### Specifications

#### Hardware

**Comm. Controller:** MU860 (16C550C compatible)

**Bus:** 32-bit Universal PCI

#### Connectors:

CP-104UL: DB44 female

CP-104JU: RJ45 x 4

#### Serial Interface

**Number of Ports:** 4

**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:** Tx/D, Rx/D, RTS, CTS, DTR, DSR, DCD, GND

#### Driver Support

**Operating Systems:** Windows 9X/ME/NT/2000, Windows XP/2003/Vista/2008/7 x86/x64, 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, Solaris 10 x86/x64

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

#### Physical Characteristics

##### Dimensions:

CP-104UL: 64.4 x 120 mm (2.53 x 4.72 in)

CP-104JU: 83 x 120 mm (3.27 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)

##### Standards and Certifications

**EMC:** CE, FCC

**EMI:** EN 55022, EN 61000-3-2, EN 61000-3-3, FCC Part 15 Subpart B Class B

**EMS:** EN 55024, 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)

**Green Product:** RoHS, CRoHS, WEEE

**MTBF** (mean time between failures)

**Time:** 558,961 hrs

**Database:** MIL-HDBK-217F, GB 25°C

##### Power Requirements

**Power Consumption:**

CP-104UL: 120 mA @ +5 V

CP-104JU: 135 mA @ +5 V

##### Warranty

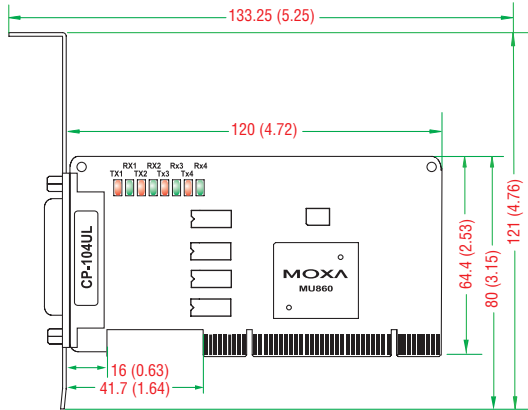
**Warranty Period:** 5 years

**Details:** See [www.moxa.com/warranty](http://www.moxa.com/warranty)

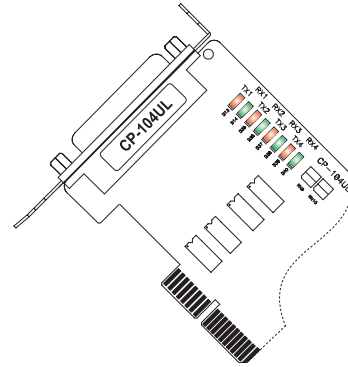
**Dimensions**

Unit: mm (inch)

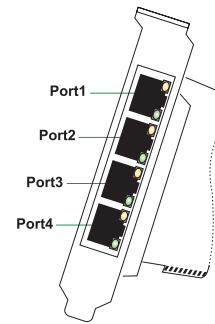
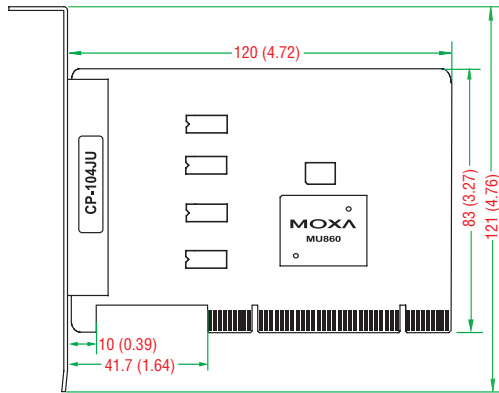
**CP-104UL**



**On-board LEDs**



**CP-104JU**



**Ordering Information**

**Available Models**

**CP-104UL-DB9M:** 4-port RS-232 low profile Universal PCI serial board, 0 to 55°C operating temperature (includes DB9 male cable)

**CP-104UL-DB25M:** 4-port RS-232 low profile Universal PCI serial board, 0 to 55°C operating temperature (includes DB25 male cable)

**CP-104JU:** 4-port RS-232 Universal PCI serial board with RJ45 ports on the board, 0 to 55°C operating temperature

**CP-104UL-T:** 4-port RS-232 low profile Universal PCI serial board, -40 to 85°C operating temperature

**CP-104JU-T:** 4-port RS-232 Universal PCI serial board with RJ45 ports on the board, -40 to 85°C operating temperature

**Connection Options** (can be purchased separately)

**Package Checklist**

- 1 CP-104UL or CP-104JU board
- Low profile bracket (CP-104UL only)
- DB9-M or DB25-M cable included (CP-104UL only)
- Documentation and software CD
- Quick installation guide (printed)
- Warranty card

**CBL-M44M9x4-50**

DB44 male to DB9 male x 4 (50 cm cable)



**CBL-RJ45M9-150**

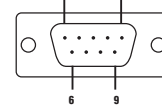
8-pin RJ45 to DB9 male (150 cm cable)



PIN	RS-232
1	DCD
2	RxD
3	TxD
4	DTR

PIN	RS-232
5	GND
6	DSR
7	RTS
8	CTS

**DB9 male**



**CBL-M44M25x4-50**

DB44 male to DB25 male x 4 (50 cm cable)



**CBL-RJ45M25-150**

8-pin RJ45 to DB25 male (150 cm cable)



PIN	RS-232
2	TxD
3	RxD
4	RTS
5	CTS

PIN	RS-232
6	DSR
7	GND
8	DCD
20	DTR

**DB25 male**

