# **CP-168U**

# -8-port RS-232 Universal PCI serial board



- > Over 700 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
- > Choose from a wide range of connection cables and boxes
- > 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 protection on the board
- > Wide temperature model available for -40 to 85°C environments



## **:** Introduction

The CP-168U is a smart, 8-port universal PCI board designed for POS and ATM applications. It is a top choice of industrial automation engineers and system integrators, and supports many different operating systems, including Windows, Linux, and even Unix. In addition, each of the board's 8 RS-232 serial ports supports a super fast 921.6 Kbps baudrate. The CP-168U provides full modem control signals to ensure compatibility with a wide range of serial peripherals, and works with both 3.3V and 5V PCI buses, allowing the board to be installed in virtually any available PC server.

# **Specifications**

#### Hardware

Comm. Controller: MU860 (16C550C compatible) Bus: 32-bit Universal PCI Connector: DB62 female

#### **Serial Interface**

Number of Ports: 8 Serial Standards: RS-232 Max. No. of Boards per PC: 4

#### Serial Line Protection

ESD Protection: 15 KV on the board Optical Isolation: 500 V with connection box Opt8F (must be purchased separately)

#### 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

#### 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: 82 x 120 mm (3.22 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

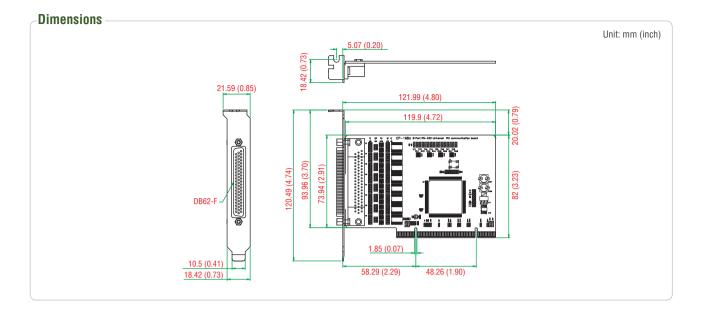
MTBF (mean time between failures) Time: 280,854 hrs

Database: Telcordia (Bellcore), GB

Power Requirements Power Consumption: 180 mA @ +5 V

#### Warranty Warranty Day

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



# **Crdering Information**

#### Available Models

CP-168U: 8-port RS-232 Universal PCI serial board, 0 to 55°C operating temperature CP-168U-T: 8-port RS-232 Universal PCI serial board, -40 to 85°C operating temperature

## Connection Options (can be purchased separately)

#### Package Checklist

- 1 CP-168U board
- Documentation and software CD
- Quick installation guide (printed)
- Warranty card

OPT8-M9         CBL-M62M9x8-100 (OPT8D)           DB9 male x 8 (150 cm cable)         DB9 male x 8 (100 cm cable)	PIN         RS-232           1         DCD	PIN         RS-232           5         GND	DB9 male
	2RxD3TxD4DTR	6         DSR           7         RTS           8         CTS	
CBL-M62M25x8-100 (OPT8C)	PIN RS-232	PIN RS-232	DB25 male
DB25 male x 8 (150 cm cable) DB25 male x 8 (100 cm cable)	2 TxD	6 DSR	1 13 I I
	3 RxD	7 GND	
	4 RTS	8 DCD	
	5 CTS	20 DTR	14 25
OPT8S	PIN RS-232	PIN RS-232	DB25 female
	2 RxD	6 DTR	
	3 TxD	7 GND	
	4 CTS	8 DCD	
	5 RTS	20 DSR	25 14
	PIN RS-232	PIN RS-232	8-pin RJ45
8-pin RJ45 x 8 (30 cm cable)	1 DSR	5 RxD	
	2 RTS	6 DCD	
	3 GND	7 CTS	
	DB9 male x 8 (100 cm cable)	DB9 male x 8 (100 cm cable)       1       DCD         1       DCD         2       RxD         3       TxD         4       DTR         CBL-M62M25x8-100 (OPT8C)         DB25 male x 8 (100 cm cable)       2         2       TxD         3       RxD         4       RTS         5       CTS         OPT8S         DB25 female x 8 (150 cm cable)         25 KV ESD Surge Protection         3       TxD         4       CTS         5       RTS	DB9 male x 8 (100 cm cable)       1       DCD       5       GND         2       RxD       3       TxD       6       DSR         3       TxD       4       DTR       8       CTS         CBL-M62M25x8-100 (OPT8C) DB25 male x 8 (100 cm cable)         2       TxD       3       RxD       6       DSR         3       RxD       4       DTR       8       CTS         OPT8S DB25 female x 8 (150 cm cable)         25 KV ESD Surge Protection       2       RxD       4       RTS         3       TxD       4       CTS       6       DTR         OPT8S DB25 female x 8 (150 cm cable)         25 KV ESD Surge Protection       3       TxD       4       CTS         3       TxD       4       CTS       6       DTR         3       TxD       4       CTS       20       DTR         2       RxD       3       TxD       8       DCD         25 KV ESD Surge Protection       3       TxD       4       CTS       5         5       RTS       20       DSR       20       DSR

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