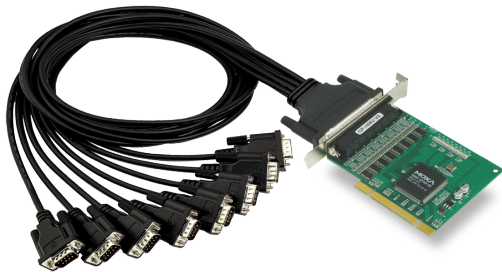


# CP-168U

## 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 3.3/5 V PCI and PCI-X
- > Drivers provided for a broad selection of operating systems, including the latest Windows and Linux
- > 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

superfast 921.6 kbps baudrate. The CP-168U provides full modem control signals to ensure compatibility with a wide range of serial peripherals, and it works with both 3.3 V and 5 V 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

**Electrical 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

#### Serial Signals

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

#### Physical Characteristics

**Dimensions:** 82 x 120 mm (3.22 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 2008 R2/2012/2012 R2 (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:

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

#### MTBF (mean time between failures)

**Time:** 280,854 hrs

**Standard:** Telcordia (Bellcore) TR/SR

#### Power Requirements

**Input Current:** 180 mA @ 5 VDC

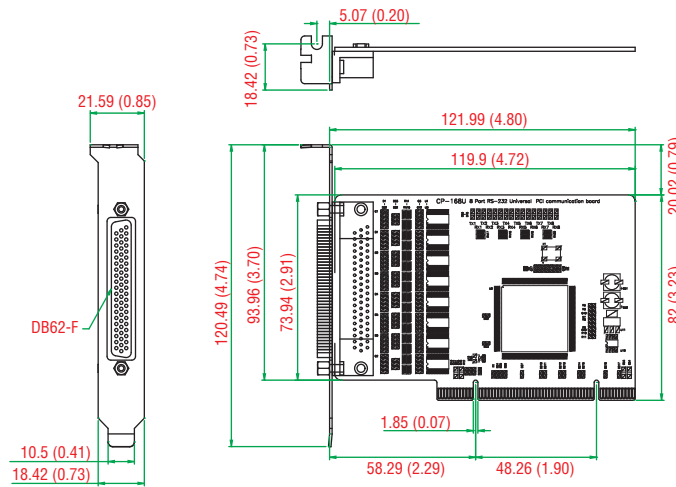
#### Warranty

**Warranty Period:** 5 years

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

### Dimensions

Unit: mm (inch)



### Ordering 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)

- CBL-M62M9x8-100:** M62 to 8 x DB9-M cable, 100 cm
- CBL-M62M25x8-100:** M62 to 8 x DB25-M cable, 100 cm

#### Optional Connectors (choose one per board)

- OPT8A:** M62 to 8 x DB25-F connection box w/ 150 cm DB62-M to DB62-F cable
- OPT8B:** M62 to 8 x DB25-M connection box w/ 150 cm DB62-M to DB62-F cable
- OPT8S:** M62 to 8 x DB25-F connection box w/ surge protection, and 150 cm DB62-M to DB62-F cable
- OPT8-M9:** M62 to 8 x DB9-M connection box w/ 150 cm DB62-M to DB62-F cable
- OPT8-RJ45:** M62 to 8 x RJ45 (8-pin) connection box w/ 30 cm cable

#### Package Checklist

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

#### OPT8-M9

DB9 male x 8 (150 cm cable)



#### CBL-M62M9x8-100 (OPT8D)

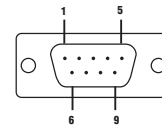
DB9 male x 8 (100 cm cable)



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

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

#### DB9 male



#### OPT8B

DB25 male x 8 (150 cm cable)



#### CBL-M62M25x8-100 (OPT8C)

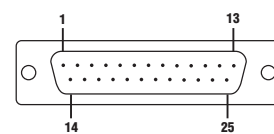
DB25 male x 8 (100 cm cable)



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

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

#### DB25 male



#### OPT8A

DB25 female x 8 (150 cm cable)



#### OPT8S

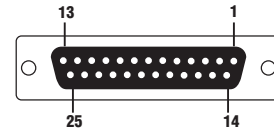
DB25 female x 8 (150 cm cable)



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

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

#### DB25 female



#### OPT8-RJ45

8-pin RJ45 x 8 (30 cm cable)



PIN	RS-232
1	DSR
2	RTS
3	GND
4	TxD

PIN	RS-232
5	RxD
6	DCD
7	CTS
8	DTR

#### 8-pin RJ45

