## CP-168U Series

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

## Features and Benefits

- Over 700 kbps data throughput for top performance
- 921.6 kbps maximum baudrate for fast data transmission
- 128-byte FIFO and on-chip H/W, S/W flow control
- Compatible with $3.3 / 5 \mathrm{~V} \mathrm{PCI}$ and $\mathrm{PCI}-X$
- Drivers provided for a broad selection of operating systems, including Windows, Linux, and UNIX
- Wide-temperature model available for -40 to $85^{\circ} \mathrm{C}$ environments


## Certifications

## C $\in \mathbb{F}$

## 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 eight RS-232 serial ports supports a fast 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

| Serial Interface | MU860 (16C550C compatible) |
| :--- | :--- |
| Comm. Controller | 32-bit Universal PCI |
| Bus | 128 bytes |
| Connector | 8 |
| FIFO | 8 |
| Max. No. of Boards per PC | RS-232 |
| No. of Ports | 50 bps to 921.6 kbps |
| Serial Standards | $5,6,7,8$ |
| Baudrate | $1,1.5,2$ |
| Data Bits | None, Even, Odd, Space, Mark |
| Stop Bits | None, RTS/CTS, XON/XOFF |
| Parity |  |
| Flow Control |  |

## Serial Signals

$\qquad$ TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND

| Windows Drivers | DOS, Windows 95/98/ME/NT/2000, Windows XP/2003/Vista/2008/7/8/8.1/10 (x86/x64), <br> Windows 2008 R2/2012/2012 R2/2016/2019 (x64), Windows Embedded CE 5.0/6.0, <br> Windows XP Embedded |
| :--- | :--- |
| Linux Drivers | Linux kernel 2.4.x, Linux kernel 2.6.x, Linux kernel 3.x, Linux kernel 4.x, Linux kernel 5.x |
| UNIX Drivers | QNX 6, SCO OpenServer, UnixWare 7, Solaris 10, FreeBSD |

Power Parameters
Input Current
180 mA @ 5 VDC

Physical Characteristics

| Dimensions | $82 \times 120 \mathrm{~mm}$ (3.22 $\times 4.72 \mathrm{in}$ ) |
| :---: | :---: |
| LED Interface |  |
| LED Indicators | Built-in Tx, Rx LEDs for each port |
| Environmental Limits |  |
| Operating Temperature | CP-168U: 0 to $55^{\circ} \mathrm{C}\left(32\right.$ to $\left.131^{\circ} \mathrm{F}\right)$ <br> CP-168U-T: -40 to $85^{\circ} \mathrm{C}\left(-40\right.$ to $185^{\circ} \mathrm{F}$ ) |
| Storage Temperature (package included) | -40 to $85^{\circ} \mathrm{C}\left(-40\right.$ to $\left.185{ }^{\circ} \mathrm{F}\right)$ |
| Ambient Relative Humidity | 5 to 95\% (non-condensing) |
| Standards and Certifications |  |
| EMC | EN 55032/35 |
| 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 $1 \mathrm{GHz}: 3 \mathrm{~V} / \mathrm{m}$ IEC 61000-4-4 EFT: Power: 1 kV |
| International Approval | CP-168U: KC |

Declaration
Green Product RoHS, CRoHS, WEEE

MTBF

| Time | $280,854 \mathrm{hrs}$ |
| :--- | :--- |
| Standards | Telcordia (Bellcore) Standard TR/SR |

Warranty

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

Package Contents

| Device | $1 \times$ CP-168U Series serial board |
| :--- | :--- |
| Documentation | $1 \times$ quick installation guide <br> $1 \times$ substance disclosure table |

## Dimensions

Unit: mm (inch)


## Ordering Information

| Model Name | Serial Standards | No. of Serial Ports | Operating Temp. |
| :--- | :---: | :---: | :---: | :---: |
| CP-168U | RS-232 | 8 | 0 to $55^{\circ} \mathrm{C}$ |
| CP-168U-T | RS-232 | 8 | -40 to $85^{\circ} \mathrm{C}$ |

## Accessories (sold separately)

Cables

| CBL-M62M25x8-100 | M62 to $8 \times$ DB25 male serial cable, 1 m |
| :--- | :--- |
| CBL-M62M9x8-100 | M62 to $8 \times$ DB9 male serial cable, 1 m |

## Connection Boxes

| OPT8A | M62 to $8 \times$ DB25 female connection box with DB62 male to DB62 female serial cable |
| :--- | :--- |
| OPT8B | M62 to $8 \times$ DB25 male connection box with DB62 male to DB62 female cable, 1.5 m |
| OPT8S | M62 to $8 \times$ DB25 female connection box with surge protection and a DB62 male to DB62 female cable, |
| OPT8-M9 | 1.5 m |
| OPT8-RJ45 | M62 to $8 \times$ DB9 male connection box, DB62 male to DB62 female cable, 1.5 m |
|  | M62 to $8 \times$ RJ45 (8-pin) connection box, 30 cm |

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