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 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
> Wide temperature model available for -40 to 85°C environment

Overview

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

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: 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)
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)
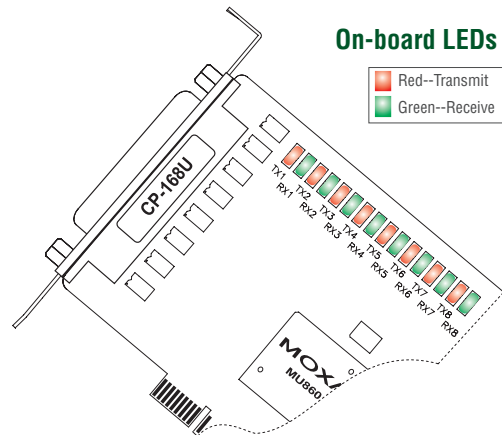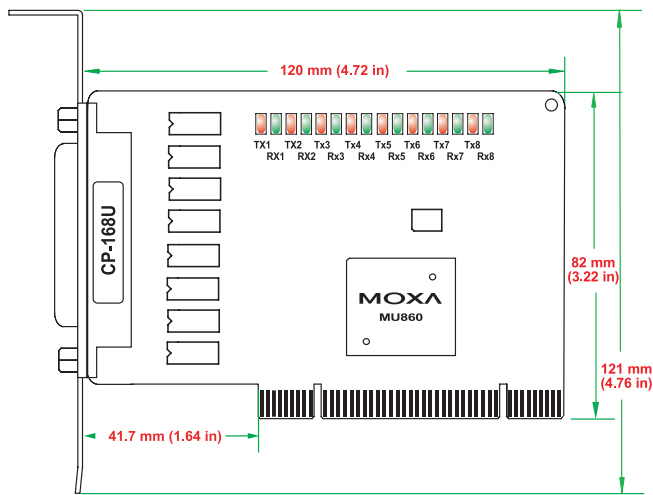
Power Requirements

Power Consumption: 180 mA @ +5 V

Warranty

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

Dimensions

120 mm (4.72 in)

TX1 TX2 Tx3 Tx4 Tx5 Tx6 Tx7 Tx8
RX1 RX2 RX3 Rx4 Rx5 Rx6 Rx7 Rx8

CP-168U

MOXA
MU860

82 mm (3.22 in)

121 mm (4.76 in)

41.7 mm (1.64 in)

On-board LEDs

Red--Transmit
Green--Receive

CP-168U

TX1 TX2 Tx3 Tx4 Tx5 Tx6 Tx7 Tx8
RX1 RX2 RX3 Rx4 Rx5 Rx6 Rx7 Rx8

MOXA
MU860

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

Package Checklist

- CP-168U board
- Document and Software CD
- Quick Installation Guide (printed)
- Warranty Card

Connection Options (can be purchased separately)

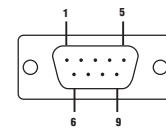**OPT8-M9**
DB9 male x 8 (150 cm cable)

CBL-M62M9x8-100 (OPT8D)
DB9 male x 8 (100 cm cable)

PIN	RS-232	PIN	RS-232
1	DCD	5	GND
2	RxD	6	DSR
3	TxD	7	RTS
4	DTR	8	CTS

DB9 male

1   5
6   9

OPT8B
DB25 male x 8 (150 cm cable)

CBL-M62M25x8-100 (OPT8C)
DB25 male x 8 (100 cm cable)

PIN	RS-232	PIN	RS-232
2	TxD	6	DSR
3	RxD	7	GND
4	RTS	8	DCD
5	CTS	20	DTR

DB25 male

1   13
14   25
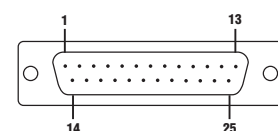
OPT8A
DB25 female x 8 (150 cm cable)

OPT8S
DB25 female x 8 (150 cm cable)
25 KV ESD Surge Protection

OPT8F/Z (RS-422)
DB25 female x 8 (150 cm cable)
110 or 230 VAC power adaptor
(115.2 Kbps max. baudrate)

OPT8F with 500 V isolation

OPT8K(RS-422/485)
DB25 female x 8 (150 cm cable)
110 or 230 VAC power adaptor

PIN	RS-232	PIN	RS-232
2	RxD	6	DTR
3	TxD	7	GND
4	CTS	8	DCD
5	RTS	20	DSR

PIN	RS-422/RS-485-4w	RS-485-2w
2	RxD+(B)	Data+(B)
3	TxD+(B)	
7	GND	GND
14	RxD-(A)	Data-(A)
16	TxD-(A)	

DB25 female

13   1
25   14

OPT8-RJ45
8-pin RJ45 x 8 (30 cm cable)

PIN	RS-232	PIN	RS-232
1	DSR	5	RxD
2	RTS	6	DCD
3	GND	7	CTS
4	TxD	8	DTR

8-pin RJ45

1   8

MOXA®