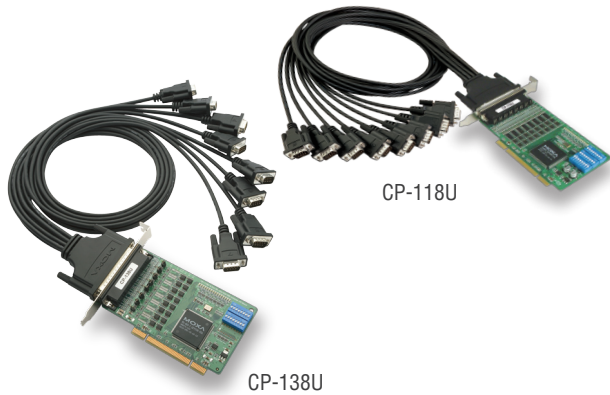# CP-118U/138U

8-port RS-232/422/485 Universal PCI serial boards

CP-118U

CP-138U

> 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
> 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
> Easy maintenance with on-board LED display, and management software
> Wide temperature model available for -40 to 85°C environments

PComm Lite | Extreme Performance Turbo Serial Engine | -40°C 85°C

Compatible with Windows 7 | Designed for Microsoft Windows XP and Vista | RoHS | CE FC

: Overview

The CP-118U and CP-138U are smart, 8-port Universal PCI serial boards designed for POS and ATM applications and for use by industrial automation system manufacturers and system integrators. Both boards are compatible with all major operating systems. In addition, the CP-118U's 8 RS-232/422/485 ports and the CP-138U's

8 RS-422/485 ports support data rates up to 921.6 kbps and provide full modem control signals to ensure compatibility with a wide range of serial peripherals. The CP-118U and CP-138U support both 3.3 V and 5 V PCI buses, making them suitable for installation in most PC servers.

: Drivers Provided for Windows and Linux

One of Moxa's highest priorities is to provide drivers for all mainstream operating systems. Reliable, well-tested Windows and Linux/Unix drivers are available for use with the CP-118U and CP-138U serial

boards. Other operating systems, such as Windows XP embedded and WEPOS, are also supported to accommodate embedded integration applications.

: Specifications

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

Serial Interface
Number of Ports: 8
Serial Standards:
CP-118U: RS-232/422/485
CP-138U: RS-422/485
Max. No. of Boards per PC: 4

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
RS-422: TxD+(B), TxD-(A), RxD+(B), RxD-(A), GND
RS-485-4w: TxD+(B), TxD-(A), RxD+(B), RxD-(A), GND
RS-485-2w: Data+(B), Data-(A), GND

Physical Characteristics
Dimensions: 82 x 135 mm (3.22 x 5.31 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 55022/24
EMI: CISPR 22, 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

MTBF (mean time between failures)
Time:
CP-118U: 1,073,385 hrs
CP-138U: 1,147,210 hrs
Standard: Telcordia (Bellcore) SR-332

MOXA®

Power Requirements
Input Current:
CP-118U: 240 mA @ 5 VDC (RS-232); 300 mA @ 5 VDC (RS-422)
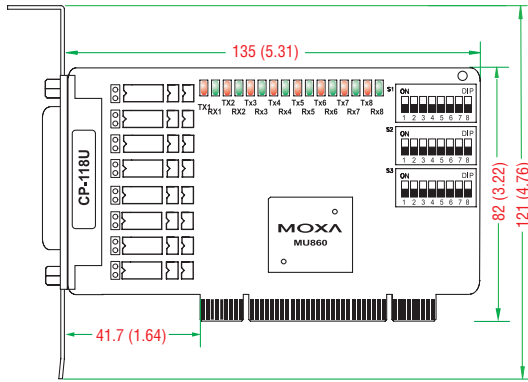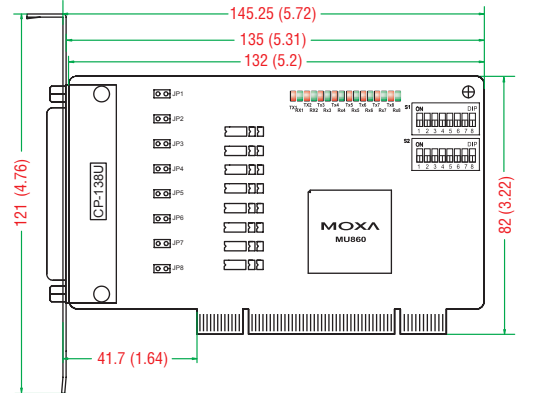CP-138U: 135 mA @ 5 VDC (RS-422)

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

Dimensions

CP-118U

Unit: mm (inch)

CP-138U

: Ordering Information

Available Models
CP-118U: 8-port RS-232/422/485 Universal PCI serial board, 0 to 55°C operating temperature
CP-138U: 8-port RS-422/485 Universal PCI serial board, 0 to 55°C operating temperature
CP-118U-T: 8-port RS-232/422/485 Universal PCI serial board, -40 to 85°C operating temperature
CP-138U-T: 8-port RS-422/485 Universal PCI serial board, -40 to 85°C operating temperature

Connection Options (can be purchased separately)
CBL-M68M9x8-100: SCSI VHDCI 68 to 8 x DB9-M cable, 100 cm
CBL-M68M25x8-100: SCSI VHDCI 68 to 8 x DB25-M cable, 100 cm

Optional Connectors (choose one per board)
OPT8-M9+: VHDCI 68 to 8 x DB9-M connection box
OPT8B+: VHDCI 68 to 8 x DB25-M connection box
OPT8A+: VHDCI 68 to 8 x DB25-F connection box
OPT8-RJ45+: VHDCI 68 to 8 x RJ45 (8-pin) connection box
OPT8S+: VHDCI 68 to 8 x DB25-F connection box w/ surge protection

Package Checklist
- 1 CP-118U or CP-138U board
- Documentation and software CD
- Quick installation guide (printed)
- Warranty card

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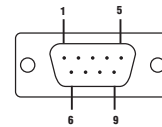DB9 male x 8 (150 cm cable)

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

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

DB25 male
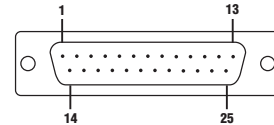
OPT8A
DB25 female x 8 (150 cm cable)

OPT8S
DB25 female x 8 (150 cm cable)

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

DB25 female
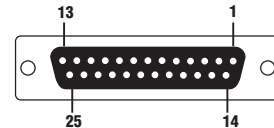
OPT8-RJ45
8-pin RJ45 x 8 (30 cm cable)

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