

# CB-108 Series

## 8-port RS-232 PC/104-Plus modules



- > 921.6 kbps maximum baudrate for super fast data transmission
- > On-chip H/W and S/W flow control
- > Built-in 15 kV ESD protection
- > Onboard Tx and Rx LED indicators for each port
- > Widows, Windows CE 5.0/6.0, and Windows XP embedded operating systems supported
- > Wide temperature model available for -40 to 85°C environments



### : Overview

The CB-108 PC/104-Plus modules come with 8 RS-232 ports, and can be used with PC/104-Plus CPU boards that accept the PC/104-Plus expansion interface. Optional DB9 and DB25 connection cables are available for connecting to serial devices, and the CB-108s'

versatile driver support makes the modules suitable for a wide range of applications. The CB-108 modules can be used on the PC/104-Plus (PCI) bus, and provide a reliable, high performance solution for multiport serial communication.

### : Specifications

#### Hardware

**Comm. Controller:** MU860 (16C550C compatible)  
**Bus:** PC/104-Plus bus  
**Connector:** 40-pin box header

#### 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

#### 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  
**I/O Address:** Assigned by BIOS  
**IRQ:** Assigned by BIOS  
**FIFO:** 128 bytes

#### Serial Signals

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

#### Operating Systems

**Windows Real COM Drivers:** Windows 95/98/ME/NT/2000, Windows XP/2003/Vista/2008/7/8/8.1 (x86/x64), Windows 2008 R2/2012/2012 R2 (x64), DOS, Windows Embedded CE 5.0/6.0, Windows XP Embedded  
**Fixed TTY Drivers:** QNX 6

**Linux Real TTY Drivers:** Linux 2.4.x, 2.6.x

*Note: Please refer to Moxa's website for the latest driver support information.*

#### Physical Characteristics

**Dimensions:** 90 x 96 mm (3.54 x 3.78 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, EN 61000-3-2, EN 61000-3-3, FCC Part 15 Subpart B Class A  
**EMS:** EN 55024, IEC 61000-6-2, IEC 61000-6-4, 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)  
**Green Product:** RoHS, CRoHS, WEEE

#### MTBF (mean time between failures)

**Time:** 403,631 hrs

**Database:** Telcordia (Bellcore), GB

#### Power Requirements

**Power Consumption:** 153 mA @ 5 VDC

#### Warranty

**Warranty Period:** 5 years

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

### : Ordering Information

#### Available Models

**CB-108:** 8-port RS-232 PC/104-Plus module, 0 to 55°C operating temperature  
**CB-108-T:** 8-port RS-232 PC/104-Plus module, -40 to 85°C operating temperature

#### Connection Options (can be purchased separately)

**CBL-F40M9x4-50:** 40-pin box header to DB9 male x 4 connection cable, 50 cm  
**CBL-F40M25x4-50:** 40-pin box header to DB25 male x 4 connection cable, 50 cm

#### Package Checklist

- 1 CB-108 or CB-108-T module
- Documentation and software CD
- Quick installation guide (printed)
- Warranty card