

CB-114 Series

4-port RS-232/422/485 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
- > Serial interface is DIP switch selectable
- > Onboard Tx and Rx LED indicators for each port
- > Windows, 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-114 PC/104-Plus modules come with 4 RS-232/422/485 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-114s'

versatile driver support makes the modules suitable for a wide range of applications. The CB-114 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
DIP Switches: Serial interface

Serial Interface

Number of Ports: 4
Serial Standards: RS-232/422/485
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
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

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: 381,081 hrs

Database: Telcordia (Bellcore), GB

Power Requirements

Power Consumption: 164 mA @ 5 VDC

Warranty

Warranty Period: 5 years

Details: See www.moxa.com/warranty

Ordering Information

Available Models

CB-114: 4-port RS-232/422/485 PC/104 module, 0 to 55°C operating temperature
CB-114-T: 4-port RS-232/422/485 PC/104 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-114 or CB-114-T module
- Documentation and software CD
- Quick installation guide (printed)
- Warranty card