

# CA-134I Series

## 4-port RS-422/485 PC/104 modules with 2 kV isolation



- > 921.6 kbps maximum baudrate for super fast data transmission
- > On-chip S/W flow control
- > Built-in 15 kV ESD protection
- > IRQ settings, I/O settings, and serial interface are jumper and DIP switch selectable
- > Onboard Tx and Rx LED indicators for each port
- > 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 CA-134I PC/104 modules are reliable, high performance, multiport serial communication solutions that have 4 RS-422/485 ports, and can be used with PC/104 CPU boards that accept the PC/104 expansion

interface. Optional DB9 and DB25 connection cables are available for connecting to serial devices, and the CA-134I's versatile driver support makes the modules suitable for a wide range of applications.

### Specifications

#### Hardware

**Comm. Controller:** 16C550C or compatible x 4  
**Bus:** PC/104 bus  
**Connector:** 40-pin box header  
**DIP Switches:** I/O base address, interrupt vector, serial interface

#### Serial Interface

**Number of Ports:** 4  
**Serial Standards:** RS-422/485  
**Max. No. of Boards per PC:** 4

#### Serial Line Protection

**ESD Protection:** 15 kV on the board  
**Electrical Isolation:** 2 kV

#### 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  
**IRQ:** 3, 4, 5, 6, 7, 9, 10, 11, 12, 15 (shared for all ports)  
**FIFO:** 64 bytes

#### Serial Signals

**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 (x86/x64), DOS, Windows Embedded CE 5.0/6.0, Windows XP Embedded

**Fixed TTY Drivers:** QNX 4, 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:** 339,822 hrs  
**Database:** Telcordia (Bellcore), GB

#### Power Requirements

**Power Consumption:** 220 mA @ 5 VDC

#### Warranty

**Warranty Period:** 5 years  
**Details:** See [www.moxa.com/warranty](http://www.moxa.com/warranty)

### Ordering Information

#### Available Models

**CA-134I:** 4-port RS-422/485 PC/104 module with electrical isolation, 0 to 55°C operating temperature  
**CA-134I-T:** 4-port RS-422/485 PC/104 module with electrical isolation, -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 CA-134I or CA-134I-T module
- Documentation and software CD
- Quick installation guide (printed)
- Warranty card