

# CI-134 Series

## 4-port RS-422/485 ISA serial boards



PCComm Lite

- > Cost-effective ISA boards with 4 RS-422/485 ports
- > RS-485 data direction control with ADDC® or by RTS
- > 921.6 kbps maximum baudrate for super fast data transmission
- > 16-byte FIFO and on-chip hardware flow control
- > Surge protection and electrical isolation available
- > Built-in termination resistors



12

Multiport Serial Boards > CI-134 Series

### Overview

The CI-134 series ISA boards come with 4 independent RS-422/485 serial ports for connecting data acquisition equipment and other serial devices to a PC. Connect your devices over longer distances—up to 1.2 km (4000 ft)—and ensure greater reliability in industrial

environments with on-board surge protection and electrical isolation (available with some models). Enjoy greater versatility by using point-to-point full duplex connections, or set up a half duplex RS-485 multi-drop network.

### Specifications

#### Hardware

**Comm. Controller:** 16C550C or compatible x 4

**Bus:** 16-bit ISA

**Connector:** DB37 female

#### Serial Interface

**Number of Ports:** 4

**Serial Standards:** RS-422/485

**Max. No. of Boards per PC:** 4

#### Serial Line Protection

**Electrical Isolation:** 2 kV (CI-134I/IS only)

#### Performance

**Baudrate:** 50 bps to 921.6 kbps

**Built-in Termination Resistor:** 120 ohm (enabled by jumper for RS-485-2w)

#### Serial Communication Parameters

**Data Bits:** 5, 6, 7, 8

**Stop Bits:** 1, 1.5, 2

**Parity:** None, Even, Odd, Space, Mark

**I/O Address:** 0x0000-0xFFFF (default = 0x180)

**IRQ:** 2 (9), 3, 4, 5, 7, 10 (default), 11, 12, 15

#### Serial Signals

**RS-422:** TxD+(B), TxD-(A), RxD+(B), RxD-(A), RTS+(B), RTS-(A), CTS+(B), CTS-(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:

CI-134: 85 x 160 mm (3.35 x 6.30 in)

CI-134I/IS: 110 x 180 mm (4.33 x 7.09 in)

#### Driver Support

**Windows:** Windows 95/98/ME/NT/2000, Windows XP/2003/Vista/2008/7/8/8.1 (x86/x64), Windows 2008 R2/2012/2012 R2 (x64), Windows 3.x, 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:** 0 to 55°C (32 to 131°F)

**Storage Temperature:** -20 to 85°C (-4 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

#### ESD:

IEC 61000-4-2 ESD: Contact: 8 kV; Air: 15 kV

IEC 61000-4-3 RS: 80 MHz to 1 GHz: 10 V/m

IEC 61000-4-4 EFT: Signal: 2 kV

#### MTBF (mean time between failures)

**Time:** 424,655 hrs

**Standard:** Telcordia (Bellcore) TR/SR

#### Power Requirements

##### Input Current:

CI-134: 450 mA @ 5 VDC

CI-134I: 610 mA @ 5 VDC

CI-134IS: 620 mA @ 5 VDC

#### Warranty

**Warranty Period:** 5 years

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

### Ordering Information

#### Available Models

**CI-134-DB9M:** 4-port RS-422/485 ISA serial board (CBL-M37M9x4-30 cable included)

**CI-134I-DB9M:** 4-port RS-422/485 ISA serial board with electrical isolation (CBL-M37M9x4-30 cable included)

**CI-134IS-DB9M:** 4-port RS-422/485 ISA serial board with electrical isolation and surge protection (CBL-M37M9x4-30 cable included)

**CI-134 w/o Cable:** 4-port RS-422/485 ISA serial board (CBL-M37M25x4-30 cable included)

**CI-134I w/o Cable:** 4-port RS-422/485 ISA serial board with electrical isolation (CBL-M37M25x4-30 cable included)

**CI-134IS w/o Cable:** 4-port RS-422/485 ISA serial board with electrical isolation and surge protection (CBL-M37M25x4-30 cable included)

#### Connection Options (one cable is included with each board)

**CBL-M37M9x4-30:** M37 to 4 x DB9-M cable, 30 cm

**CBL-M37M25x4-30:** M37 to 4 x DB25-M cable, 30 cm

#### Package Checklist

- 1 CI-134 board
- 1 connection cable
- Documentation and software CD
- Quick installation guide (printed)
- Warranty card