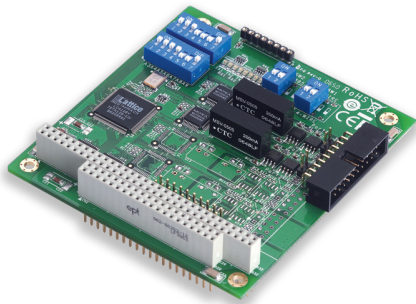# CA-132/132I Series

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

> 921.6 kbps maximum baudrate for super fast data transmission
> On-chip software flow control
> Built-in 15 kV ESD protection
> IRQ, I/O, and serial interface jumper and DIP switch selectable
> Onboard Tx and Rx LED indicators for each port
> Supports RS-485 ADDC® (Automatic Data Direction Control)
> Windows CE 5.0/6.0 and Windows XP embedded operating systems supported
> Wide temperature models available for -40 to 85°C environments

PComm Lite   -40°C 85°C

: Overview

The CA-132/132I PC/104 modules are reliable, high performance, multiport serial communication solutions that have 2 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-132/132Is' versatile driver support makes the modules suitable for a wide range of applications.

: Specifications

Hardware
Comm. Controller: 16C550C or compatible x 2
Bus: PC/104 bus
Connector: 20-pin box header
LED Indicators: Built-in TX, RX LEDs for each port
DIP Switches: I/O base address, interrupt vector

Serial Interface
Number of Ports: 2
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 (CA-132I only)

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: 536,288 hrs
Database: Telcordia (Bellcore), GB

Power Requirements
Power Consumption:
CA-132: 155 mA @ +5 V
CA-132I: 190 mA @ +5 V

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

: Ordering Information

Available Models
CA-132: 2-port RS-422/485 PC/104 module, 0 to 55°C operating temperature
CA-132I: 2-port RS-422/485 PC/104 module with electrical isolation, 0 to 55°C operating temperature
CA-132-T: 2-port RS-422/485 PC/104 module, -40 to 85°C operating temperature
CA-132I-T: 2-port RS-422/485 PC/104 module with electrical isolation, -40 to 85°C operating temperature

Connection Options (can be purchased separately)
CBL-F20M9x2-50: 20-pin box header to DB9 male x 2 connection cable, 50 cm
CBL-F20M25x2-50: 20-pin box header to DB25 male x 2 connection cable, 50 cm

Package Checklist
- 1 CA-132 or CA-132I module
- Documentation and software CD
- Quick installation guide (printed)
- Warranty card