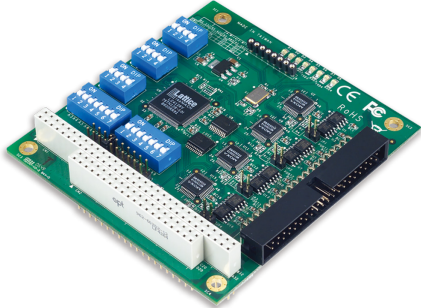# CA-114 Series

4-port RS-232/422/485 PC/104 modules

> 921.6 kbps maximum baudrate for super fast data transmission
> On-chip H/W and S/W flow control
> 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-114 PC/104 modules are reliable, high performance, multiport serial communication solutions that have 4 RS-232/422/485 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-114s' 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-232/422/485
Max. No. of Boards per PC: 8

Performance
Baudrate: 50 bps to 921.6 kbps (supports non-standard baudrates)

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-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: Windows 95/98/ME/NT, Windows 2000/XP/2003/Vista/2008/7/8/8.1/10 (x86/x64), Windows 2008 R2/2012/2012 R2/2016 (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)

Standards and Certifications
EMC: EN 55022/24, IEC 61000-6-2/6-4
EMI: FCC Part 15 Subpart B Class A
EMS:
IEC 61000-4-2 ESD: Contact 4kV; Air: 8kV
IEC 61000-4-3 RS: 80 MHz to 1 GHz: 3 V/m
IEC 61000-4-4 EFT: Power: 2 kV; Signal: 1 kV
IEC 61000-4-5 Surge: Power: 0.5 kV
IEC 61000-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m
IEC 61000-4-8 PFMF
Green Product: RoHS, CRoHS, WEEE

MTBF (mean time between failures)
Time: 630,997 hrs
Standard: Telcordia (Bellcore), GB

Power Requirements
Power Consumption: 305 mA @ 5 VDC

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

: Ordering Information

Available Models
CA-114: 4-port RS-232/422/485 PC/104 module, 0 to 55°C operating temperature
CA-114-T: 4-port RS-232/422/485 PC/104 module, -40 to 85°C operating temperature

Package Checklist
- 1 CA-114 or CA-114-T module
- Documentation and software CD
- Quick installation guide (printed)
- Warranty card