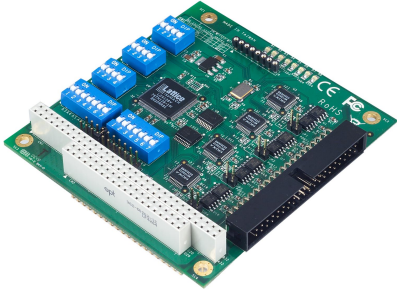# CA-114 Series

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

Features and Benefits

• 921.6 kbps maximum baudrate for fast data transmission

• On-chip hardware and software 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

• Supports Windows CE 5.0/6.0 and Windows XP Embedded operating systems

• Wide-temperature model available for -40 to 85°C environments

Certifications

CE   FC

Introduction

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 versatile driver support makes the modules suitable for a wide range of applications.

Specifications

Serial Interface

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
IRQ	3, 4, 5, 6, 7, 9, 10, 11, 12, 15 (shared for all ports)
FIFO	64 bytes
Max. No. of Boards per PC	8
No. of Ports	4
Serial Standards	RS-232, RS-422, RS-485
Baudrate	50 bps to 921.6 kbps
Data Bits	5, 6, 7, 8
Stop Bits	1, 1.5, 2
Parity	None, Even, Odd, Space, Mark
Flow Control	None, RTS/CTS, XON/XOFF

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Serial Signals

RS-232	TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND
RS-422	Tx+, Tx-, Rx+, Rx-, GND
RS-485-4w	Tx+, Tx-, Rx+, Rx-, GND
RS-485-2w	Data+, Data-, GND

Serial Software Features

Windows Drivers	DOS, Windows 95/98/ME/NT/2000, Windows XP/2003/Vista/2008/7/8/8.1/10 (x86/x64), Windows 2008 R2/2012/2012 R2 (x64), Windows Embedded CE 5.0/6.0, Windows XP Embedded
Linux Drivers	Linux kernel 2.4.x, Linux kernel 2.6.x

Power Parameters

Input Current	305 mA @ 5 VDC
Input Voltage	5 VDC

Physical Characteristics

Dimensions	90 x 96 mm (3.54 x 3.78 in)

LED Interface

LED Indicators	Built-in Tx, Rx LEDs for each port

Environmental Limits

Operating Temperature	CA-114: 0 to 55°C (32 to 131°F) CA-114-T: -40 to 85°C (-40 to 185°F)
Storage Temperature (package included)	-40 to 85°C (-40 to 185°F)
Ambient Relative Humidity	5 to 95% (non-condensing)

Standards and Certifications

EMC	EN 55032/24
EMI	CISPR 32, FCC Part 15B Class A
EMS	IEC 61000-4-2 ESD: Contact: 4 kV; Air: 8 kV 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
Environmental Testing	IEC 60068-2-1 IEC 60068-2-2 IEC 60068-2-3 IEC 60068-2-14
Safety	EN 60950-1, UL 60950-1
Vibration	IEC 60068-2-6

Declaration

Green Product	RoHS, CRoHS, WEEE

MTBF

Time	630,997 hrs
Standards	Telcordia (Bellcore), GB

Warranty

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

Package Contents

Device	1 x CA-114 Series PC/104 module
Documentation	1 x document and software CD 1 x quick installation guide 1 x warranty card

Ordering Information

Model Name	Serial Bus	Serial Standards	No. of Serial Ports	Operating Temp.
CA-114	PC/104	RS-232/422/485	4	0 to 55°C
CA-114-T	PC/104	RS-232/422/485	4	-40 to 85°C