

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



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

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 R2/2016/2019 (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
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 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

© Moxa Inc. All rights reserved. Updated Sep 16, 2021.

This document and any portion thereof may not be reproduced or used in any manner whatsoever without the express written permission of Moxa Inc. Product specifications subject to change without notice. Visit our website for the most up-to-date product information.