CA-108 Series

8-port RS-232 PC/104 modules



Features and Benefits

- 921.6 kbps maximum baudrate for fast data transmission
- On-chip hardware and software flow control
- IRQ and I/O settings 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-108 PC/104 modules are reliable, high-performance, multiport serial communication solutions that have 8 RS-232 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

Seriai interiace			
Comm. Controller	16C550C or compatible x 4		
Bus	PC/104 bus		
Connector	40-pin box header		
DIP Switches	I/O base address, Interrupt vector		
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	8		
Serial Standards	RS-232		
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		

Serial Software Features

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		
UNIX Drivers	FreeBSD 4.x, QNX 4		
Power Parameters			
Input Current	210 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-108: 0 to 55°C (32 to 131°F) CA-108-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	CISPR 32, FCC Part 15B Class A 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 IEC 61000-4-11		
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Ems Environmental Testing	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 IEC 61000-4-11 IEC 60068-2-1 IEC 60068-2-2 IEC 60068-2-3 IEC 60068-2-14		
Ems Environmental Testing Vibration	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 IEC 61000-4-11 IEC 60068-2-1 IEC 60068-2-2 IEC 60068-2-3 IEC 60068-2-14		
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Environmental Testing Vibration Declaration Green Product	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 IEC 61000-4-11 IEC 60068-2-1 IEC 60068-2-2 IEC 60068-2-3 IEC 60068-2-14		
Environmental Testing Vibration Declaration Green Product MTBF	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 IEC 61000-4-11 IEC 60068-2-1 IEC 60068-2-2 IEC 60068-2-3 IEC 60068-2-14 IEC 60068-2-6		
Environmental Testing Vibration Declaration Green Product MTBF Time	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 IEC 61000-4-11 IEC 60068-2-1 IEC 60068-2-2 IEC 60068-2-3 IEC 60068-2-14 IEC 60068-2-6 RoHS, CRoHS, WEEE		
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Package Contents

Device	1 x CA-108 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-108	PC/104	RS-232	8	0 to 55°C
CA-108-T	PC/104	RS-232	8	-40 to 85°C

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