

Serial Communications Products

3U CompactPCI Serial Communications Products



Model Name	cPCI-3538	cPCI-3534	cPCI-3544
Plug & Play	√	√	√
Serial Port Number	8	4	4
Max. Async Speed	115.2 kbps	115.2 kbps	115.2 kbps
Isolation	-	On-board	On-board
RS-232C # of Ports	8	3	-
RS-485 # of Ports	-	1 Isolated	4 Isolated
RS-422 # of Ports	-	1 Isolated	4 Isolated
Rear I/O Version	√	√	√
Cable	C825M / C809M	C425M / C409M	C425M / C409M
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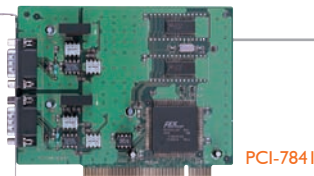
PCI-based Serial Communications Products



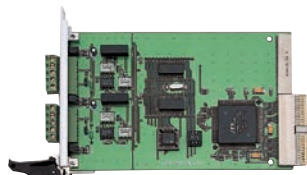
Model Name	C588	C584	C518	C514	C422	C485
Plug & Play	√	√	√	√	√	√
Serial Port Number	8	4	8	4	2	4
Max. Async Speed	115.2 kbps	115.2 kbps	115.2 kbps	115.2 kbps	115.2 kbps	115.2 kbps
Isolation	External	External	-	-	On-board	On-board
RS-232C # of Ports	8	4	7	3	-	-
RS-485 # of Ports	-	-	1 Isolated	1 Isolated	2 Isolated	4 Isolated
RS-422 # of Ports	-	-	1 Isolated	1 Isolated	2 Isolated	4 Isolated
Cable	C825M / C809M	C425M / C409M	C825M / C809M	C425M / C409M	-	C425M / C409M
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PCI-784 I / cPCI-784 I

Dual-port Isolated CAN Interface Cards



PCI-784 I



cPCI-784 I

Introduction

The PCI-784 I/cPCI-784 I is a Controller Area Network (CAN) interface card. It supports a dual-port CAN interface that can run independently or bridged together. The built-in CAN controller is a Philips SJA1000, which provides bus arbitration and error detection with auto correction and re-transmission functionality.

Controller Area Network

The CAN (Controller Area Network), a serial bus system originally developed by Bosch for use in automobiles, is increasingly used for industry automation. Its multi-master protocol, real-time capability, error correction and high noise immunity makes it especially suited for intelligent I/O devices control network.

Features

- Two independent CAN network operation
- Up to 1 Mbps programmable transfer rate
- 16 MHz CAN controller frequency
- 2500 V_{RMS} isolation protection
- Direct memory mapping to the CAN controllers
- Powerful master interface for CAN bus protocols
- PCI bus plug-and-play
- Supports Windows® 2000/XP and Linux operation systems
- Only supports CompactPCI interface 5V V(I/O)

Software Support

- **PCI-784 I**
 - Dos driver
 - Windows® NT/2000/XP
 - Linux driver
- **cPCI-784 I**
 - Windows 2000/XP
 - Dos driver
 - Linux driver

Software Support

■ Ports 2	CAN channels (V2.0 A, B)
■ CAN Controller	SJA1000
■ CAN Transceiver	82C250/251
■ Isolation Voltage	2500 V _{RMS}
■ Connectors	Dual DB9 male connectors for PCI-784 I 5-pin screw terminal for cPCI-784 I
■ Operating Temperature	0 to +60 °C
■ Storage Temperature	-20 °C to +80 °C
■ Humidity	5 to 95%, non-condensing
■ Power Consumption	+5 V @ 400 mA typical, @ 900 mA max.
■ Dimensions	PCI-784 I: 132 mm x 107 mm (H x L) cPCI-784 I: 100 mm x 160 mm (H x L)

Ordering Information

- **PCI-784 I**
Dual-port isolated CAN interface card
- **cPCI-784 I**
Dual-port isolated CAN interface card in 3U CompactPCI form factor
- **cPCI-784 I R**
Dual-port isolated CAN interface card in 3U CompactPCI form factor with rear I/O support

1
DAQ

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PXI

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Modular
Instruments

4
GPIB & Bus
Expansion

5
PAC

6
Motion

7
Distributed I/O

8
Serial Comm

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Vision

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Software &
Utilities

11
PCI & Industrial
Systems

12
Accessories

C588/C584/C518/C514/C485/C422

PCI-based Serial Communications Cards



C588



C584



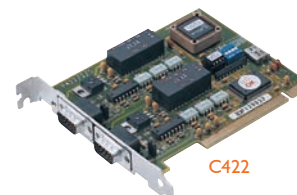
C518



C514



C485



C422

Features

- PCI Rev 2.1 Plug-and-play
- IRQ & IO address automatically assigned by BIOS
- Supports up to 2 cards per system, jumper-less, easy to configure
- Isolated RS-422/RS-485 interface (C422/C485, C518/C514)

Applications

- Factory automation
- Machine automation
- Distributed monitoring & control systems

Software Support

- Windows® 2000/XP/XP Embedded
- Drivers for Linux

Software Support

■ Serial Communications Controller	Type: 16550A compatible
■ Port Capability	C588: 8 independent RS-232C ports C584: 4 independent RS-232C ports C518: 7 independent RS-232C ports, and 1 isolated RS-422/RS-485 port C514: 3 independent RS-232C ports, and 1 isolated RS-422/RS-485 port C485: 4 independent isolated RS-422/RS-485 ports C422: 2 independent isolated RS-422/RS-485 ports
■ Baud Rate	Each port can be configured to 50 to 115,200 bps
■ Form Factor	C588: 140 mm x 107 mm C584: 140 mm x 102 mm C518: 159 mm x 108 mm C514: 146 mm x 108 mm C485: 159 mm x 108 mm C422: 159 mm x 108 mm +5 V or +3.3 V 32-bit PCI signaling environment
■ PCI Interface	32-bit CompactPCI, PICMG 2.0 Rev 3.0
■ Working Temperature	0°C to +55°C
■ Storage Temperature	-20°C to +65°C
■ Humidity	10% to 95% non-condensed

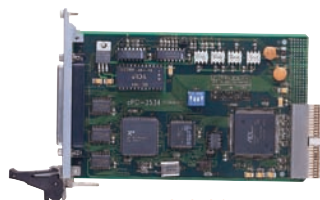
Ordering Information

- **C588**
8-port RS-232C async communications card
- **C584**
4-port RS-232C async communications card
- **C518**
8-port (7 RS-232C ports, 1 RS-422/RS-485 port) industrial communications card
- **C514**
4-port (3 RS-232C ports, 1 RS-422/RS-485 port) industrial communications card
- **C485**
4-port RS-422/RS-485 industrial communications card
- **C422**
2-port RS-422/RS-485 industrial communications card

- **C809M**
DB-62 to 8 DB-9 male cable
- **C825M**
DB-62 to 8 DB-25 male cable
- **C409M**
DB-37 to 4 DB-9 male cable
- **C425M**
DB-37 to 4 DB-25 male cable

cPCI-3534/3538 Series

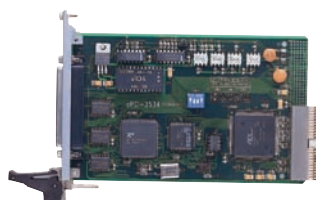
4/8-port Asynchronous Serial Communications Modules



cPCI-3534



cPCI-3534R



cPCI-3538



cPCI-3538R

Features

- 32-bit CompactPCI, PICMG 2.0 Rev 2.1
- Plug-and-play, IRQ & I/O address automatically assigned by PCI BIOS
- 4/8 asynchronous communications ports with intelligent buffer
- Three RS-232 ports and one isolated RS-422/RS-485 port with 2500 VRMS isolation voltage (cPCI-3534)
- Eight RS-232 ports (cPCI-3538)
- Supports up to 2 cards per system
- Suitable for modems, data display, data collection, telecommunications
- Rear I/O version is available for cPCI-3534R and cPCI-3538R
- Support multiple OS
- Surge protector in TXD/RXD signal line
- Rugged DB-37 connector for cPCI-3534
- Rugged DB-62 connector for cPCI-3538

Applications

- Factory automation
- Distributed monitoring & control systems
- Telecommunications
- POS systems
- Stock market systems
- Traffic control systems

Software Support

- Windows® 2000/ME/XP
- Linux drivers

Software Support

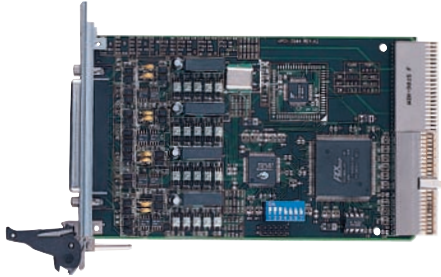
■ Serial Communications Controller	I6C550A compatible
■ System I/O Mapping	Assigned by PCI BIOS Shared IRQ
■ Port Capability of cPCI-3534	3 independent RS-232 ports 1 isolated switch selectable RS-422/485 port RS-485 support auto-direction control Max. two cards per system (8-port max.)
■ Port Capability of cPCI-3538	8 independent RS-232 ports Max. two cards per system (16-port max.)
■ Baud Rate	Each port can be configured to 50 to 115,200 bps
■ Flow Control (for RS-232 only)	Xon/Xoff control RTS/CTS control
■ Isolation Voltage	2500 VRMS for RS-422/485 port of cPCI-3534
■ Connector	DB37 female connector for cPCI-3534 DB62 female connector for cPCI-3538
■ Cable	External cable with 4 standard DB25 (C425M) / DB9 (C409M) connectors for cPCI-3534 External cable with 8 standard DB25 (C825M) / DB9 (C809M) connectors for cPCI-3538
■ Operating Temperature	0°C to +60°C
■ Storage Temperature	-20°C to +70°C
■ Humidity	5% to 95%, non-condensing
■ Cable	External cable with 4 standard DB25 (C425M) / DB9 (C409M) connectors for cPCI-3534 External cable with 8 standard DB25 (C825M) / DB9 (C809M) connectors for cPCI-3538
■ Operating Temperature	0°C to +60°C
■ Storage Temperature	-20°C to +70°C
■ Humidity	5% to 95%, non-condensing

Ordering Information

- **cPCI-3534**
4-port async serial communications module
- **cPCI-3534R**
4-port async serial communications module with rear I/O support
- **C409M**
DB-37 to four DB-9 male cable
- **C425M**
DB-37 to four DB-25 male cable
- **cPCI-3538**
8-port async serial communications module
- **cPCI-3538R**
8-port async serial communications module with rear I/O support and C809M
- **C809M**
DB-62 to eight DB-9 male cable
- **C825M**
DB-62 to eight DB-25 male cable

cPCI-3544 Series

4-port RS-422/RS-485 Isolated Serial Communications Modules



Software Support

■ Serial Communications Controller	I6C550A compatible
■ System I/O Mapping	Assigned by PCI BIOS Shared IRQ
■ Port Capability	4 independent isolation RS-422/RS-485 ports (switch selectable) Max. 8 cards per system (32 ports max.)
■ Baud Rate	Each port can be configured to 50 to 115,200 bps
■ Isolation Voltage	2500 V _{RMS} RS-485 ports support auto-direction flow control Supports rear I/O option for cPCI-3544R
■ Connector	DB37 female connector
■ Cable	External cable with 4 standard DB25 (C425M) / DB9 (C409M) connectors
■ Working Temperature	0°C to +60°C
■ Storage Temperature	-20°C to +70°C
■ Humidity	5% to 95% non-condensed

Features

- 32-bit CompactPCI, PICMG 2.0 Rev 2.1
- Plug-and-play, IRQ & I/O address automatically assigned by PCI BIOS
- Four asynchronized communications ports with intelligent buffer
- Four RS-422/RS-485 ports
- 2500 V_{RMS} isolation voltage
- Suitable for modems, data display, data collection, telecommunications
- Supports Multiple OS
- Surge protectors
- Rugged DB37 connector
- Only support CompactPCI interface 5V V(I/O)

Applications

- Factory automation
- Distributed monitoring and control systems
- Telecommunications
- POS systems
- Stock market systems
- Traffic control systems

Software Support

- Windows® 2000/XP/XP Embedded
- Drivers for Linux

Ordering Information

- **cPCI-3544**
Isolated 4-port RS-422/RS-485 serial communications module
- **cPCI-3544R**
Isolated 4-port RS-422/RS-485 serial communications module with rear I/O support
- **C409M**
DB37 to four DB9 male cable
- **C425M**
DB37 to four DB25 male cable

PCI-8994

6U CompactPCI 4-port IEEE 1394a & 4-port RS-232 Card



Software Support

■ IEEE 1394	TI TSB43AB23, IEEE 1394a OHCI PHY/Link controller TI TSB41AB3, IEEE 1394a 3port transceiver/arbiter
■ RS-232	OX16PCI954, quad COM ports controller
■ Baud rate	Up to 15 Mbps in asynchronous mode
■ Form Factor	Single size: 255.0 mm x 165.0 mm + 5 V or + 3.3 V 32-bit PCI signaling environment
■ PCI Interface	32-bit Compact PCI, PICMG 2.0 Rev 3.0
■ OS Support	Windows 2000, XP Embedded, RTX 5.0 or later
■ I/O	4 ports IEEE 1394a, 4 ports RS-232, and one 12 V power output connector on the front panel
■ Power Provided to IEEE 1394 Connection	1 A / per port (over-current protection)
■ Working Temperature	0°C to +55°C
■ Storage Temperature	-20°C to +80°C
■ Humidity	5% to 95% non-condensed

Features

- 32-bit/33 MHz 6U CompactPCI, PICMG 2.0 Rev 3.0
- Plug-and-play, IRQ&IO address automatically assigned by BIOS
- Four IEEE 1394a ports
- Power Provided to IEEE 1394 I/O Connection: 1A/port
- Four RS-232 ports, baud rates up to 15 Mbps in asynchronous mode
- One 12 V power output connector on the front panel

Applications

- Factory automation
- Machine automation
- Distributed monitoring & control systems
- Telecommunication and industrial control

Software Support

- Windows® 2000/XP
- Linux drivers
- RTX 5.0 or later

Ordering Information

- **cPCI-8994**
6U CompactPCI 4-port IEEE 1394a & 4-port RS-232 card

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DAQ2
PXI3
Modular Instruments4
GPIB & Bus Expansion5
PAC6
Motion7
Distributed I/O8
Serial Comm9
Vision10
Software & Utilities11
CPQ & Industrial Systems12
Accessories