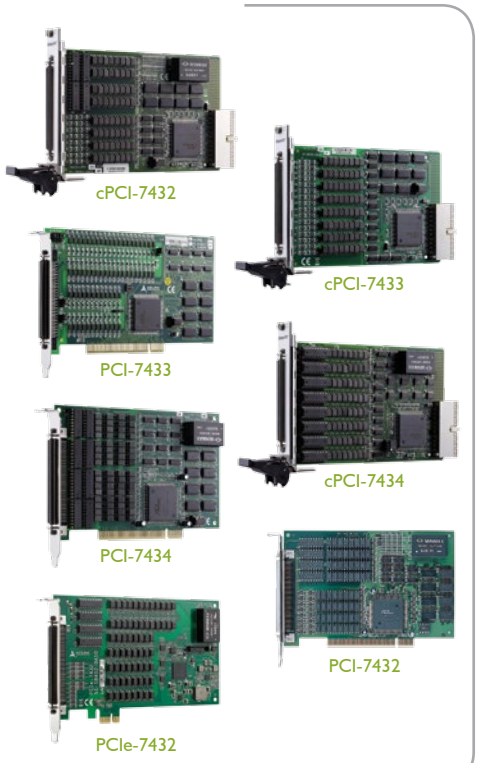
PCI/cPCI-7432/7433/7434, PCIe-7432

64-CH Isolated Digital I/O Cards,32-CH Isolated Digital Input & 32-CH Isolated Digital Output card

PCI EXPRESS® PCI CompactPCI



Features

- **Supports a 32-Bit 5 V PCI bus (PCI-7432/7433/7434), x1 PCI Express interface (PCIe-7432)**
- **3U Eurocard form factor, CompactPCI compliant (PICMG 2.0 R2.1) (cPCI-7432/7433/7434)**
- **32-CH isolated digital inputs & 32-CH isolated digital outputs (PCI-7432/7432HIR, cPCI-7432, PCIe-7432/7432HIR)**
- **64-CH isolated digital inputs (PCI-7433/7433HIR, cPCI-7433)**
- **64-CH isolated digital outputs (PCI-7434, cPCI-7434/7434P)**
- **Isolation Voltage:**
  - **2500 V_{RMS}: PCI-7432/7433/7434/PCIe-7432**
  - **5000 V_{RMS}: cPCI-7432/7433/7434/7434P**
- **Sink current up to 500 mA on single isolated output**
- **Isolated input voltage up to 24 V (PCI-7432/7433, cPCI-7432/7433 , PCIe-7432/7432HIR)**
- **Isolated input voltage up to 50 V (PCI-7432HIR/7433HIR)**
- **Two external interrupt sources (PCI-7432/7432HIR/7433/ 7433HIR, cPCI-7432/7432RP/7433, PCIe-7432/7432HIR)**

Supported Operating System

- Windows 7/8.1 x64/x86, Linux

Driver and SDK

- LabVIEW, MATLAB, C/C++, Visual Basic, Visual Studio.NET

Software Utility

- AD-Logger

Specifications

Isolated Digital Input

- Number of channels
  - 32 (PCI-7432/7432HIR, cPCI-7432, PCIe-7432/7432HIR)
  - 64 (PCI-7433/7433HIR, cPCI-7433)
- Maximum input range (Non-polarity)
  - 5~24V, non-polarity (PCI-7432/7433, cPCI-7432/7433, PCIe-7432)
  - 12~50V, non-polarity (PCI-7432HIR/7433HIR, PCIe-7432HIR)
- Digital logic levels: non-polarity (PCI-7432/7433, cPCI-7432/7433, PCIe-7432)
  - Input high voltage: 5V to 24V
  - Input low voltage: 0V to 1.3V
- Digital logic levels: non-polarity (PCI-7432HIR/7433HIR, PCIe-7432HIR)
  - Input high voltage: 12V to 50V
  - Input low voltage: 0V to 2V
- Input resistance
  - 2.4 kΩ @ 0.5 W (PCI-7432, cPCI-7432, cPCI-7433 , PCIe-7432)
  - 2.4 kΩ @ 1 W (PCI-7433)
  - 4.7 kΩ @ 0.5 W (PCI-7432HIR,PCIe-7432HIR)
  - 4.7 kΩ @ 1 W (PCI-7433HIR)
- Isolation voltage: 2500 V_{RMS}: PCI-7432/7432HIR/ 7433/7433HIR/PCIe-7432/7432HIR
  5000 V_{RMS}: cPCI-7432/7433
- Interrupt sources: digital input channel 0 & 1
- Data transfers: programmed I/O

Isolated Digital Output

- Number of channels
  - 32 (PCI-7432/7432HIR, cPCI-7432, PCIe-7432/7432HIR)
  - 64 (PCI-7434, cPCI-7434)
- Output type: open collector Darlington transistor
- Sink current (PCI-7432/7432HIR/7434, cPCI-7434, PCIe-7432/7432HIR)
  - All channels "ON" : 120mA @ 24V
  - Single channel "ON": 500mA@ 24V
- Source current (cPCI-7434P)
  - All channels "ON" : 260mA @24V
  - Single channel "ON" : 500mA @24V
- Power dissipation: Max. 2.25 W per chip (8 DO channels) (PCI-7432/7432HIR/7434, cPCI-7432/7434, PCIe-7432/7432HIR)
  Max. 1.47 W per chip (8 DO channels) (cPCI-7434P)
- Supply voltage: 5-35 V
- Isolation voltage: 2500 V_{RMS}
- Data transfers: programmed I/O

General Specifications

- I/O connector: 100-pin SCSI-II female
- Operating temperature: 0°C to 60°C (32°F to 140°F)
- Storage temperature: -20°C to 80°C (-4°F to 176°F)
- Relative humidity: 5% to 95%, non-condensing
- Power requirements

	PCI-7432 PCI-7432HIR cPCI-7432	PCI-7433 PCI-7433HIR cPCI-7433	PCI-7434 cPCI-7434P	PCIe-7432 PCIe-7432HIR	
	+5V	+5V	+5V	+3.3V	+12V
Typical	530mA	500mA	560mA	36.6mA	150mA
Max.				38.2mA	500mA

- Dimensions (not including connectors)
  - 156 mm x 106 mm (6.08" x 4.13") (PCI-7432 & PCI-7432HIR)
  - 175 mm x 107 mm (6.82" x 4.17") (PCI-7433, PCI-7433HIR , PCIe-7432 & PCIe-7432HIR)
  - 156 mm x 106 mm (6.08" x 4.13") (PCI-7434)
  - 156 mm x 106 mm (6.08" x 4.13") (PCI-7434P)
  - 160 mm x 100 mm (6.24" x 3.9") (cPCI-7432/7433/7434)

Terminal Boards & Cables

- DIN-100S-01
  Terminal Board with One 100-pin SCSI-II Connector and DIN-Rail Mounting (Cables are not included.)
- ACL-102100-1
  100-pin SCSI-II cable (mating with AMP-787082-9), 1 M

* For more information on mating cables, please refer to P3-48/49.

Note:
Legacy DIN-502S can be replaced by two DIN-50S-01 and ACL-10252-1 (100-Pin to two 50-Pin Cable, 1 M)

Ordering Information

- **PCI-7432**
  32-CH Isolated DI & 32-CH Isolated DO PCI Card
- **PCI-7432HIR**
  32-CH Isolated DI & 32-CH Isolated DO PCI Card with High Input Range
- **PCI-7433**
  64-CH Isolated DI PCI card
- **PCI-7433HIR**
  64-CH Isolated DI PCI Card with High Input Range
- **PCI-7434**
  64-CH Isolated DO PCI Card
- **cPCI-7433**
  64-CH Isolated DI cPCI Card
- **cPCI-7434**
  64-CH Isolated DO cPCI Card
- **cPCI-7434P**
  64-CH Isolated DO cPCI Card with Source Current Transistor
- **PCIe-7432**
  32-CH Isolated DI & 32-CH Isolated DO PCIe Card
- **PCIe-7432HIR**
  32-CH Isolated DI & 32-CH Isolated DO PCIe Card with High Input Range