

PCI/cPCI-7432/7433/7434

64-CH Isolated Digital I/O Cards



Specifications

Isolated Digital Input

- Number of channels
 - 32 (PCI-7432/7432HIR, cPCI-7432)
 - 64 (PCI-7433/7433HIR, cPCI-7433)
- Maximum input range (Non-polarity)
 - 24 V, non-polarity (PCI-7432/7433, cPCI-7432/7433)
- Digital logic levels: 0 V to 24 V, non-polarity
 - Input high voltage: 5 V to 24 V
 - Input low voltage: 0 V to 1.5 V
- Input resistance
 - 2.4 kΩ @ 0.5 W (PCI-7432, cPCI-7432, cPCI-7433)
 - 2.4 kΩ @ 1 W (PCI-7433)
 - 4.7 kΩ @ 0.5 W (PCI-7432HIR)
 - 4.7 kΩ @ 1 W (PCI-7433HIR)
- Isolation voltage: 2500 V_{RMS}: PCI-7432/7432HIR/7433/7433HIR
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)
 - 64 (PCI-7434, cPCI-7434)
- Output type: open collector Darlington transistor
- Sink current (PCI-7432/7432HIR/7434, cPCI-7434)
 - 500 mA for single channel @ 100% duty cycle
 - 500 mA for all channels @ 20% duty cycle
- Source current (cPCI-7434P)
 - 500 mA for single channel @ 100% duty cycle
 - 260 mA for all channels @ 10% duty
- Power dissipation: Max. 2.25 W per chip (8 DO channels) (PCI-7432/7432HIR/7434, cPCI-7432/7434)
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

Device	+5 V
PCI-7432/7432HIR, cPCI-7432	530 mA typical
PCI-7433/7433HIR, cPCI-7433	500 mA typical
PCI-7434, cPCI-7434P	560 mA typical

- 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)
 - 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-I

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

Features

- Supports a 32-Bit 5 V PCI bus (PCI-7432/7433/7434)
- 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)
- 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
 - 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)
- Isolated input voltage up to 50 V (PCI-7432HIR/7433HIR)
- Two external interrupt sources (PCI-7432/7432HIR/7433/7433HIR, cPCI-7432/7432RP/7433)
- Supported Operating System
 - Windows 7/8 x64/x86, Linux
- Driver and SDK
 - LabVIEW, MATLAB, C/C++, Visual Basic, Visual Studio.NET
- Software Utility
 - AD-Logger