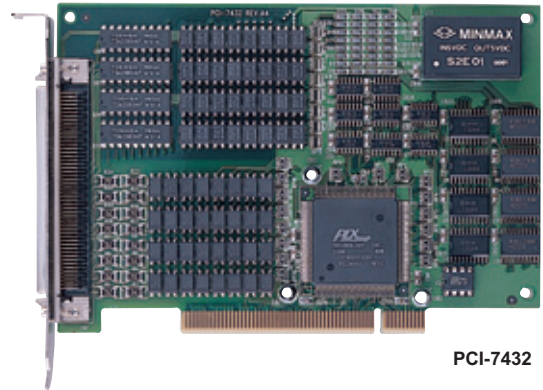


# PCI-7432/7433/7434

## 64-CH Isolated Digital I/O Cards

### Features

- Supports a 32-bit 5 V PCI bus
  - 32-CH isolated digital inputs & 32-CH isolated digital outputs (PCI-7432 & PCI-7432HIR)
  - 64-CH isolated digital inputs (PCI-7433 & PCI-7433HIR)
  - 64-CH isolated digital outputs (PCI-7434)
  - Non-polarity digital input range (PCI-7432, PCI-7432HIR, PCI-7433 & PCI-7433HIR)
  - 60 Hz AC signal input detection capability (PCI-7433ALC)
  - 2500 VRMS optical isolation
  - Sink current up to 500 mA on each isolated output
  - Isolated input voltage up to 24 V (PCI-7432 & PCI-7433)
  - Isolated input voltage up to 50 V (PCI-7432HIR & PCI-7433HIR)
  - Two external interrupt sources (PCI-7432, PCI-7432HIR, PCI-7433 & PCI-7433HIR)
  - Compact, half-size PCB
- **Operating Systems**
    - Windows Vista/XP/2000/2003
    - Linux
  - **Recommended Software**
    - VB.NET/VC.NET/VB/VC++/BCB/Delphi
    - DAQBench
  - **Driver Support**
    - DAQPilot for Windows
    - DAQ-LVIEW PnP for LabVIEW™
    - DAQ-MTLB for MATLAB®
    - PCIS-DASK for Windows
    - PCIS-DASK/X for Linux



PCI-7432

### Introduction

ADLINK PCI-743X series cards are 64-CH high-density digital input and/or output cards. They provide a robust 2,500 V isolation protection that is suitable for most industrial applications. The wide input range of the PCI-7432 and PCI-7433 makes it easy to sense the status of external devices. There are several options for PCI-743X series, such as normal version with input range from 0 to 24 V, as well as HIR version with high input range from 0 to 50 V. The PCI-7433ALC provides more flexibility to extend the signal type from DC to AC, thus the PCI-7433ALC is suitable for AC power test system.

The PCI-7432 and PCI-7434 feature a wide output range from 5 to 35 V, suitable for relay driving and industrial automation applications. The PCI-7432 and PCI-7433 also provide two interrupt sources on digital input channels, which are easily configurable.

### Specifications

#### Isolated Digital Input

- Number of channels
  - 32 (PCI-7432 & PCI-7432HIR)
  - 64 (PCI-7433 & PCI-7433HIR)
- Maximum input range (Non-polarity)
  - 24 V, non-polarity (PCI-7432 & PCI-7433)
  - 50 V, non-polarity (PCI-7432HIR & PCI-7433HIR)
  - 24 V, AC input amplitude @ 60 Hz (PCI-7433ALC)
- Digital logic levels
  - 0-24 V, non-polarity (PCI-7432 & PCI-7433)
    - Input high voltage: 5-24 V
    - Input low voltage: 0-1.5 V
  - 0-50 V, non-polarity (PCI-7432HIR & PCI-7433HIR)
    - Input high voltage: 10-50 V
    - Input low voltage: 0-2 V
  - 0-24 V, AC input amplitude @ 60 Hz (PCI-7433ALC)
    - Input high voltage: 5-24 V
    - Input low voltage: 0-1 V
- Input resistance
  - 2.4 kΩ @ 0.5 W (PCI-7432 & PCI-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 VRMS
- Interrupt sources: digital input channel 0 & 1
- Data transfers: programmed I/O

#### Isolated Digital Output

- Number of channels
  - 32 (PCI-7432 & PCI-7432HIR)
  - 64 (PCI-7434)
- Output type: open collector Darlington transistor
- Sink current
  - 500 mA for one channel @ 100% duty
  - 500 mA for all channels @ 20% duty
- Power dissipation: Max. 2.25 W per chip (8 DO channels)
  - Supply voltage: 5-35 V
  - Isolation voltage: 2500 VRMS
  - Data transfers: programmed I/O

#### General Specifications

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

Device	+5 V
PCI-7432 PCI-7432HIR	530 mA typical
PCI-7433 PCI-7433HIR PCI-7433ALC	500 mA typical
PCI-7434	560 mA typical

- Dimensions (not including connectors)
  - 156 mm x 106 mm (PCI-7432 & PCI-7432HIR)
  - 175 mm x 107 mm (PCI-7433, PCI-7433HIR & PCI-7433ALC)
  - 156 mm x 106 mm (PCI-7434)

### Termination Boards

#### DIN-100S-01

Termination Board with a 100-pin SCSI-II Connector and DIN-Rail Mounting (Cables are not included. For information on mating cables, refer to Section 12.)

#### 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-7433ALC**  
64-CH Isolated DI Card for AC signal input detection
- **PCI-7434**  
64-CH Isolated DO Card