PCI-7250/7251, LPCI-7250

8-CH Relay Outputs & 8-CH Isolated DI Cards / Low Profile PCI Card

Features

- Support a 32-bit 5V PCI bus (PCI-7250/7250)
- Support a 32-bit 3.3V or 5V PCI bus (LPCI-7250)

 4-CH SPDT & 4-CH SPST relays (PCI-7250)
- 8-CH SPDT & 8-CH SPST relays (PCI-7250 + 1 x PCI-7251
- 12-CH SPDT & 12-CH SPST relays (PCI-7250 + 2 x PCI-7251)
- 16-CH SPDT & 16-CH SPST relays (PCI-7250 + 3 x PCI-7251)
- 8-CH SPDT (LPCI-7250)
- Nonlatching relays
- On-board LED indicators for relay status
- On-board relay driving circuits
- Relay output status read back
- 8-CH isolated digital inputs (PCI-7250/LPCI-
- 16-CH isolated digital inputs (PCI-7250 + 1 x PCI-7251)
- 24-CH isolated digital inputs (PCI-7250 + 2 x
- 32-CH isolated digital inputs (PCI-7250 + 3 x PCI-7251)
- On-board low-pass filtering for digital inputs
- Compact, half size PCB (PCI-7250/7251)
- Compact, low-profile PCI size PCB (LPCI-7250)

■ Operating Systems

- Windows 98/NT/2000/XP/2003
- Linux
- DOS
- Windows CE (call for availability)

■ Recommended Software

- VB/VC++/BCB/Delphi
- DAQBench

- Driver SupportDAQ-LVIEW PnP for LabVIEW
 - DAQ-MTLB for MATLAB
- DAOBOY for Windows
- PCIS-DASK for Windows
- PCIS-DASK/X for Linux





LPCI-7250

Introduction

ADLINK PCI-7250/7251 provides 4-CH SPDT (Form C) & 4-CH SPST (Form A) relay outputs and 8-CH isolated digital inputs. The LPCI-7250 provides 8-CH SPDT (Form C) relay outputs and 8-CH isolated digital inputs. The status of each relay output is represented by an on-board LED. When the relay is in SET condition, its corresponding LED will turn ON, and on the contrary, it is OFF. All of the digital input channels are non-polarity and optically isolated. You can set for each digital input by using RC filter or not. The devices are suitable for collecting digital inputs in noisy environments.

The PCI-7251 is an 8-CH relay outputs and 8-CH isolated DI extension card of the PCI-7250. All the I/O functions of PCI-7251 are the same as those of the PCI-7250. The PCI-7251 has to be connected with PCI-7250 and the bus interface is controlled by the PCI-7250. Up to 3 PCI-7251 cards can be connected to one PCI-7250. therefore, expanding the PCI-7250's DIO from 8 DIO to at most 32 DIO.

Specifications

Relay Output

- Number of channels: 8
- Relay types
- PCI-7250/7251:
- Channel 0-3: SPDT (normal open)
- Channel 4-7: SPST (normal open)
- LPCI-7250:
- Channel 0-7: SPDT (normal open)
- Contact ratingPCI-7250/7251
- + AC: 120 V @ 0.5 A
- DC: 24 V @ 1 A
- LPCI-7250
- DC: 30 V @ 2 A
- Breakdown voltage: 1000 VRMS
- Contact resistance: 100 mΩ
- Relay ON/OFF time
- Operate time: 8 ms
- · Release time: 8 ms
- LED indicators: on-board LEDs for relay status
- Expected life
- PCI-7250/7251:
- >5x10⁵ operations @ 1 A, 24 V_{DC}
- >2x10⁵ operations @ 0.5 A, 120 Vac
- LPCI-7250:
- >10⁵ operations @ 2 A, 30 VDC
- >5x10⁵ operations @ 1 A, 30 VDC
- Data transfers: programmed I/O

Isolated Digital Input

- Number of channels: 8
- Maximum input range: 24 V, non-polarity
- Digital logic levels
- 0-24 V, non-polarity
- Input high voltage: 5-24 V
- Input low voltage: 0-1.5 V
- ■Input resistance: 2.2 kΩ @ 0.33 W

- Isolation voltage: 5000 VRMS
- Data transfers: programmed I/O

General Specifications

- ■I/O connector
- PCI-7250/7251
- 37-pin D-sub female
- LPCI-7250
- 50-pin SCSI-II female
- Operating temperature: 0 to 60 °C
- Storage temperature: -20 to 80 °C
- Relative humidity: 5 to 95%, noncondensing
- Power requirements

Device	+5 V
PCI-7250	140 mA typical
PCI-7251	125 mA typical
LPCI-7250	200 mA typical

- Dimensions (not including connectors)
- 162 mm x 107 mm (PCI-7250)
- 141 mm x 102 mm (PCI-7251) • 120 mm x 65 mm (LPCI-7250)

Termination Boards

PCI-7250/7251:

Termination Board with a 37-pin D-sub Connector and DIN-Rail Mounting (Including One 1-meter ACL-10137 Cable)

■ ACLD-9137

General-Purpose Termination Board with a 37-pin D-sub Male Connector

LPCI-7250:

■ DIN-50S

Termination Board with a 50-pin SCSI-II Connector and DIN-Rail Mounting (Including One 1-meter ACL-10250 Cable)

Pin Assignment

PCI-7250 LPCI-7250 NO0 1 20 NO3 NO0 1 26 NO4 COM0 2 21 COM3 NC0 3 22 NC3 OM0 2 27 COM4 NC0 3 28 NC4 COM0 NO1 4 23 NO4 COM1 5 24 COM4 NO1 4 29 NO5 COM1 5 30 COM5 COM1 COM₁ NC1 6 25 NO5 NO2 7 26 COM5 NC1 6 31 NC5 NO2 7 32 NO6 COM2 8 27 NO6 COM2 8 33 COM6 NC2 9 28 COM6 NC2 9 34 NC6 NO7 10 29 N/C NO3 10 35 NO7 COM7 11 30 DI0_H COM3 11 36 СОМ7 DI0_L 12 31 DI1_H NC3 12 37 NC7 DI1_L 13 32 DI2_H DI2_L 14 33 DI3_H N/C 13 38 N/C N/C 14 39 N/C DI3_L 15 34 DI4_H N/C 15 40 N/C DI4 L 16 35 DI5 H N/C 16 41 N/C DI5_L 17 36 DI6_H DI6_L 18 37 DI7_H N/C 17 42 N/C IDI_0H 18 43 IDI 0L DI7 L 19 IDI 1H 19 44 IDI 1L

IDI 2H 20 45 IDI 2L

IDI_3H 21 46 IDI_3L

IDI_4H 22 47 IDI_4L

IDI_5H 23 48 IDI_5L

IDI_6H 24 49 IDI_6L

IDI_7H 25 50 IDI_7L

Ordering Information

- PCI-7250
- 8-CH Relay Outputs & 8-CH Isolated DI Card
- PCI-7251 8-CH Relay Outputs & 8-CH Isolated DI Extension Card for PCI-7250
- LPCI-7250 8-CH Relay Outputs & 8-CH Isolated DI Low-Profile PCI Card

