

PCI-7250/7251, LPCI-7250

8-CH Relay Outputs & 8-CH Isolated DI Cards

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-7250)
- 16-CH isolated digital inputs (PCI-7250 + 1 x PCI-7251)
- 24-CH isolated digital inputs (PCI-7250 + 2 x PCI-7251)
- 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

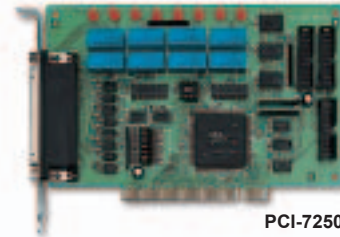
- Windows 2000/NT/XP/98
- DOS
- RedHat Linux
- Windows CE

Recommended Software

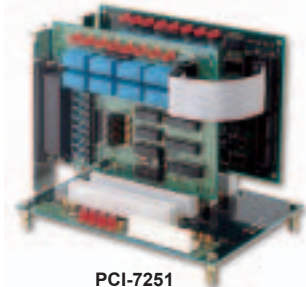
- VB/V/C++/BCB/Delphi
- DAQBench

Driver Support

- PCIS-DASK for Windows 2000/NT/XP/98
- PCIS-DASK/X for RedHat Linux
- PCIS-OCX ActiveX controls
- DAQ-LVIEW PnP for LabVIEW



PCI-7250



PCI-7251

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 rating
 - AC: 120 V @ 0.5 A
 - DC: 24 V @ 1 A
- Breakdown voltage: 1000 V_{RMS}
- 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 V_{AC}
 - LPCI-7250:
 - >10⁵ operations @ 2 A, 30 V_{dc}
 - >5x10⁵ operations @ 1 A, 30 V_{dc}
- 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 V
- Isolation voltage: 5000 V_{RMS}
- Data transfers: programmed I/O

General Specifications

- I/O connector: 37-pin D-sub 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:

- DIN-37D 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

■ ACLD-9138

- General-Purpose Termination Board with a 37-pin D-sub Connector (Including One 1-meter ACL-10237 Cable)

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

NO0	1	20	NO3		
COM0	2	21	COM3		
NC0	3	22	NC3		
NO1	4	23	NO4		
COM1	5	24	COM4		
NC1	6	25	NO5		
NO2	7	26	COM5		
COM2	8	27	NO6		
NC2	9	28	COM6		
NO7	10	29	N/C		
COM7	11	30	DI0_H		
DI0_L	12	31	DI1_H		
DI1_L	13	32	DI2_H		
DI2_L	14	33	DI3_H		
DI3_L	15	34	DI4_H		
DI4_L	16	35	DI5_H		
DI5_L	17	36	DI6_H		
DI6_L	18	37	DI7_H		
DI7_L	19				

LPCI-7250

NO0	1	26	NO4		
COM0	2	27	COM4		
NC0	3	28	NC4		
NO1	4	29	NO5		
COM1	5	30	COM5		
NC1	6	31	NC5		
NO2	7	32	NO6		
COM2	8	33	COM6		
NC2	9	34	NC6		
NO3	10	35	NO7		
COM3	11	36	COM7		
NC3	12	37	NC7		
N/C	13	38	N/C		
N/C	14	39	N/C		
N/C	15	40	N/C		
N/C	16	41	N/C		
N/C	17	42	N/C		
IDI_0H	18	43	IDI_0L		
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-7250L 8-CH Relay Outputs & 8-CH Isolated DI Card w/o manual & CD
- 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

- 1 Software Solutions
- 2 PXI/ CompactPCI Platforms
- 3 PXI-Based Instruments
- 4 PXI/ CompactPCI Modules
- 5 PCI DAQ Cards
- 6 PCI DIO Cards
- 7 PCI/ 104-Plus Products
- 8 ISA DAS/ DIO Cards
- 9 Wiring Termination Boards
- 10 Motion Control Cards
- 11 Machine Vision Products
- 12 Remote I/O Modules