

PCI-7256

16-CH Latching Relay Outputs & 16-CH Isolated DI Card

Features

- Supports a 32-bit 3.3 V or 5 V PCI bus
- 16-CH latching SPDT relay outputs
- Latching relays
- Power saving on relay actuation
- Output status unchanged when power-off
- On-board LED indicators for relay status
- Relay output status read back
- On-board relay driving circuits
- On-board connectors for external LED connection
- 16-CH isolated digital inputs
- 2500 VRMS optical isolation for digital inputs
- Change-of-state (COS) interrupt
- On-board low-pass filtering for digital inputs
- Two external interrupt sources
- On-board isolated +5 V power for dry contact inputs
- Compact, half-size PCB available
- Board ID

- **Operating Systems**
 - Windows 2000/NT/XP/9x
 - DOS
 - Red Hat Linux
 - Windows CE (call for availability)

- **Recommended Software**
 - VB/V++/BCB/Delphi
 - DAQBench

- **Driver Support**
 - PCIS-DASK for Windows 2000/NT/XP/9x
 - PCIS-DASK/X for Red Hat Linux
 - PCIS-OCX ActiveX controls
 - PCIS-LVIEW/PnP **NEW!**



Introduction

ADLINK PCI-7256 is a 16-CH latching relay outputs and 16-CH isolated DI card. All relays are Form C type, which are suitable for device connection with ON/OFF control. With latching relays, the PCI-7256 has the advantage of power saving. The status of each latching 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. Latching relays also features unchanged status even when the system power is turned off, so that the PCI-7256 is suitable for critical applications which need to keep output status when fault conditions happen.

All of the digital input channels are non-polarity and optically isolated. Users can set for each digital input by using RC filter or not. The PCI-7256 device also features the change-of-state (COS) interrupt. It means when any of these digital inputs changes its state, an interrupt will be generated for user to handle this external event.

Specifications

Relay Output

- Number of channels: 16
- Relay type: Latching SPDT (Form C), latching
- The output status will keep unchanged when power-off
- Isolation voltage: 1500 VRMS
- Contact rating
 - AC: 125 V @ 0.5 A
 - DC: 30 V @ 1 A
- Breakdown voltage: 1000 VRMS
- Contact resistance: 60 mΩ
- Relay ON/OFF time
 - Operate time: 3 ms
 - Release time: 3 ms
- LED indicators:
 - On-board LEDs for relay status
 - On-board connectors for external LED connection
- Expected relay life:
 - >2x10⁵ operations @ 1 A, 30 VDC
 - >10⁵ operations @ 0.5 A, 125 VAC
- Data transfer: programmed I/O

General Specifications

- I/O connector: 68-pin SCSI-II female
- Operating temperature: 0 to 60 °C
- Storage temperature: -20 to 80 °C
- Relative humidity: 5 to 95%, noncondensing
- Power requirements

+5 V
340 mA typical
980 mA (when all relays are activated simultaneously)

- Dimensions (not including connectors)
175 mm x 107 mm

Termination Boards

- **DIN-68S/1S**
Termination Board with a 68-pin SCSI-II Connector and DIN-Rail Mounting (Including One 1-meter ACL-10569 Cable)

Isolated Digital Input

- Number of channels: 16
- 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: 4.7 kΩ @ 0.5 W
- Isolateiond voltage: 2500 VRMS
- Interrupt sources: Change-of-state interrupt, digital input channel 0 and 1
- Data transfer: programmed I/O

Isolated Power Supply

- Output voltage: +5 V
- Maximum output current: 170 mA @ 40 °C

Pin Assignment

ISO5V	1	35	ISOGN
D10	2	36	D11
D12	3	37	D13
D14	4	38	D15
D16	5	39	D17
DICOM2	6	40	DICOM1
D18	7	41	D19
D10	8	42	D111
D12	9	43	D113
D14	10	44	D115
NC0	11	45	NC8
COM0	12	46	COM8
NO0	13	47	NO8
NC1	14	48	NC9
COM1	15	49	COM9
NO1	16	50	NO9
NC2	17	51	NC10
COM2	18	52	COM10
NO2	19	53	NO10
NC3	20	54	NC11
COM3	21	55	COM11
NO3	22	56	NO11
NC4	23	57	NC12
COM4	24	58	COM12
NO4	25	59	NO12
NC5	26	60	NC13
COM5	27	61	COM13
NO5	28	62	NO13
NC6	29	63	NC14
COM6	30	64	COM14
NO6	31	65	NO14
NC7	32	66	NC15
COM7	33	67	COM15
NO7	34	68	NO15

Ordering Information

- **PCI-7256**
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