

# PCI-7258

## 32-CH PhotoMos Relay Outputs & 2-CH Isolated DI Card



### Introduction

ADLINK's PCI-7258 is a 32-CH PhotoMos relay and 2-CH isolated digital input card. The 32 PhotoMos relay outputs on the PCI-7258 can switch external devices, including those requiring high input voltage or AC/DC signal at different levels. PhotoMos relays feature long mean-time-between-failure (MTBF) coming from the solid-state process. This makes the PCI-7258 ideal in various applications, such as semiconductor applications, telecommunications, instrumentations, medical equipments and machine automation.

The 2-CH isolated digital inputs on the PCI-7258 can sense the status of external inputs. The PCI-7258 can generate an interrupt when one or both inputs change from low to high. Using these interrupts well can release your computer from a heavy burden in dealing with digital input data.

### Features

- Supports a 32-bit 3.3 V or 5 V PCI bus
- 32-CH long-life PhotoMos relay outputs
- Relay output status read back
- 1500 VRMS optical isolation for relay outputs
- Onboard LED indicators for relay status
- Onboard connectors for external LED connection
- Onboard relay driving circuits
- 2-CH isolated digital inputs
- Two external interrupt sources
- 2500 VRMS optical isolation for digital inputs
- Compact, half-size PCB
- Board ID
- Operating Systems
  - Windows Vista/XP/2000/2003
  - Linux
- Recommended Software
  - AD-Logger
  - VB.NET/VC.NET/VB/VC++/BCB/Delphi
  - DAQBench
- Driver Support
  - DAQPilot for Windows
  - DAQPilot for LabVIEW™
  - DAQ-MTLB for MATLAB®
  - PCIS-DASK for Windows
  - PCIS-DASK/X for Linux

### Specifications

#### Relay Output

- Number of channels: 32
- Relay type: PhotoMos SPST (Form A)
- Load voltage (peak AC): 350 V
- Continuous load current: 0.12 A
- Peak load current: 0.3 A
- Maximum switching power: 300 mW
- Isolation voltage: 1500 VRMS
- Output turn-on resistance: 17 Ω typical
- Output off-state leakage current: 1 μA maximum
- Turn-on time: 0.23 ms typical
- Turn-off time: 0.04 ms typical
- Data transfers: programmed I/O

#### Isolated Digital Input

- Number of channels: 2
- 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: 2.4 kΩ @ 0.5 W
- Isolation voltage: 2500 VRMS
- Interrupt sources: digital input channel 0 and 1
- Data transfers: programmed I/O

#### General Specifications

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

+5 V
380 mA max.
- Dimensions (not including connectors)  
175 mm x 107 mm

### Terminal Boards

#### ■ DIN-68S-01

Terminal Board with One 68-pin SCSI-II Connector and DIN-Rail Mounting (Cables are not included. For information on mating cables, refer to Section 12, Accessories.)

### Ordering Information

#### ■ PCI-7258

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### Pin Assignment

#### PCI-7258

NO1	1	35	NO18
COM1	2	36	COM18
NO2	3	37	NO19
COM2	4	38	COM19
NO3	5	39	NO20
COM3	6	40	COM20
NO4	7	41	NO21
COM4	8	42	COM21
NO5	9	43	NO22
COM5	10	44	COM22
NO6	11	45	NO23
COM6	12	46	COM23
NO7	13	47	NO24
COM7	14	48	COM24
NO8	15	49	NO25
COM8	16	50	COM25
NO9	17	51	NO26
COM9	18	52	COM26
NO10	19	53	NO27
COM10	20	54	COM27
NO11	21	55	NO28
COM11	22	56	COM28
NO12	23	57	NO29
COM12	24	58	COM29
NO13	25	59	NO30
COM13	26	60	COM30
NO14	27	61	NO31
COM14	28	62	COM31
NO15	29	63	NO32
COM15	30	64	COM32
NO16	31	65	DI0
COM16	32	66	DI1
NO17	33	67	DIGND0
COM17	34	68	DIGND1