

LPCI-7230

16-CH Isolated DI & 16-CH Isolated DO Low-Profile PCI Card

Features

- Supports a 3.3V or 5V PCI bus
- 16-CH isolated digital inputs and 16-CH isolated digital outputs
- Non-polarity digital input range
- 2500 V_{RMS} optical isolation
- Sink current up to 500mA on each isolated output
- Isolated input voltage up to 24 V
- Two external interrupt sources
- Compact, low-profile PCI size PCB

Operating Systems

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

Recommended Software

- VB/VC++/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



Introduction

ADLINK LPCI-7230 is a 16-CH isolated digital input and 16-CH isolated digital output module with low profile PCI size. The device supports 3.3V and 5V PCI bus and provides a robust 2,500 V isolation protection which is suitable for most industrial applications. The wide input range makes the LPCI-7230 easy to sense the status of external devices. A potential difference of 3 to 24 V between two input terminals is logic high. Logic low is between 0 to 1 V. The device features a wide output range from 5 to 35 V, suitable for relay driving and industrial automation applications. It also provides two interrupt sources on digital input channels, which are easily user configurable.

Specifications

Isolated Digital Input

- Number of channels: 16 (IDI0-7 have individual connections and IDI8-15 share a common connection.)
- Maximum input range: 24 V, non-polarity
- Digital logic levels
 - 0-24V, non-polarity
 - ◆ Input high voltage: 3-24 V
 - ◆ Input low voltage: 0-1 V
- Input resistance: 1.2 kΩ @ 0.5 W
- Isolation voltage: 2500 V_{RMS}
- Interrupt sources: digital input channel 0 and 1
- Data transfers: programmed I/O

Isolated Digital Output

- Number of channels: 16
- 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_{DC}
- Isolation voltage: 2500 V_{RMS}
- Data transfers: programmed I/O

General Specifications

- I/O connector: 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
LPCI-7230	150 mA typical

- Dimensions (not including connectors)
120 mm x 65 mm

Certificate

- EMC/EMI: CE, FCC Class A

Termination Boards

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

Pin Assignment

VDD	1	26	VDD
EOGND	2	27	+5V
EOGND	3	28	EOGND
EOGND	4	29	EOGND
IDO_7	5	30	IDO_14
IDO_6	6	31	IDO_15
IDO_5	7	32	IDO_12
IDO_4	8	33	IDO_13
IDO_3	9	34	IDO_10
IDO_2	10	35	IDO_11
IDO_1	11	36	IDO_8
IDO_0	12	37	IDO_9
IDI_3H	13	38	IDI_7L
IDI_3L	14	39	IDI_7H
IDI_2H	15	40	IDI_6L
IDI_2L	16	41	IDI_6H
IDI_1H	17	42	IDI_5L
IDI_1L	18	43	IDI_5H
IDI_0H	19	44	IDI_4L
IDI_0L	20	45	IDI_4H
IDI_11	21	46	IDI_15
IDI_10	22	47	IDI_14
IDI_9	23	48	IDI_13
IDI_8	24	49	IDI_12
EICOM	25	50	EICOM

Ordering Information

- **LPCI-7230**
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