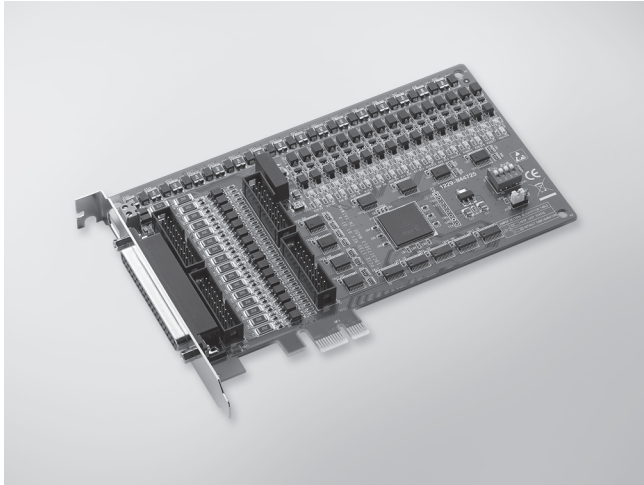


PCIE-1730 PCIE-1730H

32-ch TTL and 32-ch Isolated Digital I/O PCIe Card

32-ch TTL and 32-ch Isolated Digital I/O PCIe card with digital filter and interrupt function



Features

- 32-ch isolated DI/O (16-ch digital input, 16-ch digital output)
- 32-ch TTL DI/O (16-ch digital input, 16-ch digital output)
- High output driving capacity
- Interrupt handling capability
- Selectable Digital filter time
- D-type connector for isolated input and output channels
- High-voltage isolation on output channels (2,500 V_{DC})

Introduction

PCIE-1730/1730H isolated digital input channels as well as isolated digital output channels with isolation protection up to 2,500 V_{DC}, which makes them ideal for industrial applications where high-voltage isolation is required. There are also 32 TTL digital I/O channels on PCIE-1730/1730H. All of the signals of PCIE-1730H can be used as interrupt request signals and also disable or enable the interrupt in each channel and support the edge of the input signals, at which to generate an interrupt. All of PCIE-1730 DI channel has a digital filter to prevent wrong recognition of input signals from carrying noise or a chattering.

Specifications

Digital Input

- **Channels** 16
- **Compatibility** 5 V/TTL
- **Input Voltage** Logic 0: 0.8 V max.
Logic 1: 2.0 V min.
- **Interrupt Capable Ch.** PCIE-1730: 2 (ID10, ID18)
PCIE-1730H: 16

Isolated Digital Input

- **Channels** 16
- **Input Voltage** Logic 0: 3 V max.
Logic 1: 10 V min. (30 V max.)
- **Interrupt Capable Ch.** PCIE-1730: 2 (ID10, ID18)
PCIE-1730H: 16
- **Isolation Protection** 2,500 V_{DC}
- **Opto-Isolator Response** 50 μs
- **Input Resistance** 2.7 kΩ @ 1 W
- **Digital Filter Time (PCIE-1730H only)**

Setting Data (n)	Digital Filter Time	Setting Data (n)	Digital Filter Time	Setting Data (n)	Digital Filter Time
0 (00h)	The filter function is not used.	7 (07h)	16μsec	14 (0Eh)	2.048msec
1 (01h)	0.25μsec	8 (08h)	32μsec	15 (0Fh)	4.096msec
2 (02h)	0.5μsec	9 (09h)	64μsec	16 (10h)	8.192msec
3 (03h)	1μsec	10 (0Ah)	128μsec	17 (11h)	16.384msec
4 (04h)	2μsec	11 (0Bh)	256μsec	18 (12h)	32.768msec
5 (05h)	4μsec	12 (0Ch)	512μsec	19 (13h)	65.536msec
6 (06h)	8μsec	13 (0Dh)	1.024msec	20 (14h)	131.072msec

Digital Output

- **Channels** 16
- **Compatibility** 5 V/TTL
- **Output Voltage** Logic 0: 0.5V max.
Logic 1: 2.4V min.
- **Output Capability** Sink: 24mA @ 0.5V
Source: 15mA @ 2.4V

Isolated Digital Output

- **Channels** 16
- **Output Type** Sink type (NPN)
- **Isolation Protection** 2,500 V_{DC}
- **Output Voltage** 5 ~ 40 V_{DC}
- **Sink Current** 500 mA max./channel
- **Opto-Isolator Response** 50 μs

General

- **Bus Type** PCI Express V1.0
- **I/O Connectors** 1 x DB37 female connector
4 x 20-pin box header
- **Dimensions (L x H)** 168 x 100 mm (6.6" x 3.9")
- **Power Consumption** Typical: 3.3 V @ 280 mA, 12 V @ 330 mA
Max.: 3.3 V @ 420 mA, 12 V @ 400 mA
- **Operating Temperature** 0 ~ 60°C (32 ~ 140°F)
- **Storage Temperature** -25 ~ 85°C (-13 ~ 185°F)
- **Storage Humidity** 5 ~ 95% RH, non-condensing

Ordering Information

- **PCIE-1730-AE** 32-ch TTL and 32-ch Isolated Digital I/O PCIe Card
- **PCIE-1730H-AE** 32-ch TTL and 32-ch Isolated Digital I/O PCIe card with digital filter and interrupt function

Accessories

- **PCL-10120-1E** 20-pin Flat Cable, 1 m
- **PCL-10120-2E** 20-pin Flat Cable, 2 m
- **ADAM-3920-AE** 20-pin DIN-rail Flat Cable Wiring Board
- **PCLD-782-BE** 16-ch Isolated DI Board w/ 1m 20-pin Flat Cable
- **PCLD-885-AE** 16-ch Power Relay Board w/ 20p & 50p Flat Cables
- **PCLD-785-BE** 16-ch Relay Board w/ One 1m 20-pin Flat Cable
- **ADAM-3937-BE** DB37 DIN-rail Wiring Board
- **PCL-10137-1E** DB37 Cable, 1 m
- **PCL-10137-2E** DB37 Cable, 2 m
- **PCL-10137-3E** DB37 Cable, 3 m