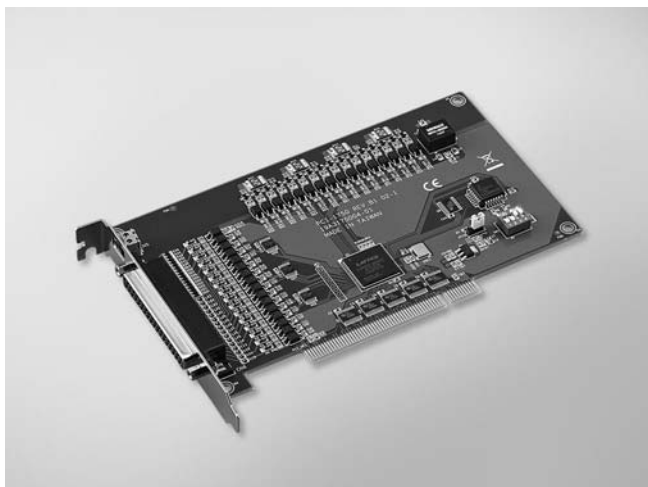


PCI-1750/1750SO

32-ch Isolated Digital I/O and 1-ch Counter PCI Card



FCC CE RoHS COMPLIANT

Features

- 16 isolated DI and 16 isolated DO channels
- High voltage isolation on all isolated channels (2,500 V_{DC})
- High source current on isolated output channels (200 mA/channel)
- Supports dry contact or 5 ~ 50 V_{DC} isolated inputs
- Interrupt handling capability
- Timer/counter interrupt capability

Introduction

PCI-1750/1750SO offers 16 isolated digital input channels, 16 isolated digital output channels, and one isolated counter/timer for the PCI bus. With isolation protection of 2,500 V_{DC}, and dry contact support, PCI-1750/1750SO is ideal for industrial applications where high-voltage protection is required. Each I/O channel of the PCI-1750/1750SO corresponds to a bit in a PC I/O port. This makes PCI-1750/1750SO very easy to program. This card also offers a counter or timer interrupt and two digital input interrupt lines to a PC, so you can then easily configure the card with software.

Specifications

Isolated Digital Input

- **Channels** 16
- **Input Voltage** Logic 0: 2 V max.
Logic 1: 5 V min. (50 V_{DC} max.) or dry contact
- **Interrupt Capable Ch.** 2
- **Isolation Protection** 2,500 V_{DC}
- **Opto-Isolator Response** 100 μs

Isolated Digital Output

- **Channels** 16
- **Sink Current** 200mA max. / channel (PCI-1750 NPN type)
- **Source Current** 200mA max. / channel (PCI-1750SO PNP type)
- **Isolation Protection** 2,500 V_{DC}
- **Output Voltage** 5 ~ 40 V_{DC}
- **Source Current** 200 mA max. per channel
- **Opto-Isolator Response** 100 μs
- **Sufficient Withstanding current** 1.6A max. per PCOM
- **Over current ground** CN5 (wiring necessary if totally current over 1.6A)

Counter/Timer

- **Channels** 1
- **Resolution** 1 x 16-bit isolated counter
- **Input Voltage** Logic 0: 2V max.
Logic 1: 5V min. (50V_{DC} max.)
- **Max. Input Frequency** 1 MHz
- **Isolation Protection** 2,500 V_{DC}

General

- **Bus Type PCI** V2.2
- **I/O Connectors** 1 x DB37 female connector
1 x 2-pin terminal block for extended ground
- **Dimensions (L x H)** 175 x 100 mm (6.9" x 3.9")
- **Power Consumption** Typical: 5 V @ 850 mA
Max.: 5 V @ 1.0 A

- **Operating Temperature** 0 ~ 70°C (32 ~ 158°F)
- **Storage Temperature** -20 ~ 80°C (-4 ~ 176°F)
- **Storage Humidity** 5 ~ 95% RH, non-condensing

Ordering Information

- **PCI-1750** 32-ch Isolated Digital I/O (NPN DO) and Counter PCI Card
- **PCI-1750SO** 32-ch Isolated Digital I/O (PNP DO) and Counter PCI Card

Accessories

- **PCL-10137-1E** DB37 Cable, 1 m
- **PCL-10137-2E** DB37 Cable, 2 m
- **PCL-10137-3E** DB37 Cable, 3 m
- **ADAM-3937** DB37 DIN-rail Wiring Board

Pin Assignments

| | | | |
|-----------------|----|----|-----------------|
| INT0 / IDI 0 | 1 | 20 | IDI 1 |
| IDI 2 | 2 | 21 | IDI 3 |
| INT0_G / IDI 4 | 3 | 22 | IDI 5 |
| IDI 6 | 4 | 23 | IDI 7 |
| INT1 / IDI 8 | 5 | 24 | IDI 9 |
| IDI 10 | 6 | 25 | IDI 11 |
| INT1_G / IDI 12 | 7 | 26 | IDI 13 |
| IDI 14 | 8 | 27 | IDI 15/Counter2 |
| IGND | 9 | 28 | IGND |
| COM1 | 10 | 29 | IGND |
| IDO 0 | 11 | 30 | IDO 1 |
| IDO 2 | 12 | 31 | IDO 3 |
| IDO 4 | 13 | 32 | IDO 5 |
| IDO 6 | 14 | 33 | IDO 7 |
| IDO 8 | 15 | 34 | IDO 9 |
| IDO 10 | 16 | 35 | IDO 11 |
| IDO 12 | 17 | 36 | IDO 13 |
| IDO 14 | 18 | 37 | IDO 15 |
| COM2 | 19 | | |