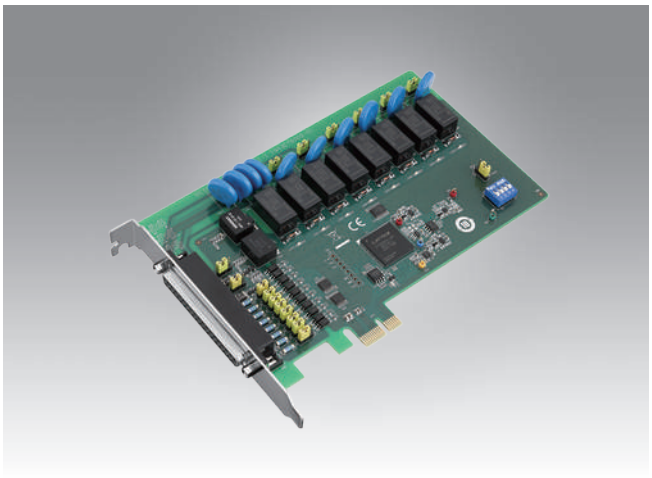
PCIE-1760

8-Ch Relay and 8-Ch Isolated Digital Input PCI Express Card



Features

- 8 opto-isolated digital input channels with counter/timer function
- 8 relay actuator output channels
- 2 opto-isolated Counter I/O (PWM, Event Counting, Frequency Measurement and Timer/Pulse)
- LED indicators to show activated relays
- Jumper-selectable dry/wet-contact input signals
- Up event counters for DI
- Programmable digital filter function for DI
- Pattern match interrupt function for DI
- Change-of-state interrupt function for DI
- Board ID switch

Introduction

The PCIE-1760 relay actuator and isolated digital input card is a PC add-on card for the PCI Express bus that satisfies the PCI Express (Revision 1.0) standard. PCIE-1760 features 8 opto-isolated digital inputs with up to 2,500 V_{DC} isolation protection for collecting digital inputs in noisy environments, 8 relay actuators that can be used as on/off control devices or small power switches, and 2 isolated counters for custom applications.

For easy monitoring, each relay is equipped with a single red LED that indicates the on/off status. Each isolated input supports both dry and wet contact to enable easy interfacing with other devices when no voltage is present in the external circuit.

Specifications

Isolated Digital Input

- **Channels** 8
- **Input Voltage** Logic 0: 3.0V max.
Logic 1: 10V min. (30V max.)
- **Interruptible Channels** 8
- **Isolation Protection** 2,500 V_{DC}
- **Opto-Isolator Response** 100 µs max.
- **Input Debounce Filter** 1 µs ~ 255 µs, software configurable

Counter/Timer

- **Channels** 2
- **Resolution** 32 bits
- **Compatibility** Sink(NPN): 5-40V_{DC}
Source: 5V/TTL
- **Input Frequency*** 1KHz Max.
- **Isolation Protection** 2,500 V_{DC}
- **Input Debounce Filter** 1 µs ~ 255 µs, high/low period set independently, software configurable

Relay Output

- **Channels** 8
- **Relay Type** Form C x 2, form A/B x 6, selected by jumpers
- **Contact Rating** 125V_{AC} @ 0.5A, 30V_{DC} @ 1A
62.5VA, 30W
- **Operate/Release Time** 5 / 3.5 ms max
- **Resistance** <100mΩ initially
- **Life Expectancy (Electrical)** 30 V_{DC} @ 1A, 125 V_{AC} @ 1 A: 3 x 10^5 operations min.,
30 V_{DC} @ 1 A, 125 V_{AC} @ 0.5 A: 10^6 operations min.

General

- **Bus Type** PCI Express x1, V1.0
- **I/O Connectors** 1 x DB37, female
- **Dimensions (L x W x H)** 175 x 100 x 18 mm (6.9" x 3.9" x 0.7")
- **Power Consumption** +3.3 V: 150 mA typ., 750 mA max.
+12 V: 40 mA typ., 80 mA max.
- **Operating Temperature** 0 ~ 60 °C (32 ~ 140 °F)
- **Storage Temperature** -20 ~ 70 °C (-4 ~ 158 °F)
- **Storage Humidity** 5 ~ 95% RH, non-condensing

Ordering Information

- **PCIE-1760-B** 8-ch relay/IDI PCIe card w/ counter/timer

Accessories

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

* Input for event counting, frequency measurement, refer to user manual for more details

All product specifications are subject to change without notice.

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