

PCIE-1760

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



FCC CE 

Features

- 8 opto-isolated digital input channels with counter/timer function
- 8 relay actuator output channels
- 2 opto-isolated PWM outputs
- LED indicators to show activated relays
- Jumper selectable dry contact/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
- BoardID switch

Introduction

PCIE-1760 relay actuator and isolated digital input card is a PC add-on card for the PCI Express bus. It meets the PCI Express standard Rev. 1.0. It provides 8 opto-isolated digital inputs with isolation protection of $2,500 V_{DC}$ for collecting digital inputs in noisy environments, 8 relay actuators that can be used as a on/off control devices or small power switches, and 2 isolated PWM (Pulse Width Modulation) outputs for custom applications.

For easy monitoring, each relay is equipped with one red LED to show its on/off status. Each isolated input supports both dry contact and wet contact so that it can easily interface with other devices when no voltage is present in the external circuit.

Specifications

Isolated Digital Input

- **Channels** 8
- **Input Voltage** Logic 0: 0 - 3 V_{DC}
Logic 1: 10 - 30 V_{DC}
- **Interrupt Capable Ch.** 8
- **Isolation Protection** 2,500 V_{DC}
- **Opto-Isolator Response** 60 μs
- **Input Resistance** 3.2 $k\Omega$ 1 W

Counter/Timer

- **Channels** 2
- **Resolution** 32 bits
- **Input Voltage** Logic 0: 0 - 3 V_{DC}
Logic 1: 10 - 30 V_{DC}
- **Max. Input Frequency** Up to 1 kHz
- **Isolation Protection** 2,500 V_{DC}
- **PWM Channels** 2
- **Digital Noise Filter** Effective input period: 1 μs - 255 μs (unit: 1 μs)

Relay Output

- **Channels** 8
- **Relay Type** 2 x Form C, and 6 x Form A
- **Contact Rating** 125 V_{AC} @ 0.5 A, 30 V_{DC} @ 1 A
- **Operate/Release Time** 5 / 3.5 ms max
- **Contact Resistance** < 100 $m\Omega$ initially
- **Life Expectancy (Electrical)** 3 x 10⁹ cycles min.: 2 A @ 30 V_{DC} , 1 A @ 125 V_{AC}
10⁶ cycles min.: 1 A @ 30 V_{DC} , 0.5 A @ 125 V_{AC}

General

- **Bus Type** PCI Express V1.0
- **I/O Connectors** 1 x DB37 female connector
- **Dimensions (L x H)** 168 x 100 mm (6.6" x 3.9")
- **Power Consumption** Typical: +3.3 V @ 390 mA +12 V @ 30 mA
Max.: +3.3 V @ 490 mA +12V @ 60 mA
- **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** 8-ch Relay/IDI PCIe Card w/ 2-ch 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** DB37 DIN-rail Wiring Board