# **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 PWM outputs
- · 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

FCC CE ROHS

#### 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<sub>DC</sub> 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 PWM (pulse width modulation) outputs 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

• Input Voltage Logic 0: 3.0V max.

Logic 1: 10V min. (30V max.)

Interruptible Channels 1

• Isolation Protection  $2,500 V_{DC}$ 

• Opto-Isolator Response 50 μs

■ Input Resistance 3.2KΩ @1W

#### **Counter/Timer**

Channels2

• Resolution 32 bits

• Compatibility 5 V/TTL

• Max. Input Frequency 1KHz

■ Isolation Protection 2,500 V<sub>DC</sub>

PWM Channels

■ **Digital Noise Filter** PWM High Period : 100 μs ~ [(2<sup>32</sup>-1) x 50] μs,

deviation: ± 60 µs

PWM Low Period : 100  $\mu$ s ~ [(2<sup>32</sup>-1) x 50]  $\mu$ s,

deviation: ± 60 µs

#### **Relay Output**

• Channels 8

Relay Type
Contact Rating
2 x Form C, and 6 x Form A
125V<sub>AC</sub>@0.5A, 30V<sub>DC</sub>@1A

62.5VA, 30W

■ Operate/Release Time 5 / 3.5 ms max

• Resistance  $< 100 m\Omega$  initially

Life Expectancy (Electrical) 200,000@0.5A, 125V<sub>AC</sub> (500,000@1.0A, 30V<sub>DC</sub>

All product specifications are subject to change without notice.

#### General

Bus TypeI/O ConnectorsPCI Express V1.01 x DB37, female

**Dimensions (L x H)** 168 x 100 mm (6.6" x 3.9")

Power Consumption
Typical: +3.3V@390mA, +12V@30mA
Max.: +3.3V@490mA, +12V@60mA

Operating Temperature 0 ~ 60 °C (32 ~ 140 °F)
Storage Temperature -20 ~ 85 °C (-4 ~ 185 °F)

■ **Storage Humidity** 5 ~ 95 % RH, non-condensing

## **Ordering Information**

■ PCIE-1760-AE 8-ch relay/IDI PCIe card w/10-ch counter/timer

#### **Accessories**

PCL-10137-1E
PCL-10137-2E
DB37 cable, 1 m
DB37 cable, 2 m
PCL-10137-3E
DB37 cable, 3 m

■ **ADAM-3937-AE** DB37 DIN rail wiring board