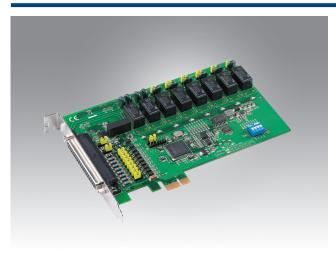
# **PCIE-1760**

## 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



### 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 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<sub>DC</sub>
 Opto-Isolator Response 50 μs
 Input Resistance 3.2KΩ @1W

#### Counter/Timer

 • Channels
 2

 • Resolution
 32 bits

 • Compatibility
 5 V/TTL

 • Max. Input Frequency
 1KHz

 • Isolation Protection
 2,500 V₀c

 • PWM Channels
 2

• **Digital Noise Filter** PWM High Period : 100  $\mu$ s ~ [(2<sup>32</sup>-1) x 50]  $\mu$ s,

deviation: ± 60 µs

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

deviation: ± 60 µs

#### **Relay Output**

Channels8

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 <100mΩ initially</li>
 Life Expectancy (Electrical) 500,000@1.0A, 30V<sub>DC</sub>

#### General

Bus Type PCI Express V1.0
 I/O Connectors 1 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

 $\begin{array}{ll} \bullet & \textbf{Operating Temperature} & 0 \sim 60~^{\circ}\text{C}~(32 \sim 140~^{\circ}\text{F}) \\ \bullet & \textbf{Storage Temperature} & -20 \sim 85~^{\circ}\text{C}~(-4 \sim 185~^{\circ}\text{F}) \\ \bullet & \textbf{Storage Humidity} & 5 \sim 95~^{\circ}\text{RH, non-condensing} \\ \end{array}$ 

## **Ordering Information**

PCIE-1760-AE
 8-ch relay/IDI PCIe card w/10-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-AE DB37 DIN rail wiring board

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