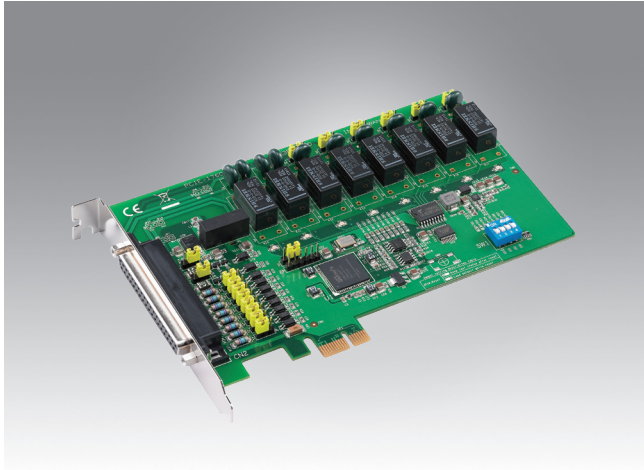


# PCIE-1760

## 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<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** 8
- **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  $\mu$ s
- **Input Resistance** 3.2K $\Omega$  @1W

#### Counter/Timer

- **Channels** 2
- **Resolution** 32 bits
- **Compatibility** 5 V/TTL
- **Max. Input Frequency** 1KHz
- **Isolation Protection** 2,500 V<sub>DC</sub>
- **PWM Channels** 2
- **Digital Noise Filter** PWM High Period : 100  $\mu$ s ~ [(2<sup>32</sup>-1) x 50]  $\mu$ s, deviation:  $\pm$  60  $\mu$ s  
PWM Low Period : 100  $\mu$ s ~ [(2<sup>32</sup>-1) x 50]  $\mu$ s, deviation:  $\pm$  60  $\mu$ s

#### Relay Output

- **Channels** 8
- **Relay Type** 2 x Form C, and 6 x Form A
- **Contact Rating** 125V<sub>AC</sub>@0.5A, 30V<sub>DC</sub>@1A  
62.5VA, 30W
- **Operate/Release Time** 5 / 3.5 ms max
- **Resistance** <100m $\Omega$  initially
- **Life Expectancy (Electrical)** 200,000@0.5A, 125V<sub>AC</sub>  
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
- **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** 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