

# PCIE-1758DI

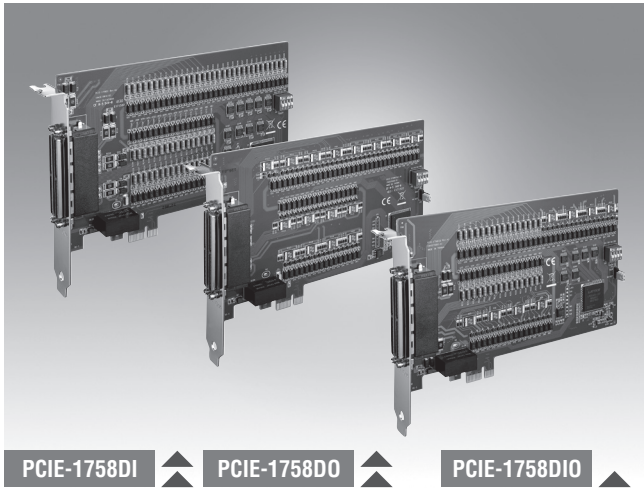
# PCIE-1758DO

# PCIE-1758DIO

128-ch Isolated Digital Input PCI Express Card

128-ch Isolated Digital Output PCI Express Card

128-ch Isolated Digital I/O PCI Express Card



PCIE-1758DI ▲ PCIE-1758DO ▲ PCIE-1758DIO ▲

CE FCC RoHS COMPLIANT 2002/95/EC

## Features

### PCIE-1758DO and PCIE-1758DIO

- 128 isolated digital output channels (64 channels for PCIE-1758DIO)
- High-voltage isolation on output channels (2,500 V<sub>DC</sub>)
- Wide output range (5 ~ 40 V<sub>DC</sub>)
- High-sink current for isolated output channels (350 mA max./channel)
- BoardID™ switch
- Digital output value retained after hot system reset

### PCIE-1758DI and PCIE-1758DIO

- 128 isolated digital input channels (64 channels for PCIE-1758DIO)
- Wide input range (10 ~ 30 V<sub>DC</sub>)
- High ESD protection (2,500 V<sub>DC</sub>)
- Digital Filter function
- BoardID™ switch
- Interrupt handling capability for each channel

## Specifications

### Isolated Digital Input

- **Channels** PCIE-1758DI: 128  
PCIE-1758DIO: 64
- **Input Voltage** Logic 0: 3 V max.  
Logic 1: 10 V min. (30 V max.)
- **Interrupt Capable Ch.** PCIE-1758DI: 128  
PCIE-1758DIO: 64
- **Isolation Protection** 2,500 V<sub>DC</sub>
- **Opto-Isolator Response** 100 μs
- **Input Resistance** 3.6KΩ@1W

### Isolated Digital Output

- **Channels** PCIE-1758DO: 128  
PCIE-1758DIO: 64
- **Output Type** Sink (NPN)
- **Isolation Protection** 2,500 V<sub>DC</sub>
- **Output Voltage** 5 ~ 40 V<sub>DC</sub>
- **Sink Current** 350mA max./channel @25 °C  
250mA max./channel @60 °C
- **Opto-isolator Response** 100 μs

### General

- **Bus Type** PCI Express x1
- **I/O Connectors** 1 x mini-SCSI female connector
- **Dimensions (L x H)** 168 mm x 100 mm (6.6" x 3.9")
- **Power Consumption**

	PCIE-1758DI	PCIE-1758DO	PCIE-1758DIO
<b>Typical</b>	3.3 V@ 270mA 12 V @ 30mA	3.3 V@ 250mA 12 V @ 25mA	3.3 V@ 250mA 12 V @ 20mA
<b>Max.</b>	3.3 V@ 400mA 12 V @ 260mA	3.3 V@ 450mA 12 V @ 235mA	3.3 V@ 425mA 12 V @ 250mA

- **Operating Temperature** 0 ~ 60°C (32 ~ 140°F) (IEC 68-2-1, 2)
- **Storage Temperature** -20 ~ 70°C (-4 ~ 158°F)
- **Storage Humidity** 5 ~ 95% non-condensing

## Ordering Information

- **PCIE-1758DI-AE** 128-ch Isolated DI PCI Express Card
- **PCIE-1758DO-AE** 128-ch Isolated DO PCI Express Card
- **PCIE-1758DIO-AE** 128-ch Isolated Digital I/O PCI Express Card

### Accessories

- **PCL-101100S-1E** 100-pin Mini-SCSI Cable, 1 m
- **PCL-101100S-2E** 100-pin Mini-SCSI Cable, 2 m
- **PCL-101100S-3E** 100-pin Mini-SCSI Cable, 3 m
- **ADAM-39100-BE** 100-pin DIN-rail SCSI Wiring Board

## Feature Details

### Interrupt Function (PCIE-1758DI/ PCIE-1758DIO)

PCIE-1758DI and PCIE-1758DIO provide an interrupt function for every digital input channel. You can disable/enable the interrupt functions, and select trigger type by setting the Rising Edge Interrupt Registers or Falling Edge Interrupt Registers of the card. When the interrupt request signals occur, software will service these interrupt requests by ISR. The multiple interrupt sources provide the card with more flexibility.

### Digital Filter Function (PCIE-1758DI/ PCIE-1758DIO)

The digital filter function is used to eliminate glitches on input data and reduce the number of changes to examine and process. The filter blocks pulses that are shorter than the specified timing interval and passes pulses that are twice as long as the specified interval. Intermediate-length pulses that are longer than half of the interval, but less than the interval, may or may not pass the filter.