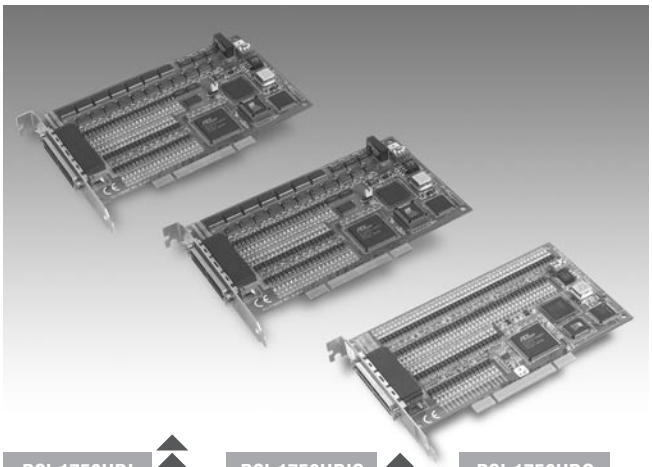
PCI-1758UDI
PCI-1758UDO
PCI-1758UDIO

128-ch Isolated Digital Input Universal PCI Card
128-ch Isolated Digital Output Universal PCI Card
128-ch Isolated Digital I/O Universal PCI Card



PCI-1758UDI | PCI-1758UDIO | PCI-1758UDO

Features

PCI-1758UDO and PCI-1758UDIO

- 128 isolated digital output channels (64 for PCI-1758UDIO)
- High-voltage isolation on output channels (2,500 V_{DC})
- Wide output range (5 ~ 40 V_{DC})
- High-sink current for isolated output channels (90 mA max./Channel)
- Current protection for each port
- BoardID™ switch
- Output status read-back
- Digital output value retained after hot system reset
- Programmable Power-Up States
- Watchdog timer

PCI-1758UDI and PCI-1758UDIO

- 128 isolated digital input channels (64 for PCI-1758UDIO)
- Wide input range (5 ~ 25 V_{DC})
- High ESD protection (2,000 V_{DC})
- Digital Filter function
- BoardID™ switch
- Interrupt handling capability for each channel

Specifications

Isolated Digital Input

- **Channels** PCI-1758UDI: 128
PCI-1758UDIO: 64
- **Input Voltage** Logic 0: 2.5 V max.
Logic 1: 5 V min. (25 V max.)
- **Interrupt Capable Ch.** PCI-1758UDI: 128
PCI-1758UDIO: 64
- **Isolation Protection** 2,500 V_{DC}
- **Opto-Isolator Response** 20 µs
- **Input Resistance** 3 kΩ

Isolated Digital Output

- **Channels** PCI-1758UDO: 128
PCI-1758UDIO: 64
- **Output Type** Sink (NPN)
- **Isolation Protection** 2,500 V_{DC}
- **Output Voltage** 5 ~ 40 V_{DC}
- **Sink Current** 90 mA max./channel
- **Opto-isolator Response** 20 µs

General

- **Bus Type** Universal PCI V2.2
- **I/O Connectors** 1 x MINI-SCSI HDRA-E100 Female
- **Dimensions (L x H)** 175 x 100 mm (6.9" x 3.9")
- **Power Consumption**

	PCI-1758UDI	PCI-1758UDO	PCI-1758UDIO
Typical	+5 V @ 0.3 A	+5 V @ 1.1 A	+5 V @ 1.2 A
Max.	+5 V @ 0.6 A	+5 V @ 2.2 A	+5 V @ 1.8 A

- **Operating Temperature** 0 ~ 60° C (32 ~ 140° F) (IEC 68-2-1, 2)
- **Storing Temperature** -20 ~ 70° C (-4 ~ 158° F)
- **Storing Humidity** 5 ~ 95 % (IEC 68-2-3) non-condensing

Ordering Information

- **PCI-1758UDI** 128-ch Isolated Digital Input Card
- **PCI-1758UDO** 128-ch Isolated Digital Output Card
- **PCI-1758UDIO** 128-ch Isolated Digital I/O Card
- **PCL-101100S-1** 100-pin SCSI Cable, 1 m
- **ADAM-39100** 100-pin SCSI wiring terminal, DIN-rail mounting

Feature Details

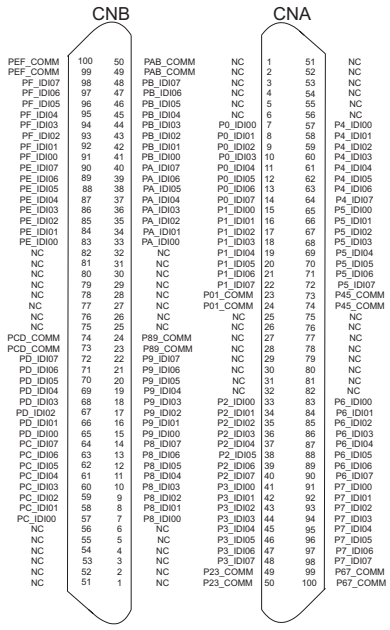
Interrupt Function (PCI-1758UDI/PCI-1758UDIO)

PCI-1758UDI and PCI-UDIO 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 (PCI-1758UDI/PCI-1758UDIO)

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 depending on your settings.

Pin Assignments



I/O Connector Pin Assignment for PCI-1758UDI