PCIE-1756
PCIE-1756H

64-Ch Isolated Digital I/O PCIe Card

64-Ch Isolated Digital I/O PCIe Card with Digital Filter and Interrupt Function



Features

- 32-ch isolated digital input
- 32-ch isolated digital output with wide output range (5 ~ 40 V_{DC})
- Interrupt handling capability
- Software-selectable digital filter time for all DI channels (PCIE-1756H only)
- Output status read back
- Retains the output settings and values after system hot reset

Introduction

PCIE-1756 and PCIE-1756H are isolated DI/O cards that offer 64 isolated digital input/output channels with up to 2,500 V_{DC} isolation protection. Featuring a wide input (10 ~ 30 V_{DC})/ output (5 ~ 40 V_{DC}) range and high sink current (500mA max./channel), PCIE-1756 and PCIE-1756H are ideal for use in industrial automation control systems. For PCIE-1756, all signals can be used as interrupt request signals and to disable/enable the interrupt function for every channel, as well as to support the input signal edge, which generates interrupts. All PCIE-1756H digital input channels have a digital filter to prevent inaccurate recognition of input signals that contain noise or chattering.

Specifications

Isolated Digital Input

- **Channels** 32
- **Input Voltage** Logic 0: 3 V max.
  Logic 1: 10 V min. (30 V_{DC} max.)
- **Input Current** 10 V_{DC} @ 2.97 mA
  20 V_{DC} @ 6.35 mA
  30 V_{DC} @ 9.73 mA
- **Interruptible Channels** PCIE-1756: 2 (IDI0, IDI16)
  PCIE-1756H: 32
- **Isolation Protection** 2,500 V_{DC}
- **Overvoltage Protection** 70 V_{DC}
- **ESD Protection** 2,000 V_{DC}
- **Opto-Isolator Response** 50 µs
- **Digital Filter Time (PCIE-1756H only)**

Setting Data (n)	Digital Filter Time	Setting Data (n)	Digital Filter Time	Setting Data (n)	Digital Filter Time
				14 (0Eh)	2.048msec
				15 (0Fh)	4.096msec
		9 (09h)	64µsec	16 (10h)	8.192msec
		10 (0Ah)	128µsec	17 (11h)	16.384msec
		11 (0Bh)	256µsec	18 (12h)	32.768msec
		12 (0Ch)	512µsec	19 (13h)	65.536msec
		13 (0Dh)	1.024msec	20 (14h)	131.072msec

Isolated Digital Output

- **Channels** 32
- **Output Type** Sink (NPN)
- **Isolation Protection** 2,500 V_{DC}
- **Output Voltage** 5 ~ 40 V_{DC}
- **Sink Current** 500 mA max./channel
- **Opto-isolator Response** 50 µs

General

- **Bus Type** PCI Express V1.0
- **I/O Connectors** 1 x 100-pin SCSI, female
- **Dimensions (L x H)** 168 x 100 mm (6.6" x 3.9")
- **Power Consumption** Typical: 3.3 V @ 385 mA
  Max.: 3.3 V @ 430 mA; 12V @ 55 mA
- **Operating Temperature** 0 ~ 60 °C (32 ~ 140 °F)
- **Storage Temperature** -20 ~ 70 °C (-4 ~ 158 °F)
- **Storage Humidity** 5 ~ 95% RH, non-condensing

Ordering Information

- **PCIE-1756-BE** 64-ch isolated digital I/O PCIe card
- **PCIE-1756H-BE** 64-ch isolated digital I/O PCIe card with digital filter and interrupt function

Accessories

- **PCL-10250-1E** 100-pin SCSI to 2 x 50-pin SCSI cable, 1 m
- **PCL-10250-2E** 100-pin SCSI to 2 x 50-pin SCSI cable, 2 m
- **ADAM-3951-BE** 50-pin DIN rail wiring board w/ LED indicators
- **PCL-10250R-1E** SCSI100 Pin Type to SCSI 50 Pin Ribbon, 1m
- **PCL-10250R-2E** SCSI100 Pin Type to SCSI 50 Pin Ribbon, 2m
- **ADAM-3951R-AE** Screw-Terminal Board w/ Ribbon connector

All product specifications are subject to change without notice.