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

FCC CE CONFILME

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

Channels32

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 (IDIO, 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
0 (00h)	The filter function is not used.	7 (07h)	16µsec	14 (0Eh)	2.048msec
1 (01h)	0.25µsec	8 (08h)	32µsec	15 (0Fh)	4.096msec
2 (02h)	0.5µsec	9 (09h)	64µsec	16 (10h)	8.192msec
3 (03h)	1µsec	10 (0Ah)	128µsec	17 (11h)	16.384msec
4 (04h)	2µsec	11 (0Bh)	256µsec	18 (12h)	32.768msec
5 (05h)	4µsec	12 (0Ch)	512µsec	19 (13h)	65.536msec
6 (06h)	8µsec	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-AE** 64-ch isolated digital I/O PCIe card

• PCIE-1756H-AE 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-101100M-3E 100-pin SCSI to 100-pin SCSI cable, 3 m
 ADAM-39100-BE 100-pin DIN rail wiring board