I/O Cards

PISO-DA4U/DA8U/DA16U

Universal PCI, 14-bit 4/8/16-ch Isolated Analog Output Board

Features

- Universal PCI (3.3 V/5 V) interface
- 3000 VDC power isolation protection
- Voltage output: ±10 V
- Two pacer timer interrupt sources
- 16-ch 5 V TTL D/I
- D/I with pull-hill and pull-low jumpers
- Card ID function
- 2500 VDC bus-type isolation protection
- 4-/8-/16-ch, 14-bit analog output
- Current output: 0 ~ 20 mA (sink)
- Double-buffered D/A latch
- 16-ch 5 V TTL D/O
- Software calibration
- Drop-in replacement for the PIO-DA4/DA8/DA16

Introduction

The PISO-DA4U/DA8U/DA16U series cards (universal PCI versions) are compatible with the PIO-DA4/DA8/DA16 cards (PCI versions) and most users can replace the PIO-DA4/DA8/DA16 by PISO-DA4U/DA8U/DA16U directly without software/driver modification.

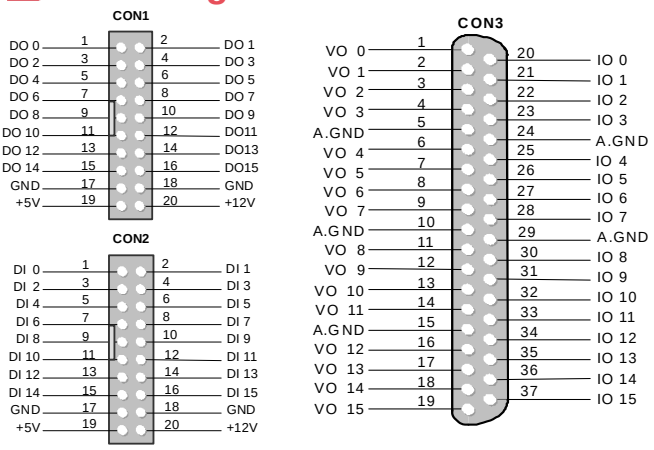
For the PISO-DA4U/DA8U/DA16U series add high0voltage isolation design that offers a durable ability to keep user's computers safe from unexpected surge. It is the built-in high-quality isolation components that make PISO-DA4U/DA8U/DA16U featuring 2500 VDC bus-typed isolation! their voltage output range is from -10 V to +10 V, and their current output range is from 0 to 20 mA. In addition, PISO-DA4U/DA8U/DA16U series also feature the following advantages by ICP DAS's innovation:

1. Accurate and easy-to-use calibration.
ICP DAS provides the software calibration instead of the manual calibration so that no jumpers and trim-pots are required anymore. The calibration information can be saved in EEPROM for long-term use.

2. Individual channel configuration.
In other words, every channel can be individually configured as voltage output or current output!

3. Card ID.
ICP DAS provides the card ID function for PISO-DA4U/DA8U/DA16U (version 1.1 or above). Users can set card ID for each card and then recognize them one by one when more than two boards are used in a computer.

Pin Assignments



Software

- DOS Lib and TC/BC/MSC sample program (with source codes)
- VB/VC/Delphi/BCB/VB.NET/C#.NET sample programs with source codes
- DLL and OCX SDK for 32-bit and 64-bit Windows XP/2003/Vista/2008/7
- Supports LabVIEW and Linux

Hardware Specifications

Models	PISO-DA4U	PISO-DA8U	PISO-DA16U
Analog Outputs			
Channels	4	8	16
Isolation Voltage	2500 V (Bus-Type)		
Resolution	14-bit		
Accuracy	0.01% of FSR ± 2 LSB @ 25 °C, ± 10 V		
Output Range	± 10 V, 0~20 mA		
Output Driving	± 5 mA		
Slew Rate	0.71 V/μs		
Digital I/O			
Channels	16-ch, 5 V/TTL		
Input Voltage	Logic 0: 0.8 V max., Logic 1: 2.0 V min.		
Output Voltage	Logic 0: 0.4 V max., Logic 1: 2.4 V min.		
Output Capability	Sink: 2.4 mA @ 0.8 V, Source: 0.8 mA @ 2.0 V		
Response Speed	1.0 MHz (Typical)		
General			
Bus Type	Universal PCI, 3.3 V and 5 V, 33 MHz, 32-bit, Plug and Play		
Connectors	Female DB37 x1, 20-pin box header x2		
Power Consumption	2200 mA @ +5 V	2400 mA @ +5 V	3000 mA @ +5 V
Operating Temperature	0 °C ~ +60 °C		
Storage Temperature	-20 °C ~ +70 °C		
Humidity	5 ~ 85% RH, non-condensing		

Ordering Information

PISO-DA4U CR	Universal PCI, 4-ch Isolation D/A Board (RoHS) Includes one CA-4002 D-Sub connector
PISO-DA8U CR	Universal PCI, 8-ch Isolation D/A Board (RoHS) Includes one CA-4002 D-Sub connector
PISO-DA16U CR	Universal PCI, 16-ch Isolation D/A Board (RoHS) Includes one CA-4002 D-Sub connector