I/O Cards

PISO-DA2U

Universal PCI, 2-ch Isolated Analog Output Board

Features ▶▶▶▶

- Universal PCI (3.3 V/5 V) interface
- 3000 V_DC isolation protection (Bus-Type and CH-CH)
- Unipolar or Bipolar analog output
- Software calibration
- Card ID function

- Drop-in replacement for the PISO-DA2
- 2-ch, 12-bit analog output
- Two pacer timer interrupt sources
- Double buffered D/A batch

Introduction

The PISO-DA2U has 2 analog output channels with high-voltage isolation protection and provides universal PCI interface (3.3 V/5 V). The PISO-DA2U is fully compatible with the PISO-DA2, and users can replace the PISO-DA2 by the PISO-DA2U directly without software/driver modification.

The built-in high-quality isolation components on the PISO-DA2U make it featuring 3750 V_DC bus-typed and channel-channel isolation, and offer durable abilities. For the PISO-DA2U, the voltage output ranges are ±10 V, ±5 V, 0~+10 V and 0~+5 V and the current output ranges are 0 ~ 20 mA and 4 ~ 20 mA. In addition, the PISO-DA2U also features 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 data can be saved in the EEPROM for long-term use.

2. Channel to channel configuration:
Each channel can be individually configured as voltage or current output with different output range.

3. Card ID:
ICP DAS provides the card ID function for PISO-DA2U. Users can set a card ID for each card so that when more than two boards are used in a computer at the same moment, users can still instantly recognize them one by one.

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

Analog Output	
Channels	2
Isolation voltage	3750 V (Bus-Type, CH-to-CH)
Resolution	12-bit
Accuracy	0.015% of FSR ± 1/2 LSB @ 25 °C, ± 10 V
Output Range	Voltage: ±10 V, ±5 V, 0 ~ 10 V, 0 ~ 5 V Current: 0 ~ 20 mA, 4 ~ 20 mA
Output Driving	± 5 mA
Slew Rate	0.3 V/µs
General	
Bus Type	Universal PCI, 3.3 V and 5 V, 33 MHz, 32-bit, Plug and Play
Connectors	Male DB9 x2
Power Consumption	1350 mA @ +5 V
Operating Temperature	0 °C ~ +60 °C
Storage Temperature	-20 °C ~ +70 °C
Humidity	5 ~ 85% RH, non-condensing

Pin Assignments

CN1

GND 05	09 +15V
GND 04	08 GND
ExtREF V Int 03	07 I Out
GND 02	06 GND
V Out 01	

CN2

GND 05	09 +15V
GND 04	08 GND
ExtREF V Int 03	07 I Out
GND 02	06 GND
V Out 01	
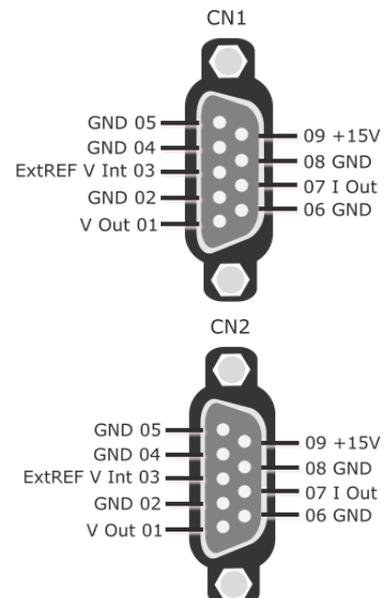
Ordering Information

PISO-DA2U CR	Universal PCI, Isolated 12-bit D/A Board (RoHS) Includes two CA-PC09M D-Sub connectors.