PISO-DA2

2-channel 12-bit isolated analog output board

Features

■ 32-bit +5V PCI Bus, Plug & Play
■ Two independent 12-bit channels of analog output
■ 3750 VDC isolation protection
■ 3000 VDC isolation DC/DC converter build-in
■ Software calibration
■ The calibration data is fully stored in EEPROM
■ Two pacer timers interrupt source
■ The voltage or current output can be set to arbitrary values or reset to zero when the power is on
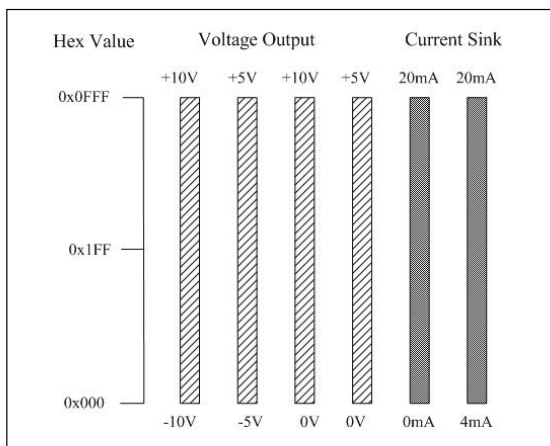
Functional Description

The PISO-DA2 is a PCI bus analog output board with two isolated 12-bit output channels for IBM personal computer and compatibility. The output range can be configured as voltage output by one of the different ranges: $\pm 10V$, $\pm 5V$, 0~10V, 0~5V, or current output using loop sink by the range: 0~20 mA or 4~20 mA. Besides, output channel is isolated from each other and the isolation range can reach the voltage more than 3000 VDC. The maximum conversion rate of the analog output is 10KS/s. It is the most cost-effective isolated D/A board for the PCI bus interface.

Applications

● Factory Automation
● Product Test
● Laboratory Automation
● Security Control

Output Range Resolution

Specifications

● D/A converter with resolution: 12-bit
● Conversion rate: 10KS/s max
● Voltage output range: Bipolar: $\pm 10V$, $\pm 5V$
   Unipolar: 0~10V, 0~5V
● External load register: 1KΩ min
● Reference voltage: Internal: -5V and -10V
   External: DC $\pm 10V$ max
● Current output: 0~20 mA, 4~20 mA
● Current loop excitation voltage: +8V~+36V
● External load register: 400 Ω max
● Converter: AD7541 or equivalent
● Accuracy: 0.015% of reading FSR (Full Scale Range)
   Linearity: $\pm 1/2$ LSB

General Specifications

● I/O connector: two 9-pin D-Sub female
● Power requirement: 5V @ 2.5A
● Operating temperature: 0 ~ 60°C
● Operating humidity: 0 ~ 90% non-condensing
● Storage temperature: -20 ~ 70°C
● Dimensions: 170 mm x 122 mm

Ordering Information

Standard
PISO-DA2: Isolated 12-bit analog output board
PISO-DA2/S: PISO-DA2 with DB-8425

Optional
DB-8425: Screw terminal board for PISO-DA2
DN-09-02: DIN-rail mounting terminal board for PISO-DA2