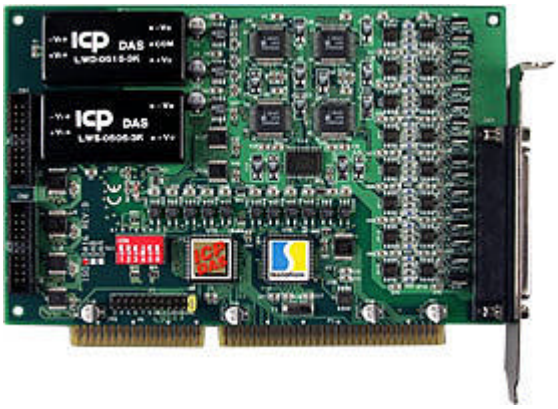
ISO-DA16

14-bit of 16 -channel Isolated Analog Output Board

PIN Assignment Software Manual



Functional Description

The ISO-DA16 is bus-type isolated 14-bit D/A card for PC/AT compatible computers. The optical isolation of the ISO-DA16 can operate with up to 2500Vrms of common-mode voltage.
The ISO-DA16 offers 16-channel double-buffered analog output. The output range may be configured from these range : +/-10V, +/-5V, 0~10V, 0~5V voltage output or 4 to 20mA or 0 to 20mA current loop sink.
The board*s innovative design improve several drawbacks of the conventional isolated D/A card . For example :
1. Jumperless,Trimless
2. The power-on value of analog output can be pre-defined by the user and stored in the on board EEPROM
3. High channel count output can be designed implemented in half size.
4. The calibration is performed under software control, thus eliminating manual trimpot adjustments. The calibration data is stored in EEPROM. Easy recalibration ensures the accuracy of the board.

Features

- ISA bus
- 2500Vdc photo-isolation protection
- 16-channel, 14-bit analog output
- Voltage/ current outputs from each converter
- Output Type (Unipolar or Bipolar) and output range (0~5v,+/- 5V,0~10V,+/- 10V) can be software programmble
- 4-20mA current sink to ground from each converter
- Double-buffered D/A latches
- Command set programming
- Software Calibration

Software

- Toolkit for DOS
- Toolkit for Windows 95/98
- Toolkit for Windows NT
- Toolkit for Windows 2000/XP
- Toolkit for LabVIEW 95/98
- Toolkit for LabVIEW NT
- ActiveX Control (OCX) 95/98
- ActiveX Control (OCX) NT
- ActiveX Control (OCX) 2000/XP
- Driver for LINUX
- Driver for DasyLab

Option

DN-37 :
37-Pin D-sub connector Screw terminal Board
DB-37 : (Direct connect)
37-pin D-sub connector Screw terminal Board

Specifications

Analog Outputs

D/A converter	Sipex Quad 14-bit MDAC
Channels	16 independent
Resolution	14-bit
Type	double-buffered, multiplying
Integral linearity	0.006% FSR : typical
Differential linearity	0.006 % FSR ; typical

Voltage Output Range

Unipolar	0~5V or 0~10V
Bipolar	+/-10Vor,+/- 5V
Current drive	+/-5mA
Absolute accuracy	0.01% FSR typical
Power on state	programmable

Current Output Range

Current output	0-20mA or 4-20mA
Absolute Accuracy	0.1% FSR typical
Excitation voltage range	+ 7 V to +40V
Power On state	programmable

Stability

Offset temperature coefficient	+/- 50μV/ deg C
Gain temperature coefficient	+/- 10ppm (C)

General Environmental

Power Requirements:	ISO-DA8 +5Vdc @800mA max. ISO-DA16+5Vdc @1400mA max.
Operating temp	0-50 deg/ C
Storage temp	-20 to 70 deg/C
Humidity	0 to 90% non-condensing
Dimensions	182 mm x 122 mm

Applications

- Programmable voltage source
- Programmable current sink
- Harsh environment operation
- Process control

Ordering Information

ISO-DA16	16-channel Bus Isolated Analog Output Board
ISO-DA16/S	ISO-DA16 + DN-37