

PCI-AIO04

PCI Analog I/O data Acquisition(AD/DA) board



INTRODUCTION

This product is designed for the data acquisition system which utilize PCI interface to get analog data and to generate analog waveform. The PCI-AIO04 is a board having the functions of analog I/O PCI board with the 12bit DAC 2 channels, 12/14/16-bit ADC 16 channels.

GENERAL DESCRIPTION

- ◆ Multi-function Data acquisition board
- ◆ PCI target 32bit/33Mhz
- ◆ 12 bit ADC 16 channel In (16-ch SE or 8-ch DI)
- ◆ 12 bit DAC channel Out
- ◆ Trigger function for analog In/Out sync.

APPLICATION

- ◆ PCI development and evaluation
- ◆ Data acquisition
- ◆ Laboratory instrumentation
- ◆ Process control systems
- ◆ Factory automation

SOFTWARE

- ▣ **Operating System**
 - Windows 2000/XP
- ▣ **Application Programming Interface**
 - Direct control through WDM driver
 - Windows DLL API

SPECIFICATION

- ▣ **Flexible Board**
 - PCI Target 32bit/33Mhz
 - PCI 5V/3.3V compatible

- Full 33Mhz burst read/write operation
- Average data rate is 30MB data to, 8MB data from the board without DMA.
- Very flexible to upgrade because of FPGA is used as PCI bridge and overall board control.
- User expandable local memory through 64pin header connector.(3.3V operation)
- User selectable oscillator

▣ **Analog Input**

- Two 12bit resolution
- 16 Single ended or 8 differential input
- 0 to +5V, 0 to 10V, ± 5 , ± 10 ,V Software-Programmable input range

▣ **Analog Output**

- 12bit resolution
- 2 channel output
- 0 to +5V, 0 to +10V, +10.8V, ± 5 V, ± 10 V, ± 10.8 V output range
- MAX 500K (2uSEC) update rate
- Can change update interval in waveform generation mode by 2uSEC increment
- Simultaneous update of outputs

■ **External connection**

- 25pin D-sub(Analog Input Channel)
- 9pin D-sub((Analog Output Channel)

PHYSICAL/ENVIRONMENTAL

■ **Dimensions**

- Dimension (not including connectors) : 175mm x 95mm

■ **Temperature**

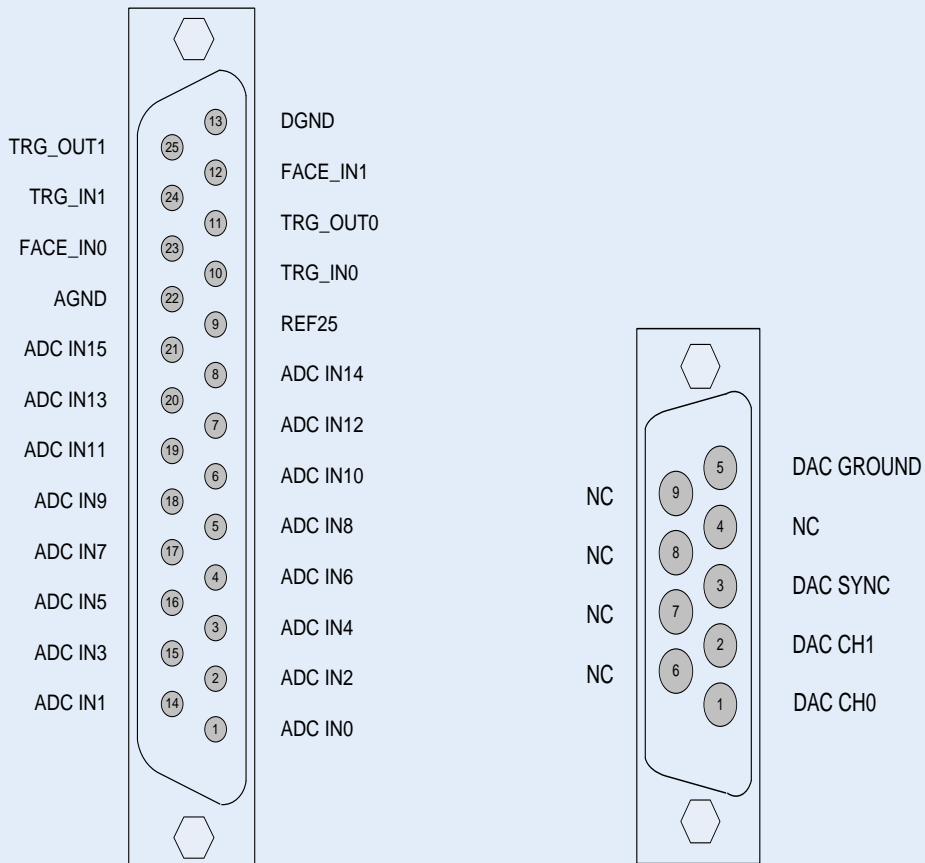
- 0 to 70°C, Operating
- -20 to 80°C Storage

■ **Relative Humidity**

- 20 to 80 percent, Non-condensing

■ **Power Requirement**

- +5V DC(±5%) at Max. 1A



BLOCK DIAGRAM

