PCI-1202LU/PCI-1202HU

Universal PCI, 32-ch, 12-bit, 110 or 40 kS/s Multi-function Board

Features

- Universal PCI (3.3 V/5 V) interface
- 110 or 40 kS/s A/D converter
- 16-ch 5 V TTL D/I
- 16-ch 5 V TTL D/O
- External: Post-trigger, Pre-trigger and Middle-trigger
- D/I with pull-high and pull-low function
- Drop-in replacement for the PCI-1202L/1202H
- 12-bit, 32 S.E/16 Diff. Analog inputs
- 1 K-sample hardware FIFO
- Built-in MagicScan controller
- Internal: Software-trigger and Pacer-trigger
- Data transfer rate is up to 2.1 M words/s (max.)
- Two 12-bit independent programmable DAC, 2 MHz throughput per channel (max.)

Introduction

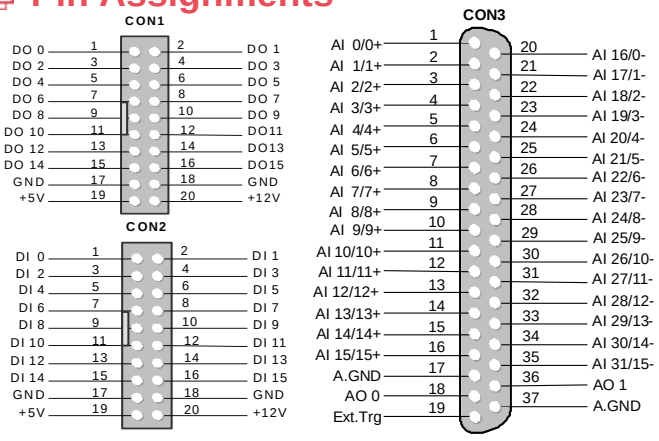
The PCI-1202 series is a family of high performance data acquisition board. It features a continuous, 110 kHz for low gain (40 kHz for high gain), gap-free data acquisition under DOS. The PCI-1202 family has the same hardware architecture as PCI-1802, and provides 32-channel single-ended or 16-channel differential analog inputs. The PCI-1202 series features "Magic Scan" function, M-function, X-function, and Continuous Capture function.

The PCI-1202LU/HU Universal PCI card supports both 5 V and 3.3 V. The PCI-1202LU/HU (Universal PCI version) is fully compatible with the PCI-1202L/H (PCI version). Compared with the PCI version cards, the PCI-1202LU/HU add new designs of D/I pull-high/low and Card-ID switch. The PCI-1202LU/HU cards are designed as drop-in replacements for the PCI-1202L/H cards for RoHS reason, in other words, the PCI version PCI-1202 card can be replaced with the Universal PCI version one without software modification.

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

Pin Assignments



Hardware Specifications

Models	PCI-1202LU	PCI-1202HU
Analog Input		
Channels	12-bit, 32 S.E/16 Diff.	
Accuracy	0.01% of FSR ± 1 LSB @ 25 °C, ± 10 V	
FIFO Size	1024 samples	
Sampling Rate	110 kS/s	40 kS/s
Analog Output		
Channels	12-bit, 2	
Accuracy	0.06% of FSR ± 1 LSB @ 25 °C, ± 10 V	
Output Range	DC:600 mA/+30 V for one channel @ 100% duty	
Output Driving	± 5 mA	
Slew Rate	8.33 V/µs	
Digital Input		
Channels	16-ch, 5 V/TTL	
Input Voltage	Logic 0: 0.8 V max., Logic 1: 2.0 V min.	
Response Speed	2.7 MHz (Typical)	
Digital Output		
Channels	16-ch, 5 V/TTL	
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	2.7 MHz (Typical)	
General		
Bus Type	Universal PCI, 3.3 V and 5 V, 33 MHz, 32-bit, Plug and Play	
Connectors	Female DB-37 x1, 20-pin box header x 2	
Power Consumption	300 mA @ +5 V	
Operating Temperature	0 °C ~ +60 °C	
Storage Temperature	-20 °C ~ +70 °C	
Humidity	5 ~ 85% RH, non-condensing	

Ordering Information

PCI-1202LU CR Art. No. 118388	32-ch, 12-bit, 110 kS/s. Low Gain Multi-function DAQ Board (1 K word FIFO). (RoHS) Includes one CA-4002 D-Sub connector.
PCI-1202HU CR Art. No. 121396	32-ch, 12-bit, 40 kS/s. High Gain Multi-function DAQ Board (1 K word FIFO). (RoHS) Includes one CA-4002 D-Sub connector.
PCI-1202LU/8K CR Art. No. 121421	32-ch, 12-bit, 110 kS/s. Low Gain Multi-function DAQ Board (8 K word FIFO). (RoHS) Includes one CA-4002 D-Sub connector.
PCI-1202HU/8K CR Art. No. 121420	32-ch, 12-bit, 40 kS/s. High Gain Multi-function DAQ Board (8 K word FIFO). (RoHS) Includes one CA-4002 D-Sub connector.