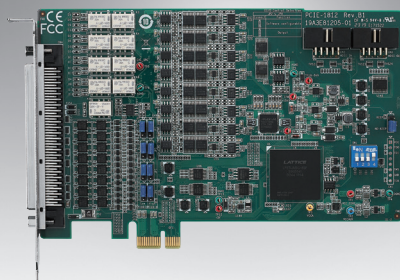


PCIE-1812

250 kS/s, 16-Bit, 8-Ch, Simultaneous Sampling Multifunction PCI Express DAQ Card

NEW



FCC CE RoHS

Features

- 8 differential simultaneous sampling analog inputs, up to 250 kS/s, 16-bit resolution
- 2 analog outputs, up to 3 MS/s, 16-bit resolution
- 2 analog triggers and 2 digital triggers for analog I/O
- 32 programmable DI/Os with interrupt functions
- Four 32-bit programmable counters/ timers/ encoders
- Board ID switch

Introduction

PCIE-1812 is a simultaneous-sampling multifunction DAQ card designed to meet a wide range of application requirements. PCIE-1812 supports simultaneous sampling of 8 analog input channels with differential input configuration for maximum noise elimination. In addition to providing 2-ch, 16-bit analog outputs with waveform generation capabilities, PCIE-1812 supports simultaneous waveform generation and analog input functions.

Specifications

Analog Input

- Channels 8
- Mode Differential input
- Resolution 16 bits
- Sample Rate 250 kS/s max.
- Input Impedance 1 GΩ
- Sampling Mode Software and external clock
- Input Range Software programmable
- Accuracy

Range	±10 V	±5 V	±2.5 V	±1.25 V	±0.625 V
Accuracy	±0.01%	±0.01%	±0.01%	±0.01%	±0.01%
Range	0 ~ 10 V	0 ~ 5 V	0 ~ 2.5 V	0 ~ 1.25 V	0 ~ 0.625 V
Accuracy		±0.01%	±0.01%	±0.01%	±0.01%

Analog Output

- Channels 2
- Resolution 16 bits
- Output Rate 3 M max.
- Output Range Software programmable

Internal Reference	Unipolar	0 ~ 5 V, 0 ~ 10 V
	Bipolar	-5 V ~ 5 V, -10 V ~ 10 V
External Reference	0 ~ +x V @ -x V (-10 ≤ x ≤ 10)	

- Slew Rate 20 V/μs
- Driving Capability ±20 mA max
- Operation Mode Static update, Buffered (Waveform generation)
- Accuracy 0.01%

Analog Trigger

- Channels 2
- Resolution 16 bits
- Input Range -10 ~ 10 V
- Hysteresis Yes. Hysteresis range is configurable
- Trigger Edge Rising edge or falling edge, selected by software

Digital Trigger

- Channels 2
- Input Voltage Logic 0: 1.5 V max.
Logic 1: 3.5 V min.
- Trigger Edge Rising edge or falling edge, selected by software

Digital I/O

- Channels 32 (shared)
- Input Voltage Logic 0: 1.5 V max.
Logic 1: 3.5 V min.
- Output Voltage Low 0.5 V max. @ 20 mA sink
High 4.5 V min. @ 20 mA source/5.2 V max.

Counter/ Timer/ Encoder

- Channels 4
- Resolution 32 bits
- Compatibility 5 V/TTL
- Max. Input Frequency 10 MHz
- Counter/Timer Functions Frequency measurement, pulse width measurement, pulse output, PWM output
- Encoder Functions Quadrature (X1, X2, X4), dual pulse (CW/CCW), signed pulse (OUT/DIR)

General

- Form Factor PCI Express x1
- I/O Connector 100-pin SCSI female ribbon-type connector
- Dimensions (L x W) 175 x 100 x 18 mm³ (6.9 x 3.9 x 0.7 in.³)
- Operating Temperature 0 ~ 60 °C (32 ~ 140 °F) (refer to IEC 68-2-1, 2)
- Storage Temperature -40 ~ 70 °C (-40 ~ 158 °F)
- Storage Humidity 5 ~ 95% RH non-condensing (refer to IEC 68-2-3)
- Board ID TM switch

Ordering Information

- PCIE-1812-B 250 kS/s, 16-bit, 8-ch simultaneous sampling multifunction card

Accessories

- PCL-101100R-1E 100-pin SCSI shielded cable, female to male, 1 m
- PCL-101100R-2E 100-pin SCSI shielded cable, female to male, 2 m
- ADAM-39100-BE 100-pin DIN rail SCSI wiring board
- PCLD-8813-AE 6Advanced Signal Conditioning Board for PCIE-1812/PCIE-1813
- PCLD-8811-AE Low-Pass Active Filter Board
- 1700030423-01 10-pin flat cable for MDSI synchronization, 10 cm