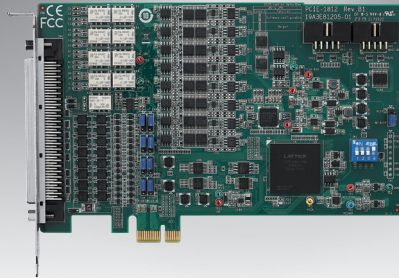


PCIE-1812

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

NEW



FCC CE RoHS COMPLIANT

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 G Ω
- 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	$\pm 0.01\%$	$\pm 0.01\%$	$\pm 0.01\%$	$\pm 0.01\%$	$\pm 0.01\%$
Range	0 ~ 10 V	0 ~ 5 V	0 ~ 2.5 V	0 ~ 1.25 V	
Accuracy		$\pm 0.01\%$	$\pm 0.01\%$	$\pm 0.01\%$	$\pm 0.01\%$

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 \leq x \leq 10)

- Slew Rate** 20 V/ μ s
- 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
- 1700030423-01** 10-pin flat cable for MDSI synchronization, 10 cm