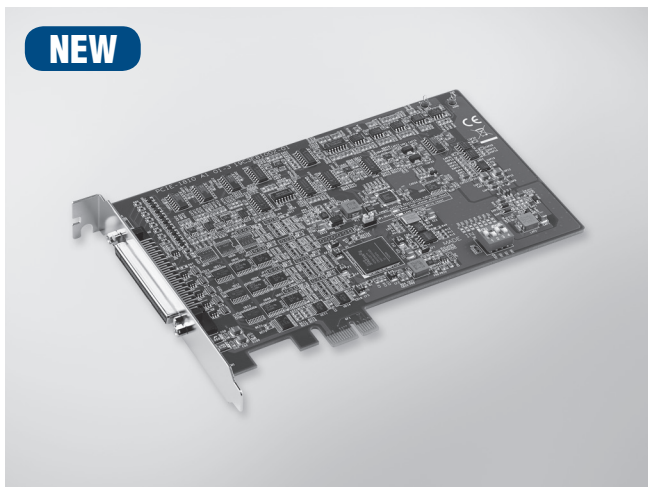


# PCIE-1810

## 800 KS/s, 12-bit, 16-ch PCI Express Multifunction Card

**NEW**



FCC CE 

### Features

- 16 analog inputs, up to 800 KS/s, 12-bit resolution
- 2 analog outputs, up to 500 KS/s, 12-bit resolution
- Support for digital trigger and analog trigger (AI only)
- 24 programmable digital I/O lines
- Two 32-bit programmable counter/timers
- Onboard FIFO memory ( 4 K samples)
- Automatic channel/ gain scanning
- Support for Microsoft Windows 8 (desktop mode only) /7/XP

### Introduction

The PCIE-1810 is a multifunction PCI Express card that includes digital I/O, analog I/O and counter functions. It also features a 800KS/s 12-bit A/D converter and supports analog trigger for A/D data acquisition.

### Specifications

#### Analog Input

- **Channels** Single-end 16-ch  
Differential 8-ch
- **Resolution** 12 bits
- **Sample Rate** Single Channel 800 KS/s max.  
Multi-Channel 500 KS/s max.
- **Trigger Reference** Digital Trigger,  
Analog Trigger
- **Trigger Mode** Start trigger, Delay to Start trigger  
Stop trigger, Delay to Stop trigger
- **FIFO Size** 4K samples
- **Overvoltage Protection** 30 Vp-p
- **Input Impedance** 1 GΩ
- **Sampling Modes** Software and external clock
- **Input Range** Software programmable

Gain	0.5	1	2	4	8
<b>Bipolar</b>	±10V	±5	±2.5	±1.25	±0.625
<b>Unipolar</b>	N/A	0 ~ 10	0 ~ 5	0 ~ 2.5	0 ~ 1.25
<b>Absolute Accuracy (% of FSR)*</b>	0.1	0.1	0.2	0.2	0.4

#### Analog Output

- **Channels** 2
- **Resolution** 12 bits
- **Output Rate** 500 KS/s max.
- **Output Range** Software programmable

Internal Reference	Unipolar	0 ~ 5 V 0 ~ 10 V
	Bipolar	-5 V ~ 5 V -10 V ~ 10 V
<b>External Reference</b>	0 ~ +x V @ -x V (-10 ≤ x ≤ 10)	

- **Slew Rate** 20 V/μs
- **Driving Capability** 5 mA
- **Operation Mode** Static update, Waveform generation
- **Accuracy** INL: ± 1 LSB, DNL: ± 1 LSB

#### Digital I/O

- **Channels** 24
- **Compatibility** 5 V/TTL
- **Input Voltage** Logic 0: 0.8 V max.  
Logic 1: 2.0 V min.
- **Output Voltage** Logic 0: 0.8 V max.  
Logic 1: 2.0 V min.
- **Output Capability** 15 mA @ 0.8 V  
-15 mA @ 2.0 V

#### Counter

- **Channels** 2
- **Resolution** 32 bits
- **Compatibility** 5 V/TTL
- **Max. Input Frequency** 10 MHz
- **Pulse Generation** Yes
- **Timebase Stability** 50 ppm

#### General

- **Form factor** PCI Express x 1
- **Triggering** Analog x 2 / Digital x 2
- **I/O Connector** 68-pin SCSI female connector
- **Dimensions (L x W)** 167 x 100 mm
- **Power Consumption** Typical: 3.3 V @ 488 mA  
12 V @ 112 mA  
Max.: 3.3 V @ 2.25 A  
12 V @ 390 mA
- **Operating Temperature** 0 ~ 60°C (32 ~ 140°F) (refer to IEC 60068-2-1, 2)
- **Storage Temperature** -40 ~ 70°C (-40 ~ 158°F)
- **Storage Humidity** 5 ~ 95% RH non-condensing (refer to IEC 60068-2-3)
- **BoardID** TM Switch

### Ordering Information

- **PCIE-1810** 800 KS/s, 12-bit Multifunction Card

#### Accessories

- **PCL-10168H-1** 68-pin SCSI Shielded Cable with Noise Rejecting, 1 m
- **PCL-10168H-2** 68-pin SCSI Shielded Cable with Noise Rejecting, 2 m
- **PCL-10168-1** 68-pin SCSI Shielded Cable, 1 m
- **PCL-10168-2** 68-pin SCSI Shielded Cable, 2 m
- **ADAM-3968** 68-pin DIN-rail SCSI Wiring Board