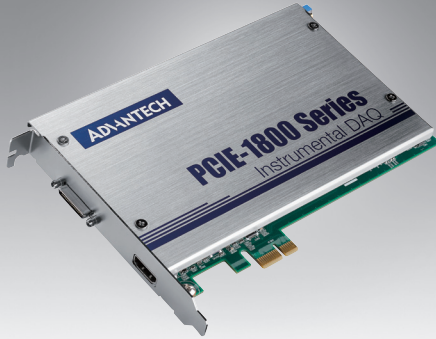# PCIE-1802

8-Ch, 24-Bit, 216 kS/s Dynamic Signal Acquisition PCI Express Card

PCIE-1802L

4-Ch, 24-Bit, 216 kS/s Dynamic Signal Acquisition PCI Express Card

NEW

FC CE RoHS COMPLIANT 2002/95/EC

Features

- 8/4 simultaneously sampled analog inputs, up to 216 kS/s
- 24-bit resolution ADCs with 115 dB dynamic range
- Wide input range of ±0.2 ~ 10 V
- Built-in anti-aliasing filter
- Software-configurable 4/10 mA integrated electronic piezoelectric (IEPE) excitation currents
- Software-selectable AC/DC coupling
- Full automatic calibration
- Multiple card synchronization

Introduction

PCIE-1802/1802L is a 24-bit, high-accuracy data acquisition PCI Express module specifically designed for sound and vibration-related applications. This module features built-in 4/10 mA excitation currents for IEPE sensors, such as accelerometers and microphones.

Specifications

Analog Input

Channels	PCIE-1802: 8 PCIE-1802L: 4 (simultaneous sampling differential or 50 Ω pseudo-differential)
Resolution	24 bits (delta sigma)
Max. Sampling Rate	100 S/s to 216 kS/s (with resolution ≤ 363.80 µS/s)
Input Coupling	AC/DC, selectable per channel
AC Cut-Off Frequency	0.727 Hz (-3 dB)
Trigger Modes	Start, Delayed Start, Stop, Delayed Stop
Input Range	±0.2, ±0.5, ±1, ±2, ±5, ±10 V
Offset Error	< ±1 mV
Gain Error	< ±0.2 %
Total Harmonic Distortion (THD)	-100 dB
Total Harmonic Distortion Plus Noise (THD+N)	-98 dB
Dynamic Range	115 dB
IEPE Excitation	0, 4, or 10 mA, selectable per channel
Data Transfer	Direct memory access (DMA)
Multi-Card Support	For synchronizing more than 8 analog input channels

Digital Input/Output

DI Channels	1 (interrupt)
DO Channels	2

General

Bus Type	PCI Express x1
I/O Connectors	CN600 36-pin mini SCSI (for analog input) CN601 HDMI (for clock, trigger, and DI/Os)
Dimensions (L x H)	168 x 100 mm (6.6" x 3.9")
Operating Temperature	0 ~ 60 °C (32 ~ 140 °F)
Storage Temperature	-40 ~ 70 °C (-40 ~ 158 °F)
Storage Humidity	5 ~ 95 % RH, non-condensing

Ordering Information

PCIE-1802-AE	8-ch, 24-bit, 216 kS/s dynamic signal acquisition PCI Express card
PCIE-1802L-AE	4-ch, 24-bit, 216 kS/s dynamic signal acquisition PCI Express card
PCLD-8840-AE	20-pin DIN rail HDMI cable wiring board for PCIE-1802 and PCIE-1840
PCL-108BNC-50E	Mini SCSI to 8-BNC cable
PCL-104BNC-50E	Mini SCSI to 4-BNC cable
PCL-10119-1E	HDMI cable

*Power consumption PCIE-1802=11.5W , PCIE-1802L=7.5W
It may have thermal issue with fanless platform.
Please consult our techinal support if you want to plug it in fanless platform.

Pin Assignments

Mini SCSI

AGND	36	18	AGND
AI0-	35	17	AI0+
AGND	34	16	AGND
AI1-	33	15	AI1+
AGND	32	14	AGND
AI2-	31	13	AI2+
AGND	30	12	AGND
AI3-	29	11	AI3+
AGND	28	10	AGND
AGND	27	9	AGND
AI4-	26	8	AI4+
AGND	25	7	AGND
AI5-	24	6	AI5+
AGND	23	5	AGND
AI6-	22	4	AI6+
AGND	21	3	AGND
AI7-	20	2	AI7+
AGND	19	1	AGND

* AI4 to AI7 (PCIE-1802 only)

HDMI

DGND	2	1	REF_CLK_IN
REF_CLK_OUT	4	3	DGND
DGND	6	5	DGND
DGND	8	7	DTRG0
TRIGOUT0	10	9	DTRG1
TRIGOUT1	12	11	DGND
DO1	14	13	DO0
SYNC_OUT	16	15	SYNC_IN
RESERVED	18	17	DGND
		19	DIO

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Data Logging & Acquisition *category:*

Click to view products by Advantech *manufacturer:*

Other Similar products are found below :

PCI-6208A DAQe-2502 PXI-2208 ACL-8112DG SpotBotBLE LPCI-7230 USB-4761-BE SE028 PCI-1761-BE AR207/8/S1/PPPP/IP65 PCI-1711UL-CE USB-4702-AE USB-4704-AE USB-4716-AE USB-4750-BE USB-4751-AE PCIE-1810-AE PCI-1710U-DE PCI-1710HGU-DE AR207/8/S1/PPPP/IP30 U2781A 4610 EL-USB-5 AR407/S1/P/P/P/P AR207/8/S2/PPPP/IP30 ACL-8112PG cPCI-7248 cPCI-7433 DAQ-2213 ND-6053 ND-6060 PCI-7230 PCI-7432 PCI-9111DG PCI-9112 PCI-9112A PCI-9113A PCI-9221 PCM-7248+ USB-1903 USB-2401 PCIE-1813-AE PCIE-1816-AE PCIE-1816H-AE PCIE-1884-AE USB-5856-AE USB-5862-AE AR654/S1/P/P/P/P/IP30 AR654/S2/P/P/P/P/IP30 DAS30