PCI-1710U/UL PCI-1710HGU

100 kS/s, 12-bit, 16-ch Universal PCI **Multifunction DAQ Card**

100 kS/s, 12-bit, 16-ch Universal PCI **Multifunction DAQ Card with High Gain**



Features

- 16-ch single-ended or 8-ch differential or a combination of analog input
- 12-bit A/D converter, with up to 100 kHz sampling rate
- Programmable gain
- Automatic channel/gain scanning .
- Onboard FIFO memory (4,096 samples)
- Two 12-bit analog output channels (PCI-1710U/HGU only)
- 16-ch digital input and 16-ch digital output
- Onboard programmable counter
- BoardID[™] switch .

Specifications

Analog Input

- Channels 16 single-ended/ 8 differential (software programmable) 12 bits
- Resolution
- FIFO Size
- Overvoltage Protection 30Vp-p
- Input Impedance 1GΩ
- Sampling Modes Software, onboard programmable pacer and external
- Input Range (V, software programmable) & Absolute Accuracy

4,096 samples

PCI-1710U/UL					
Gain	0.5	1	2	4	8
Bipolar	±10	±5	±2.5	±1.25	±0.625
Unipolar	N/A	0~10	0~5	0 ~ 2.5	0~1.25
Absolute Accuracy (% of FSR)*	0.1	0.1	0.2	0.2	0.4

PCI-1710HGU								
Gain	0.5	1	5	10	50	100	500	1000
Bipolar	±10	±5	±1	±0.5	±0.1	±0.05	±0.01	±0.005
Unipolar	N/A	0~10	N/A	0~1	N/A	0 ~ 0.1	N/A	0~0.01
Absolute Accuracy (% of FSR)*	0.1	0.1	0.2	0.2	0.4	0.4	0.8	0.8

* ±1 LSB is added as the derivative for absolute accuracy

Maximum Sampling Rate

Model	Gain	Max. Sampling Rate
PCI-1710U/UL	0.5, 1, 2, 4, 8	100 kS/s
	0.5, 1	100 kS/s
	5, 10	35 kS/s
PCI-1710HGU	20, 100	7 kS/s
	500, 1000	770 S/s

Note: The sampling rate for e used channel number. For example, if 4 channels of PCI-1710U are used, the sampling rate is 100k/4 = 25 kS/s per channel.

Analog Output (PCI-1710U/HGU only)

- Channels
- 2 Resolution 12 bits **Output Rate** Static update **Output Range** (Software programmable) 0~5V Internal Reference Unipolar 0~10 V External Reference $0 \sim +x \vee @ -x \vee (-10 \le x \le 10)$
- 10 V/µs
- Slew Rate
 - **Driving Capability**
- **Operation** Mode
- Accuracy
- INLE: ±1 LSB. DNLE: ±1 LSB

3 mA

Static update

Digital Input

-igital input	
 Channels 	16
 Compatibility 	5 V/TTL
Input Voltage	Logic 0: 0.8 V max.
	Logic 1: 2.0 V min.

Digital Output

16
5 V/TTL
Logic 0: 0.4 V max.
Logic 1: 2.4 V min.
Sink: 8.0 mA @ 0.8 V
Source: 0.4 mA @ 2.0 V

Pacer/Counter

Channels	1
Resolution	16 bits
Compatibility	5 V/TTL
Max. Input Frequency	1 MHz

General

- Bus Type Universal PCI V2.2 I/O Connector 1 x 68-pin SCSI female connector
 - Dimensions (L x H) 175 x 100 mm (6.9" x 3.9") Typical: 5 V @ 850 mA **Power Consumption**
- Max.: 5 V @ 1.0 A
- Operating Temperature 0 ~ 60°C (32 ~ 140°F) -20 ~ 70°C (-4 ~ 158°F)
- Storage Temperature
 - 5 ~ 95% RH non-condensing **Storage Humidity**

Ordering Information

- PCI-1710U PCI-1710UL
- PCI-1710HGU

Accessories

PCLD-8710 DIN-rail Wiring Board w/ CJC PCL-10168-1E 68-pin SCSI Shielded Cable, 1 m 68-pin SCSI Shielded Cable, 2 m PCL-10168-2E 68-pin DIN-rail SCSI Wiring Board ADAM-3968

100 kS/s, 12-bit Multifunction Card

100 kS/s, 12-bit Multifunction Card w/o AO

100 kS/s, 12-bit High-gain Multifunction Card

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500, 1000	
ach channels will be affected	by
BOI 181011	· · ·

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