# **PCI-1714U** PCI-1714UL

#### 30 MS/s, 12-bit, Simultaneous 4-ch **Analog Input Universal PCI Card**

10 MS/s, 12-bit, Simultaneous 4-ch **Analog Input Universal PCI Card** 



#### Features

- 4 single-ended analog input channels
- 12-bit A/D converter, with up to 30 MHz sampling rate
- Programmable gain
- Onboard FIFO memory (PCI-1714U: 32,768 samples each channel; • PCI-1714UL: 8,192 samples, each channel)
- 4 A/D converters simultaneously sampling
- Multiple A/D triggering modes
- Programmable pacer/counter
- BoardID<sup>™</sup> switch
- Universal PCI Bus (supports 3.3 V or 5 V PCI bus signals)

### Introduction

PCI-1714U and PCI-1714UL are advanced high-performance data acquisition cards based on the PCI bus. With a large FIFO of 32,768 for each channel, the maximum sampling rate of PCI-1714U can get up to 30 MS/s, on each channel, with an emphasis on continuous, non-stop, high-speed, streaming data of samples to host memory. The low-cost PCI-1714UL offers 10 MS/s on each channel at a stable rate, and has also been equipped with a universal PCI interface.

## **Specifications**

#### Analog Input

Analog inpat					
<ul> <li>Channels</li> </ul>	4 singl	e-ended			
<ul> <li>Resolution</li> </ul>	12 bits				
<ul> <li>Max. Sampling Rate</li> </ul>	PCI-17	41U: 30 MS	s/s per chanr	nel	
	PCI-17	41UL: 10 M	S/s per char	nnel	
<ul> <li>FIFO Size</li> </ul>	PCI-1714U: 32,768 samples each channel				
	PCI-17	14UL: 8,192	2 samples ea	ich channel	
<ul> <li>Overvoltage Protection</li> </ul>	30 Vp-p				
Input Impedance	50 $\Omega$ /1 M $\Omega$ /Hi Z jumper selectable/100 pF				
<ul> <li>Sampling Modes</li> </ul>	Software polling, pacer				
<ul> <li>Trigger Modes</li> </ul>	Post-trigger, pre-trigger, delay-trigger, about-trigger				
<ul> <li>Input Range (V, software programmable) &amp; Absolute Accuracy</li> </ul>					
Bipolar		±5	±2.5	±1	±0.5
Absolute Accuracy (% of FSR)*		0.1	0.2	0.2	0.4

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

#### General

•	Bus Type	Universal PCI V2.2		
•	I/O Connectors	4 x BNC connector (for AI)		
		1 x PS/2 connector (for Ext. clock and trigger)		
•	Dimensions (L x H)	175 x 100 mm (6.9" x 3.9")		
_	Dower Consumption	Tunical, EV@ 0E0 mA, 10 V@ 000 mA		

- Typical: 5 V @ 850 mA : 12 V @ 600 mA Power Consumption
- Max.: 5 V @ 1 A; 12 V @ 700m A
- Operating Temperature 0 ~ 60°C (32 ~ 140°F) Storage Temperature -20 ~ 85°C (-4 ~ 185°F)
- 5 ~ 95% RH, non-condensing
- Storage Humidity

# **Ordering Information**

- PCI-1714U
- PCI-1714UL
- 30 MS/s, 12-bit, Simultaneous 4-ch Al PCI Card 10 MS/s, 12-bit, Simultaneous 4-ch Al PCI Card
- Accessories
- ADAM-3909
- PCL-1010B-1E
- PCL-10901-1E
- PCL-10901-3E
- BNC to BNC Wiring Cable, 1 m DB9 to PS/2 Cable, 1 m DB9 to PS/2 Cable, 3 m

DB9 DIN-rail Wiring Board

## **Pin Assignments**





GND GND GND EXT CLK1

PS/2 To DB9 Cable Connector

Onboard PS/2 Connector