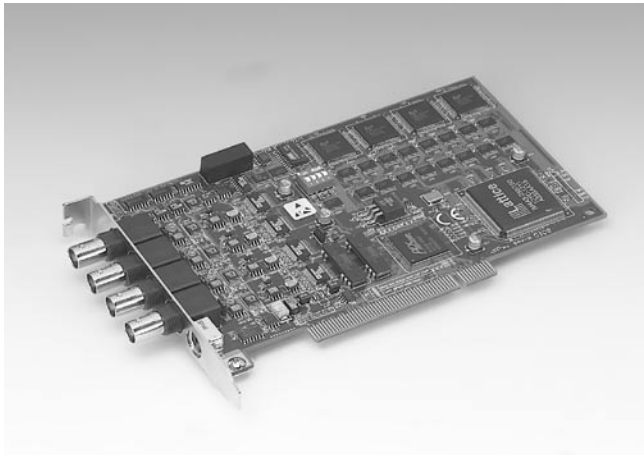


PCI-1714

PCI-1714UL

30 MS/s Simultaneous 4-ch Analog Input Card

10 MS/s Simultaneous 4-ch Analog Input Card



Features

- 12-bit A/D converter up to 30 MS/s
- 4 single-ended analog input channels
- Programmable gain for each input channel
- 32 K samples on board FIFO memory
- 4 A/D converters simultaneously sampling
- Multiple A/D triggering modes
- Programmable pacer/counter
- BoardID™ switch

Introduction

The PCI-1714 is an advanced-performance data acquisition card based on 32-bit PCI bus architecture. The maximum sampling rate of PCI-1714 is up to 30 MS/s, with an emphasis on continuous, non-stop, high-speed, streaming data of A/D samples to host memory.

Specifications

Analog Input

- Channels** 4 single-ended analog input channels
- Resolution** 12 bits
- FIFO Size** 32 K samples/ch for PCI-1714
8 K samples/ch for PCI-1714UL
- Max. Sampling Rate** 30 MS/s for PCI-1714
10 MS/s for PCI-1714UL

General

- I/O Connector Type** 4 BNC connector (for AI)
1 PS2 connector (for Ext. clock and trig)
- Dimensions** 137 x 107 mm (5.4" x 4.2")
- Power Consumption** Typical +5 V @ 850 mA ; +12 V @ 600 mA
Max. +5 V @ 1 A ; +12 V @ 700m A
- Operating Temperature** 0 ~ 70° C (32~158° F)
- Storage Temperature** -20 ~ 85° C (-4~185° F)
- Relative Humidity** 5 ~ 95%RH non-condensing (refer to IEC 68-2-3)
- Certifications** CE

Analog Input:

Channels	4 single-ended analog input channels				
Resolution	12-bit				
FIFO Size	32K locations (8K for PCI-1714UL)				
Max. Sampling Rate ¹	30MHz 10MHz for PCI-1714UL				
Input range and Gain List	Gain	1	2	5	10
	Range	±5V	±2.5V	±1V	±0.5V
Drift	Gain	1	2	5	10
	Zero (µV/° C)	±30	±30	±30	±30
	Gain (ppm/° C)	±30	±30	±30	±30
Small Signal Bandwidth for PGA	Gain	1	2	5	10
	Bandwidth (-3dB)	7 MHz	7 MHz	7 MHz	7 MHz
Max. Input voltage	±15 V	Input Surge Protect		30 Vp-p	
Input Impedance	50Ω/1MΩ/Hi Z jumper selectable /100pF				
Trigger Mode	Software, pacer, post-trigger, pre-trigger, delay-trigger, about-trigger				
Accuracy	DC	DNLE	±1LSB (No Missing Codes:12 Bits Guaranteed)		
		INLE	±2LSB		
		Offset error	Adjustable to ±1LSB		
		Gain error	Adjustable to ±1LSB		

Accuracy	AC	SINAD S/(N+D)	68 dB
		ENOB	11bits
		THD	-75 dB
External Clock 1	Logic level	TTL (Low: 0.8 V max. High: 2.0 V min.)	
	Input impedance	50 Ω	
	Input coupled	DC	
External Clock 0	Frequency	Up to 30 MHzUp to 10 MHz for PCI-1714UL	
	Logic level	5.0V peak to peak sin wave	
	Input impedance	Hi Z	
	Input coupled	AC	
External Trigger 0	Frequency	Up to 30 MHzUp to 10 MHz for PCI-1714UL	
	Logic level	TTL (Low: 0.8 V max. High: 2.0V min.)	
	Input impedance	Hi Z	
External Analog Trigger Input	Input coupled	DC	
	Range	By analog input range	
	Resolution	8-bit	
	Frequency	Up to 1MHz	

Ordering Information

- PCI-1714** 30 MHz Simultaneous 4-ch Analog Input Card, user's manual and driver CD-ROM (PCL-10901-1 cable included)
- PCI-1714UL** 10MHz Simultaneous 4-ch Analog Input card
- ADAM-3909** DB-9 Wiring Terminal for DIN-rail Mounting
- PCL-10901-1** PS2 to DB9 Wiring Cable, 1m
- PCL-10901-3** PS2 to DB9 Wiring Cable, 3m
- PCL-1010B-1** BNC to BNC Wiring Cable, 1m

Pin Assignments

