# 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

PCI-1714U   PCI-1714UL

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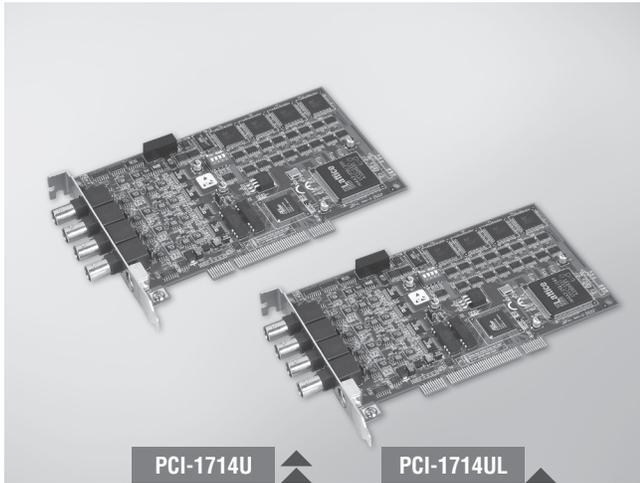
Features

- 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™ 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

- **Channels** — 4 single-ended
- **Resolution** — 12 bits
- **Max. Sampling Rate** — PCI-1741U: 30 MS/s per channel
  PCI-1741UL: 10 MS/s per channel
- **FIFO Size** — PCI-1714U: 32,768 samples each channel
  PCI-1714UL: 8,192 samples each channel
- **Overvoltage Protection** — 30 Vp-p
- **Input Impedance** — 50 Ω/1 MΩ/Hi Z jumper selectable/100 pF
- **Sampling Modes** — Software polling, pacer
- **Trigger Modes** — Post-trigger, pre-trigger, delay-trigger, about-trigger
- **Input Range (V, software programmable) & Absolute Accuracy**

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")
- **Power Consumption** — Typical: 5 V @ 850 mA ; 12 V @ 600 mA
  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)
- **Storage Humidity** — 5 ~ 95% RH, non-condensing

Ordering Information

- **PCI-1714U** — 30 MS/s, 12-bit, Simultaneous 4-ch AI PCI Card
- **PCI-1714UL** — 10 MS/s, 12-bit, Simultaneous 4-ch AI PCI Card

Accessories

- **ADAM-3909** — DB9 DIN-rail Wiring Board
- **PCL-1010B-1E** — BNC to BNC Wiring Cable, 1 m
- **PCL-10901-1E** — DB9 to PS/2 Cable, 1 m
- **PCL-10901-3E** — DB9 to PS/2 Cable, 3 m

Pin Assignments
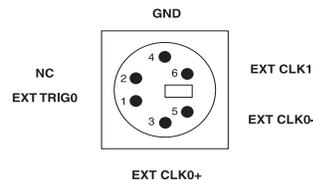
Onboard PS/2 Connector
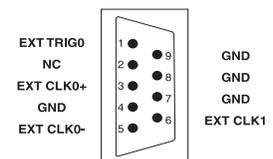
PS/2 To DB9 Cable Connector