PCI-1714

30 MS/s Simultaneous 4-ch Analog Input Card

PCI-1714UL

10 MS/s Simultaneous 4-ch Analog Input 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-1714: 32,768 samples PCI-1714UL: 8,192 samples, each channel)
- 4 A/D converters simultaneously sampling
- Multiple A/D triggering modes
- Programmable pacer/counter
- BoardID™ switch

Introduction

PCI-1714 is an advanced high-performance data acquisition card based on the PCI bus. With a large FIFO of 32 K for each channel, the maximum sampling rate of PCI-1714 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 10MS/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** — 30 MS/s for PCI-1714
  (Under 32,768 samples for ea. ch)
  10 MS/s for PCI-1714UL
  (Under 8,192 samples for ea. ch)
- **FIFO Size** — PCI-1714: 32,768 samples for each channel
  PCI-1714UL: 8,192 samples for 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)

Bipolar	±5V	±2.5V	±1V	±0.5V

General

- **Bus Type** — PCI-1714: PCI V2.2
  PCI-1714UL: Universal PCI V2.2
- **I/O Connectors** — 4 x BNC connector (for AI)
  1 x PS/2 connector (for Ext. clock and trigger)
- **Dimensions** — 175 x 100mm (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 ~ 70° C (32 ~ 158° F)
- **Storage Temperature** — -20 ~ 85° C (-4 ~ 185° F)
- **Storing Humidity** — 5 ~ 95% RH, non-condensing (refer to IEC 68-2-3)
- **Certifications** — CE

Ordering Information

- **PCI-1714** — 30 MHz Simultaneous 4-ch Analog Input card
- **PCI-1714UL** — 10 MHz Simultaneous 4-ch Analog Input card
- **ADAM-3909** — DB-9 Wiring Terminal for DIN-rail Mounting
- **PCL-10901-1** — PS2 to DB9 Wiring Cable, 1 m
- **PCL-10901-3** — PS2 to DB9 Wiring Cable, 3 m
- **PCL-1010B-1** — BNC to BNC Wiring Cable, 1 m

Pin Assignments

GND
EXT TRIG0
NC
EXT CLK1
EXT CLK0-
EXT CLK0+

Onboard PS/2 connector

EXT TRIG0
NC
EXT CLK0+
GND
EXT CLK0-
GND
GND
GND
EXT CLK1

PS/2 To DB-9 Cable Connector