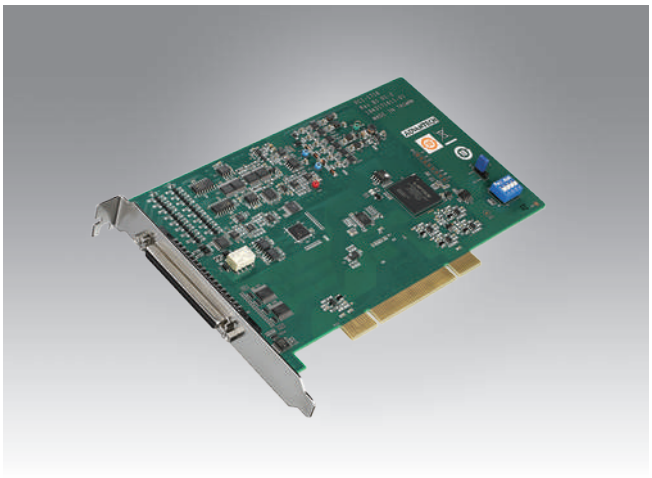
PCI-1716/L/H

16-ch, 16-bit, 1 MS/s or 250 kS/s Multifunction PCI Card



Features

- 16 single-ended or 8 differential or a combination of analog inputs
- 16-bit A/D converter, with up to 1 MS/s or 500 KS/s sampling rate
- FIFO memory (8,192 samples)
- Auto-calibration
- 2 analog output channels (PCI-1716/PCI-1716H only)
- 16-ch digital input and 16-ch digital output
- BoardID switch

Specifications

Analog Input

- **Channels** 16 single-ended, 8 differential, or combination
- **Resolution** 16 bits
- **Sample Rate** 1 MS/s max. for PCI-1716H
  250 kS/s max. for PCI-1716/L
  shared by all enabled channels
- **Convert Clock Source** Internal or external
- **Overvoltage Protection** ±15 V
- **Input Impedance** 100 MΩ
- **Integral Non-Linearity (INL)** ±1 LSB max.
- **Differential Non-Linearity (DNL)** ±1 LSB max.
- **Input Range & Absolute Accuracy***

Unipolar (V)		0 ~ 10	0 ~ 5	0 ~ 2.5	0 ~ 1.25
Bipolar (V)	±10	±5	±2.5	±1.25	±0.625
Absolute Accuracy (% of FSR)	0.01	0.025	0.025	0.04	0.075

Analog Output (PCI-1716/PCI-1716H only)

- **Channels** 2
- **Resolution** 16 bits
- **Update Rate** 1 MS/s max. per channel
- **Update Clock Source** Internal or external
- **Output Range**
  Internal Reference ±10 V, ±5 V, 0 ~ 10 V, or 0 ~ 5 V
  External Reference ±x V or 0 ~ +x V @ +x V reference (-10 ≤ x ≤ +10)
- **Absolute Accuracy** ±0.01% of full-scale range max.
- **Slew Rate** 20 V/μs
- **Driving Capability** ±20 mA max.
- **Output Impedance** 0.1 Ω max.

Digital Input

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

Digital Output

- **Channels** 16
- **Compatibility** 5 V/TTL
- **Output Voltage** Logic 0: 0.4 V max. @ 2 mA sink
  Logic 1: 4.0 V min. @ 2 mA source/5.2 V max.

Counter

- **Channels** 1
- **Resolution** 32 bits
- **Compatibility** 5 V/TTL
- **Function** Event counting, frequency measurement, one-shot, and timer/pulse
- **Input Frequency** 10 MHz max.

General

- **I/O Connector** 1 x 68-pin SCSI female connector
- **Dimensions (L x H)** 175 x 100 mm (6.9" x 3.9")
- **Power Consumption** +5 V: 500 mA typ., 800 mA max.
  +12 V: 150 mA typ., 400 mA max.
- **Operating Temperature** 0 ~ 60°C (32 ~ 140°F)
- **Storage Temperature** -20 ~ 70°C (-4 ~ 158°F)
- **Operating Humidity** 10 ~ 90% RH non-condensing
- **Storage Humidity** 5 ~ 95% RH non-condensing

Ordering Information

- **PCI-1716-B1** 16-ch, 16-bit, 250 kS/s Multifunction PCI Card
- **PCI-1716L-B1** 16-ch, 16-bit, 250 kS/s Multifunction PCI Card w/o AO
- **PCI-1716H-AE** 16-ch, 16-bit, 1 MS/s Multifunction PCI Card

Accessories

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

* For detail information, please refer to user manual.

All product specifications are subject to change without notice.
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