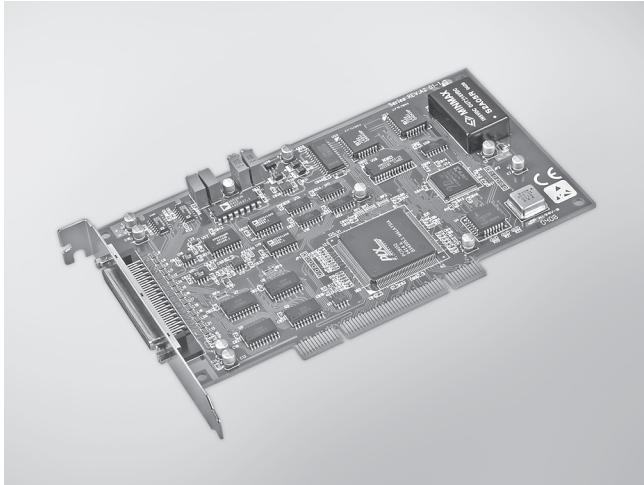


# PCI-1711U/UL

100 kS/s, 12-bit, 16-ch Universal  
PCI Multifunction DAQ Card



FCC CE RoHS

## Features

- 16-ch single-ended analog input
- 12-bit A/D converter, with up to 100 kHz sampling rate
- Programmable gain
- Automatic channel/gain scanning
- Onboard FIFO memory (1,024 samples)
- Two 12-bit analog output channels (PCI-1711U only)
- 16-ch digital input and 16-ch digital output
- Onboard programmable counter

## Specifications

### Analog Input

- **Channels** 16 single-ended
- **Resolution** 12 bits
- **Max. Sampling Rate** 100 kS/s

Note: The sampling rate for each channels will be affected by used channel number.  
For example, if 4 channels are used, the sampling rate is  $100k/4 = 25$  kS/s per channel.

- **FIFO Size** 1,024 samples
- **Overvoltage Protection** 30 Vp-p
- **Input Impedance** 2 M $\Omega$ /5 pF
- **Sampling Modes** Software, onboard programmable pacer, or external
- **Input Range (V, software programmable) & Absolute Accuracy**

| Bipolar                       | $\pm 10$ | $\pm 5$ | $\pm 2.5$ | $\pm 1.25$ | $\pm 0.625$ |
|-------------------------------|----------|---------|-----------|------------|-------------|
| Absolute Accuracy (% of FSR)* | 0.1      | 0.1     | 0.2       | 0.2        | 0.4         |

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

### Analog Output (PCI-1711U only)

- **Channels** 2
- **Resolution** 12 bits
- **Output Rate** Static update
- **Output Range** (Software programmable)

| Internal Reference | Unipolar | 0 ~ 5 V, 0 ~ 10 V                       |
|--------------------|----------|---|
| External Reference |          | 0 ~ +x V @ -x V (-10 $\leq x \leq 10$ ) |

- **Slew Rate** 11 V/ $\mu$ s
- **Driving Capability** 3 mA
- **Output Impedance** 0.81  $\Omega$
- **Operation Mode** Static update
- **Accuracy** INLE:  $\pm 0.5$  LSB  
DNLE:  $\pm 0.5$  LSB

### 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: 0.8 V  
Logic 1: 2.0 V
- **Output Capability** Sink: 8.0 mA @ 0.8 V  
Source: 0.4 mA @ 2.0 V

### Pacer/Counter

- **Channels** 1
- **Resolution** 16 bits
- **Compatibility** 5 V/TTL
- **Max. Input Frequency** 10 MHz
- **Reference Clock** Internal: 10 MHz

### General

- **Bus Type** Universal PCI V2.2
- **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**  
PCI-1711U  
Typical: 5 V @ 850 mA  
Max.: 5 V @ 1.0 A  
PCI-1711UL  
Typical: 5 V @ 700 mA  
Max.: 5 V @ 1.0 A
- **Operating Temperature** 0 ~ 60°C (32 ~ 140°F)
- **Storage Temperature** -20 ~ 70°C (-4 ~ 158°F)
- **Storage Humidity** 5 ~ 95% RH non-condensing

## Ordering Information

- **PCI-1711U** Entry-level 100 kS/s, 12-bit Multifunction Card
- **PCI-1711UL** Entry-level 100 kS/s, 12-bit Multi. Card w/o AO

### Accessories

- **PCLD-8710** 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** 68-pin DIN-rail SCSI Wiring Board

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Advantech:](#)

[PCI-1711UL-CE](#)