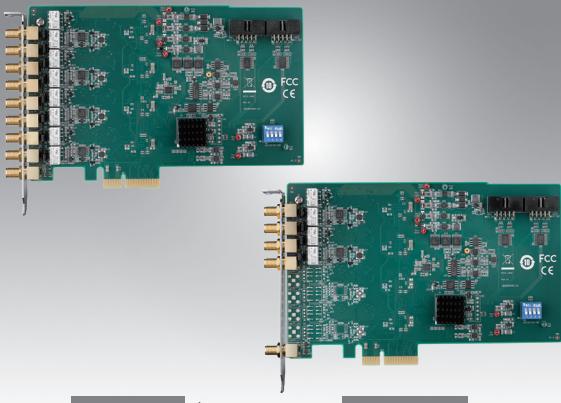


# PCIE-1842

# PCIE-1842L

8/4-ch, 14-bit, 10MS/s/ch Simultaneous Analog Input PCI Express DAQ Card



PCIE-1842

PCIE-1842L

## Specifications

### Analog Input

▪ <b>Channels</b>	8/4 single-ended
▪ <b>Analog-to-digital converter (ADC) resolution</b>	14 bits
▪ <b>Input range</b>	$\pm 10$ V, $\pm 5$ V, $\pm 2.5$ V, or $\pm 1$ V, software configurable per channel
▪ <b>Maximum input voltage</b>	10.1 V
▪ <b>Over-voltage protection</b>	$\pm 15$ V
▪ <b>Input coupling</b>	DC
▪ <b>Input impedance</b>	50 $\Omega$ or 1 M $\Omega$ , configured by on-board jumper per channel
▪ <b>Analog low-pass filter</b>	-3 dB bandwidth
	5 MHz
▪ <b>Acquisition type</b>	Instant or buffered, software configurable

### Buffered Acquisition

▪ <b>Enabled channel combination</b>	Each channel can be enabled/disabled independently by software
▪ <b>Sample rate</b>	10 MHz max. per channel
▪ <b>On-board FIFO Size</b>	65,536 Samples

### Absolute accuracy

- Operating temperature within  $\pm 5$  °C of last Auto-calibration temperature  $\pm 0.2\%$  of full-scale range max. Over full operating temperature range  $\pm 1\%$  of full-scale range max.

### Trigger

▪ <b>Number of triggers</b>	1
▪ <b>Trigger action</b>	Start, delay to start, stop, or delay to stop
▪ <b>Trigger delay range</b>	0 ~ 16,777,215 samples
▪ <b>Sample number</b>	0 ~ 16,777,215 samples

## Features

- 8 or 4 x Simultaneously Analog Inputs, up to 10 MS/s
- 14-bit resolution
- Supports digital and analog triggers
- Wide input range up to 20 Vpp ( $\pm 10$  V range)
- Onboard FIFO memory (65,536 samples)

### Analog Trigger

▪ <b>Source</b>	One of the analog input channels, software configurable
▪ <b>Threshold level</b>	Full scale of analog input range, software configurable
▪ <b>Hysteresis</b>	1/256 of analog input range, software configurable
▪ <b>Polarity</b>	Rising edge or falling edge, software configurable

### Digital Trigger

▪ <b>Source</b>	1 external pins
▪ <b>Input logic level</b>	Logic high 2.0 V min. Logic low 0.8 V max.
▪ <b>Working voltage</b>	-0.25 V ~ 5.25 V
▪ <b>Polarity</b>	Rising edge or falling edge, software configurable
▪ <b>Input protection voltage</b>	-0.5 V ~ 6.5 V

### Mechanical

▪ <b>Connector Type</b>	SMA
▪ <b>Dimension</b>	167 x 111 mm
▪ <b>Weight</b>	PCIE-1842: 161g PCIE-1842L: 130g

### Environment

▪ <b>Operating temperature</b>	0 °C to 60 °C (32 °F to 140 °F)
▪ <b>Storage temperature</b>	-20°C to 70°C (-4°F to 158°F)
▪ <b>Operating humidity</b>	10% to 90% RH, non-condensing
▪ <b>Storage humidity</b>	5% to 95% RH, non-condensing

### Certification

▪ <b>EMC</b>	CE, FCC
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## Ordering Information

▪ <b>PCIE-1842-A</b>	8-ch, 14-bit, 10MS/s/ch, simultaneous sampling card
▪ <b>PCIE-1842L-A</b>	4-ch, 14-bit, 10MS/s/ch, simultaneous sampling card

## Accessories

▪ <b>1700030423-01</b>	10-pin flat cable for MDSI synchronization, 10 cm
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