PCIE-1840

4-ch 16Bit 125 MS/s Digitizer



Features

- 4 simultaneous analog inputs, up to 125MHz, 16-bit resolution
- 500MHz Time Interleaved Sampling
- Non-stop data streaming capable
- 2 GB on-board memory
- 1M or 50 Ohm selectable input impedance
- On-Board tunable anti-aliasing filter
- AC/DC Coupling

ROHS CEFE

Introduction

The PCIE-1840 16-bit resolution digitizer divides the input voltage range into 65,536 different digitization levels, it also features sampling rates up to 125M Samples per second, and can be combined into 1 or 2 digitizing channels up to 250 MSPS or 500 MSPS , deep onboard sample memory up to 2 GB, and true ENOBs up to 11.4 bits

Specifications

Analog Input

- Channels
- Resolution
- Max. Sampling Rate
- **Memory Size**
- **Over Voltage Protection**
- Input Impedance
- Sampling Modes
- Trigger Modes
- Input Range
- Time Interleaved Sampling

4 single-ended, simultaneously

16 bits 125 MS/s per channel

2GB 30 Vp-p

 $50 \Omega / 1M \Omega$

For 1 M Ω : AC Coupling /DC Coupling

Software and external clock

Start trigger, Delay to Start trigger Stop trigger, Delay to Stop trigger

0.2 / 0.4 / 1 / 2 / 4 / 10 /

20 Vpp (input Impedance must be 1 M Ω)

- 4 channels combined, 500 MSPS max.
- 2 channels combined, 250 MSPS max.
- No time interleaved, 125 MSPS max.
- Configured automatically by setting sampling

General

- Bus Type
- I/O Connectors
- Dimensions (L x H)
- Power Consumption
- **Operating Temperature**
- Storage Temperature
- Storage Humidity

PCI Express GEN2 x 4

4 x BNC connector (for AI)

1 x HDMI connector (for Ext. clock and trigger)

175 x 100 mm (6.9" x 3.9")

Under test

0 ~ 50°C (32 ~ 122°F)

-20 ~ 70°C (-4 ~ 158°F)

5 ~ 95% RH, non-condensing

Ordering Information

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Pin Assignments

DGND REF_CLK_OUT+ REF CLK OUT-DGND TRIGOUT0 TRIGOUT1 N/A N/A N/A



REF_CLK_IN+ REF CLK IN-DGND DTRG0 DTRG1 DGND N/A N/A DGND N/A