

Programmable, High Channel Count Analog-to-Digital Converter (ADC)



- Compact housing and customizable input connectors for easy instrument integration
- Streaming ADCs for continuous data acquisition (no buffering), faster transmission and up to 50 fps
- Internal trigger generator allows external device triggering at defined frequencies. Continuous mode sends trigger signal as soon as previous acquisition is complete (highest frame rate)
- Integrated AFE amplifier chips with digitally controlled gain
- Optical and electrical trigger inputs
- Programmable Gain and SDK supports a wide range of data acquisition configurations
- Optional breakout board with 128 industry standard SMA connectors for evaluation, testing and development

Channels

Channels per ADC

128

ADC

Programmable Gain

12 to 51 dB

Bandwidth @ -3 dB ⁽¹⁾

50 kHz to 12.5 MHz

Resolution

12-bit

Sampling Rate ⁽²⁾

38 to 40 MSPS

Max Trigger / Frame Rate

50 Hz / fps

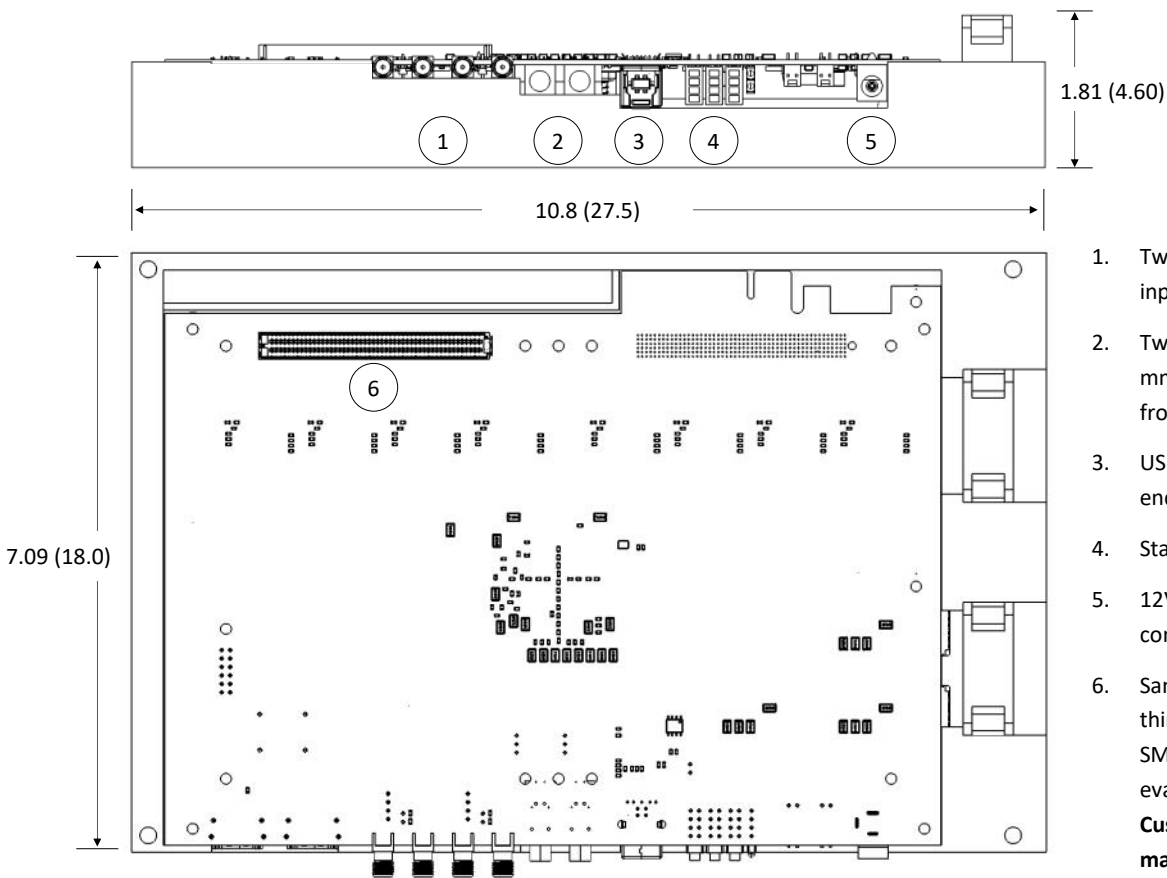
Max Points ⁽³⁾

4096

(1) Low Pass programmable filters available

(2) 38.5 MSPS default. Up to 40 MSPS with custom FPGA chip

(3) Per frame per channel

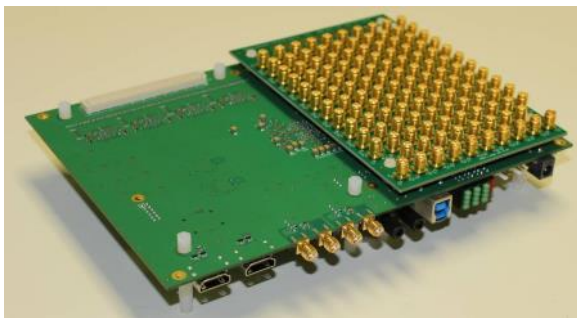


1. Two sets of programmable electrical trigger input and output (isolated SMA connectors)
2. Two optical trigger inputs for connecting 2 mm patch fibers allow precise triggering from the end-user's pulsed lasers
3. USB 3.0 port for high data transmission to end-user or PhotoSound provided computer
4. Status and diagnostic LEDs
5. 12VDC 2.5A barrel 2.35 x 0.7 mm power connector (power supply included)
6. Samtec SEAFP series input connector for third-party probe or preamplifier. Optional SMA breakout board available for evaluation, testing and development. **Custom connectors and pin mapping to match existing third-party probes can be substituted in place of default connectors.**

All dimensions approximate in inches (cm).

Computer* (optional)	Software
4+ Core i7 Processor Nvidia Graphics Card for CUDA only 16+ GB DDR4 Memory 500+ GB PCIe Solid-State Drive Windows 10 64-bit	Windows 7/10 64-bit drivers Standalone DAQ Application Software Development Kit (LabView) *.tdms data output

* End-user or PhotoSound provided



Optional SMA inputs on a breakout board for unit evaluation, testing and development

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All specifications are subject to change without notice.

LEGION ADC128 is classified EAR99 and does not require an export license.

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