

Zmod ADC 1410 Module

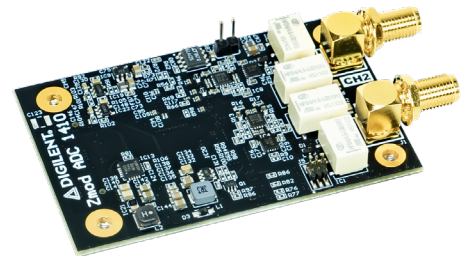
Product Overview

04/19/2023

For the most up-to-date information, visit www.mouser.com or the supplier's website.

Description

Digilent Zmod ADC 1410 is an SYZYGY™ compatible dual-channel, 14-bit, analog-to-digital converter module. The Zmod peripheral modules function better than the low-speed, low pin-count Pmod devices, with high-performance, high pin-count VITA 57.1 FMC peripherals. The Zmod 1410 module is driven by the SYZYGY carrier and can simultaneously acquire two $\pm 25\text{V}$ signals with 14 bits of resolution at a sample rate of up to 100MS/s. Analog inputs can be connected to a circuit using SMA cables.

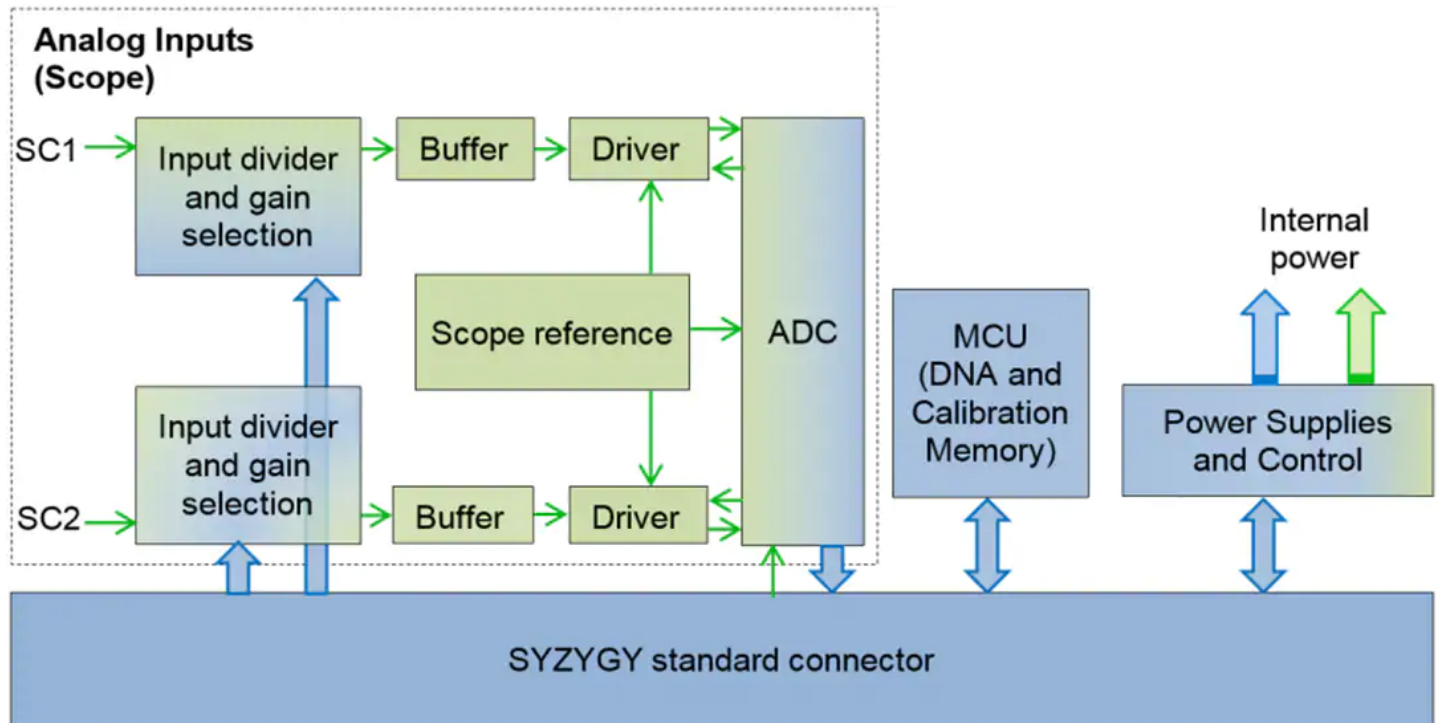


The Zmod module when coupled to a baseboard using SYZYGY expansion, such as the Eclipse Z7 or Genesys ZU, the combination becomes a powerful prototyping platform for instrumentation, and high-speed control, and SDR products. This module operates on an absolute resolution of 0.13mV for low range or 3.12mV for high range, an accuracy range of $\pm 0.2\%$, and a 100MS/s sample rate.

Features

- Two channels
- Single-ended channel type
- 14-bit resolution
- $\pm 1\text{V}$ (low gain) or $\pm 25\text{V}$ (high gain) input range
- 0.13mV (low gain) or 3.21mV (high gain) absolute resolution
- $\pm 0.2\%$ of accuracy range
- 100MS/s sample rate (real-time)
- $1\text{M}\Omega \parallel 18\text{pF}$ input impedance
- Analog bandwidth:
 - 1410-40: 20MHz at 3dB, 8MHz at 0.5dB, and 4MHz at 0.1dB
 - 1410-105: 70MHz at 3dB, 30MHz at 0.5dB, and 20MHz at 0.1dB
 - 1410-125: 70MHz at 3dB, 30MHz at 0.5dB, and 20MHz at 0.1dB
- $\pm 50\text{V}$ input protected

Block Diagram



Mouser Part Number

[View Part](#)

To learn more, visit <https://www.mouser.com/new/digilent/digilent-zmod-adc1410/>