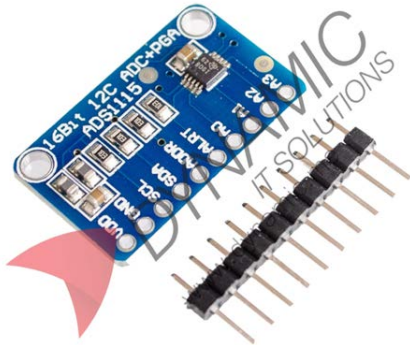


ADS1115 16-Bit ADC - 4 Chan with Programmable Gain



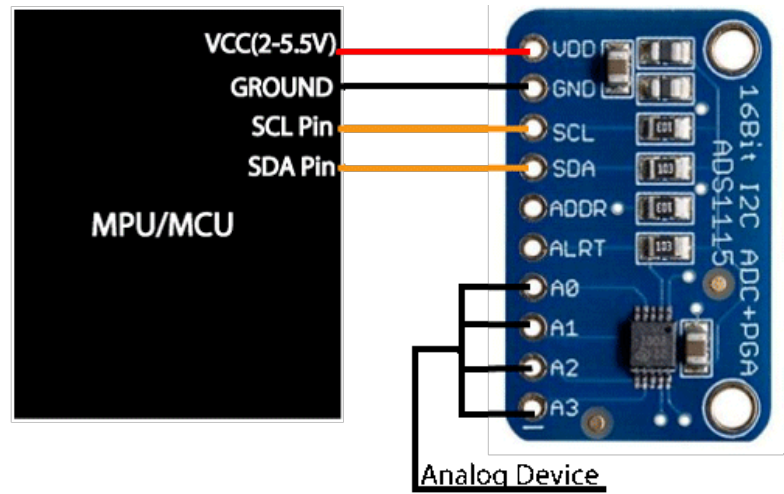
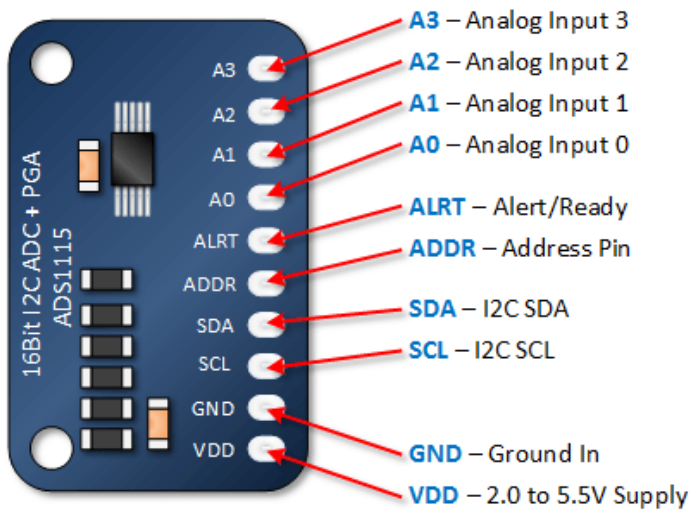
Features:

The ADS1115 16-Bit Analog-to-Digital Converter (ADC) offers precision analog measurement with a programmable gain amplifier for signal scaling up to $\times 16$. It operates over a wide voltage range (2.0V–5.5V) and supports both single-ended and differential input modes, making it highly versatile for multi-sensor systems. With an internal voltage reference, low-drift oscillator, and programmable data rate (8–860 samples/sec), it ensures accurate readings in low-power applications. Designed for microcontrollers via I2C, it supports four address options (0x48–0x4B) for multiple device configurations.

Specifications	
Resolution	16-bit
Input Channels	4 single-ended / 2 differential
Interface	I2C (7-bit address 0x48–0x4B)
Programmable Gain	Up to $\times 16$
Supply Voltage	2.0V – 5.5V
Current Consumption	150 μ A (continuous mode)
Data Rate	8 SPS – 860 SPS
Voltage Reference	Internal, low-drift
Oscillator	Internal
Comparator	Programmable
Address Select	Pin-configurable (ADDR)
Compatible Platforms	Arduino, Raspberry Pi, CircuitPython
Usage	High-precision analog measurement and signal amplification

Pinouts:

Pin Name	Type	Description
A3	Input	Analog Input Channel 3
A2	Input	Analog Input Channel 2
A1	Input	Analog Input Channel 1
A0	Input	Analog Input Channel 0
ALRT	Output	Alert/Ready Signal Output
ADDR	Input	I2C Address Selection Pin
SDA	I/O	I2C Data Line
SCL	Input	I2C Clock Line
GND	Ground	Ground Connection
VDD	Power	2.0V to 5.5V Power Supply



Product Pictures:

