

6-Axis IMU Unit

SKU:U095



Description

6-Axis IMU Unit is a 6-axis attitude sensor with 3-axis gravity accelerometer and 3-axis gyroscope, which can calculate tilt angle and acceleration in real time. The chip adopts mpu6886, has 16 bit ADC, built-in programmable digital filter and on-chip temperature sensor, adopts I2C interface (addr:0x68) to communicate with host computer, and supports low-power mode.

Product Features

- 3-axis gravity accelerometer and 3-axis gyroscope
- On chip temperature sensor
- 1KB FIFO
- Support low power consumption
- Development platform: Arduino, uiflow (blocky, python)
- 2X LEGO compatible holes

Include

- 1x 6-Axis IMU Unit
- 1x Grove Cable (5cm)

Application

- Wearable devices
- Motion tracking
- UAV attitude determination

Specification

Resources	Parameter
Communication protocol	I2C: 0x68
Accelerometer range	$\pm 2g$, $\pm 4g$, $\pm 8g$, or $\pm 16g$
Accelerometer noise	100 $\mu g/\sqrt{Hz}$
Gyroscope range	± 250 , ± 500 , ± 1000 , or ± 2000 degrees per second
Gyroscope sensitivity error	1%
Gyroscope noise	± 4 mdps/ \sqrt{Hz}
working voltage	1.71V - 3.45V
Net Weight	4g

Gross Weight	9g
Produce Size	24*24*13mm
Package Size	35*36*18mm

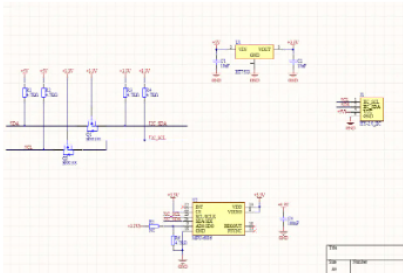
EasyLoader

EasyLoader is a concise and fast program writer, which has a built-in case program related to the product. It can be burned to the main control by simple steps to perform a series of function verification. Please install the corresponding driver according to the device type. M5Core host (Please click here to view the CP210X driver installation tutorial, M5StickC/V/T/ATOM series can be used without driver)

Related Link

Datasheet
[MPU 6886](#)

Schematic



Pin Map

M5Core(GROVE A)	SCL	SDA	5V	GND
IMU Unit	GPIO22	GPIO21	5V	GND

Example

1. Arduino

[Click here to download the Arduino example](#)

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PURCHASE