PRODUCT DATASHEET

PIR Movement Sensor Board With Qwiic

333179

The PIR Movement Sensor Board detects motion within 5 meters and integrates easily with microcontrollers using Qwiic technology.

Full product documentation, files and tutorials: **solde.red/333179**

CORE ATTRIBUTES

SKU **333179**

WEIGHT **5 g**

BARCODE **732388663002**

DESCRIPTION

A PIR (passive infrared) motion sensor is a device that detects physical movement within its field of vision by sensing changes in infrared radiation. This sensor works on the principle of detecting **thermal signals emitted by objects**, mostly warm-blooded creatures like humans. The "passive" in the name refers to the fact that the sensor itself does not emit or radiate any energy for detection.

When it detects motion, the sensor sends a digital signal to the microcontroller. The angle that the sensor "sees" is **100 degrees** and reaches up to **5 meters**. It is often used in a variety of applications, including home security systems, automatic lighting, and energy management, among others.

Our breakout board simplifies the use of the PIR sensor by using qwiic technology, making it easily connectable with microcontrollers or other circuits. It accepts input from the PIR sensor and translates it into signals that your microcontroller can interpret. In addition to the aforementioned PIR sensor, the board also contains a small ATTiny404 microcontroller, as well as a switch for selecting the I2C address. This breakout board comes with 2 qwiic connectors for easy integration into the qwiic system. If you do not wish to use qwiic, the module can also be used via standard headers.

TECHNICAL DETAILS

- **Voltage:** 2.7-12V
- **Delay:** 2s
- **Sensing range:** angle up to 100 degrees, 3-5 meters
- **PIR sensor PN:** AM312
- **Microcontroller:** ATTiny404
- **qwiic connectors**
- **Dimensions:** 38 × 22 mm / 1.5 × 0.9 inch

SPECIFICATIONS

INTERFACE	I2C
QWIIC COMPATIBLE	Yes
I2C ADDRESS DEFAULT	0x30
I2C ADDRESS CHANGEABLE	Yes
BREADBOARD COMPATIBLE	Yes
MEASUREMENT TYPES	Motion
MEASUREMENT RANGE	3 to 5 m, detection angle up to 100 degrees
IC PART NUMBER	AM312
MCU PART NUMBER	ATTINY404
SUPPLY VOLTAGE MIN V	2.7
SUPPLY VOLTAGE MAX V	12

LINKS

Arduino Library	https://github.com/SolderedElectronics/Soldered-PIR-movement-seonor-with-easyC-Arduino-Library
Full Documentation	https://docs.soldered.com/pir-sensor/overview/
Arduino: Get Started	https://docs.soldered.com/pir-sensor/arduino/geting-started/
Hardware Details	https://docs.soldered.com/pir-sensor/hardware/
Arduino Library Documentation	https://docs.soldered.com/pir-sensor/arduino/detecting-movement-qwiic/
Pinout	https://docs.soldered.com/assets/images/pir-sensor-easyc-5155294ee785b0f7d0ecfb50058679ae.png
mim_package	https://checkmim.com/packages/solderedelectronics+Soldered-PirSensor-MicroPython-Library
MicroPython Module	https://github.com/SolderedElectronics/Soldered-PirSensor-MicroPython-Library

GALLERY


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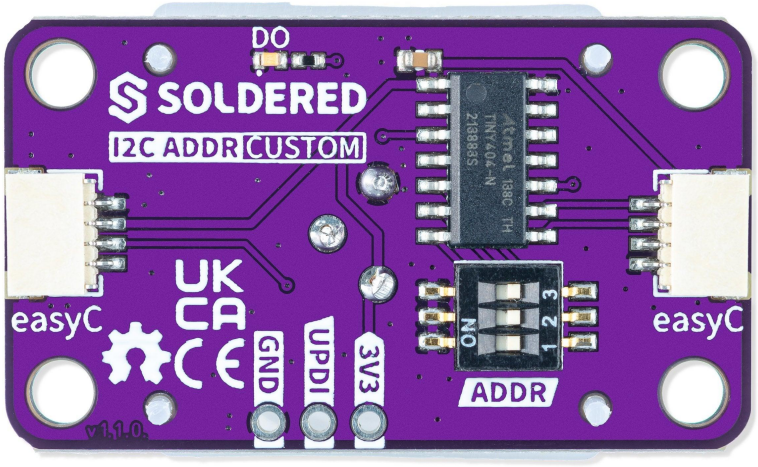
PIR MOVEMENT SENSOR BOARD WITH EASYC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