SparkFun OpenPIR

SEN-13968 Open Source Hardware



Description: The SparkFun OpenPIR is a highly customizable Passive Infrared (PIR) sensor based around the NCS36000 PIR controller. Passive infrared (PIR) sensors are able to detect motion in a small/local area — they're the sensor of choice in security systems, home automation and proximity-sensing applications. The OpenPIR allows you to set the sensitivity, trigger time and pulse mode of the motion sensor so you can tailor-fit it to your application!

The OpenPIR has a multitude of characteristics unique to itself, including two trimpots to adjust sensitivity (view distance) and the oscillator to control the length of time the output remains HIGH, as well as a trigger that supports two motion-detection modes: single-pulse and dual-pulse. Additionally, each OpenPIR is equipped with a reverse-entry green LED, which duplicates the status of the OUT pin. When motion is detected, the LED will illuminate; otherwise it will remain off.

The SparkFun OpenPIR supports a power supply range of 3VDC to 5.75VDC at 80µA standby (3mA when detecting motion) and is able to be connected via a standard 0.1" header or a 4-pin JST PH connector.

Features:

- Voltage Supply Range: 3VDC to 5.75VDC
- Standby Average Current: 80μA
- Motion-Detected Average Current: 3mA (LED enabled)
- Integrated 2−Stage Amplifier
- Internal LDO to Drive Sensor
- Internal Oscillator with External RC
- Single or Dual Pulse Detection