

Adafruit APDS9960 Proximity, Light, RGB, and Gesture Sensor

PRODUCT ID: 3595

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[DESCRIPTION](#)[TECHNICAL DETAILS](#)[LEARN](#)

DESCRIPTION

This breakout is chock full o' sensors! Add basic gesture sensing, RGB color sensing, proximity sensing, or ambient light sensing to your project with the **Adafruit APDS9960 Proximity, Light, RGB and Gesture Sensor**. When connected to your microcontroller (running our library code) it can detect simple gestures (left to right, right to left, up to down, down to up are currently supported), return the amount of red, blue, green, and clear light, or return how close an object is to the front of the sensor. This device uses an I2C interface so it's easy to wire up and use.

The APDS9960 from Avago Technologies has an integrated IR LED and driver, along with four directional photodiodes that sense reflected IR energy from the LED. It's proximity detection feature allows it to measure the distance an object is from the front of the sensor (up to a few centimeters) with 8 bit resolution.

Since there are four IR sensors, you can measure the changes in light reflectance at each of the

cardinal locations over time and turn those changes into gestures. Our interface library can detect directional gestures (left to right, right to left, up to down, down to up), but in theory more complicated gestures like zig-zag, clockwise or counterclockwise circle, near to far, etc. could also be detected with additional code.

The APDS9960 has a configurable interrupt that can fire when a certain proximity threshold is broken, or when a color sensor breaks a certain threshold.

For your convenience we've pick-and-placed the sensor on a PCB with a 3.3V regulator and some level shifting so it can be easily used with your favorite 3.3V or 5V microcontroller.

[We've also prepared a guide and software library to get you up and running in Arduino IDE with just a few lines of code!](#)



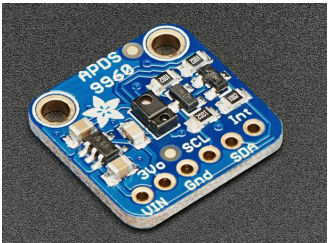
TECHNICAL DETAILS

Product Dimensions: 17.8mm x 17.8mm x 3.2mm / 0.7" x 0.7" x 0.1"

Product Weight: 1.3g / 0.0oz



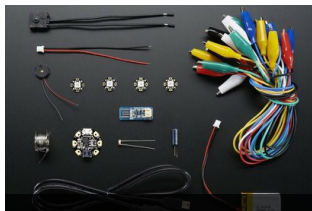
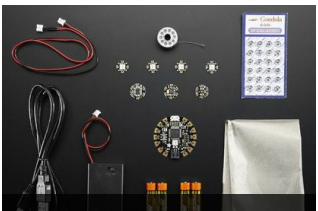
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[Adafruit APDS9960 breakout](#)

Digital Proximity, Ambient Light, RGB, and Gesture Sensor

MAY WE ALSO SUGGEST...

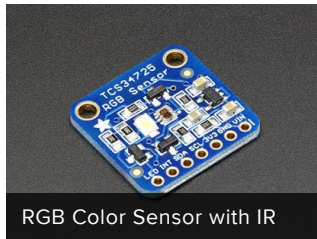




VCNL4010 Proximity/Light



Flora UV Index Sensor -



RGB Color Sensor with IR



Flora Lux Sensor - TSL2561

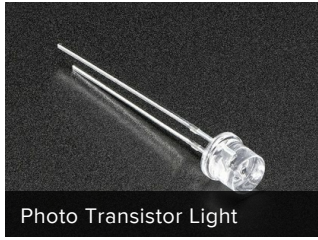


Photo Transistor Light



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Adafruit AS7262 6-Channel

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"Meaning can easily be confused with structure. Structure is a good approximation, but not the same" -
Claudia Perlich

ENGINEERED IN NYC Adafruit®



4.9 ★★★★★
 Google
 Customer Reviews