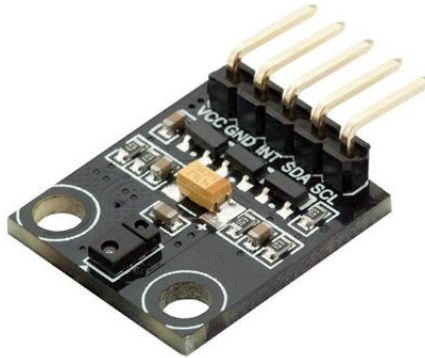




ARDUINO SENSOR GESTURE

Model: SENS-GEST-APDS-9960



Description:

The Gesture Sensor APDS-9960 is a digital RGB, ambient light, proximity and gesture sensor. The sensor has an I2C compatible interface providing red, green, blue, clear (RGBC), proximity and gesture sensing with IR LED. The RGB and ambient light sensing feature detects light intensity under various lighting conditions and through various attenuation materials including darkened glass. In addition, the integrated UV-IR blocking filter enables accurate ambient light and correlated color temperature sensing.

The proximity and gesture feature is factory-trimmed and calibrated to 100mm proximity detection distance without requiring customer calibrations. Gesture detection utilizes four directional photodiodes, integrated with visible blocking filter, to accurately sense simple UP-DOWN-RIGHT-LEFT gestures or more complex gestures. The addition of micro-optics lenses within the module provides high efficient transmission and reception of infrared energy. An internal state machine allows the device to be put into a low power state between RGBC, proximity and gesture measurements providing very low power consumption.

Features:

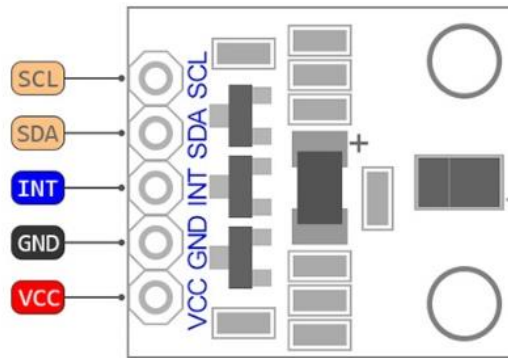
- ❖ RGBC Light Sensor, Proximity and Gesture Detector with IR LED in an Optical Module
- ❖ I2C Interface Compatible with Dedicated Interrupt Pin
- ❖ High Sensitivity Enabling Operation Behind Darkened Glass
- ❖ RGBC Light Sensing with Integrated UV-IR Block Filter
- ❖ Geometrically Arranged RGBC Photodiodes Providing Uniform Angular Response
- ❖ Calibrated to 100mm Detection Distance Eliminating Customer End Product Calibration
- ❖ Four Separate Photodiodes Sensitive to Different Directions
- ❖ Proximity and Gesture Sensing with Integrated Visible Block Filter
- ❖ Patented Shield Design Minimizing Proximity Cross Talk
- ❖ Integrated Optical Lens Collimating IR LED Beam and Improving Photodiode Sensitivity.
- ❖ Low Power Consumption: 1.0 μ A typical in Sleep Mode

Applications:

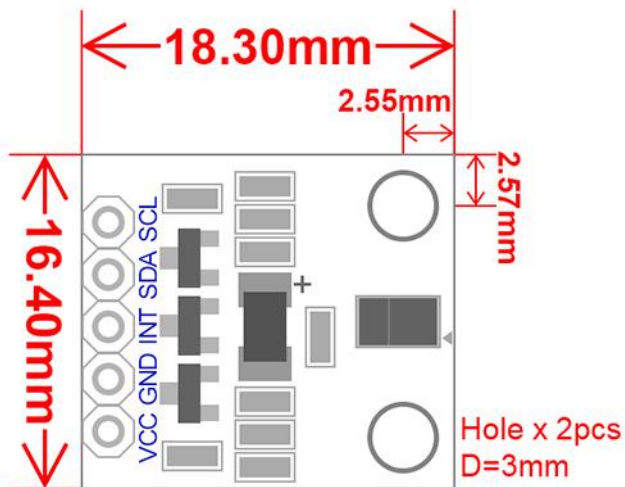
- Display Backlight Control
- Correlated Color Temperature Sensing
- Cell Phone Touch-screen Disable
- Digital Camera Touch-screen Disable
- Mechanical Switch Replacement
- Gesture Detection

Pins Diagram:

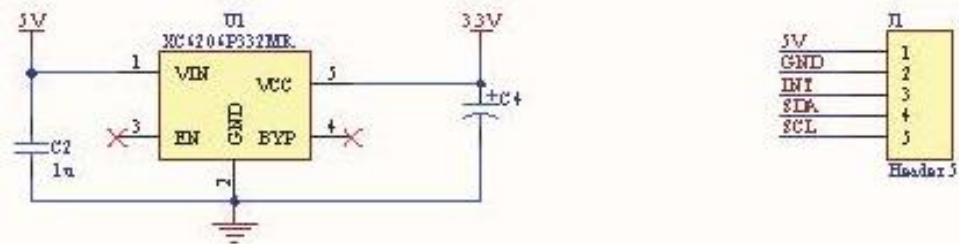
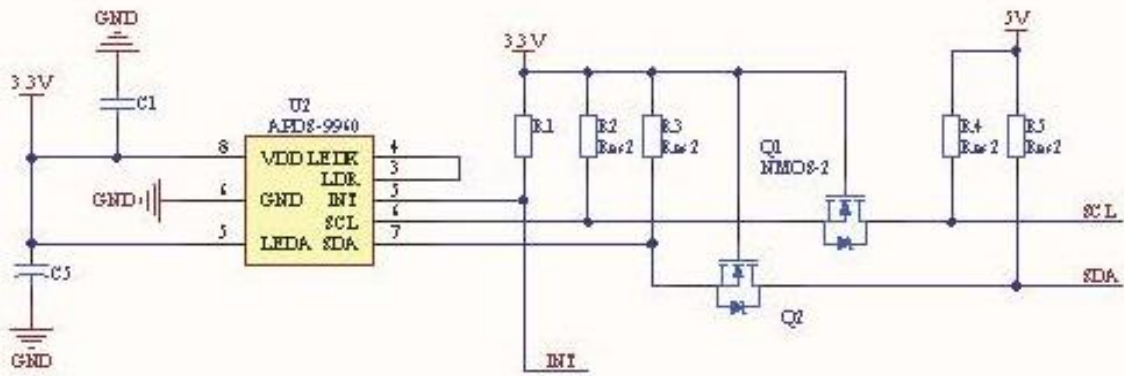
-  Power
-  GND
-  Serial Pin
-  Control



Dimensions Diagram:



Schematic:



Made in China