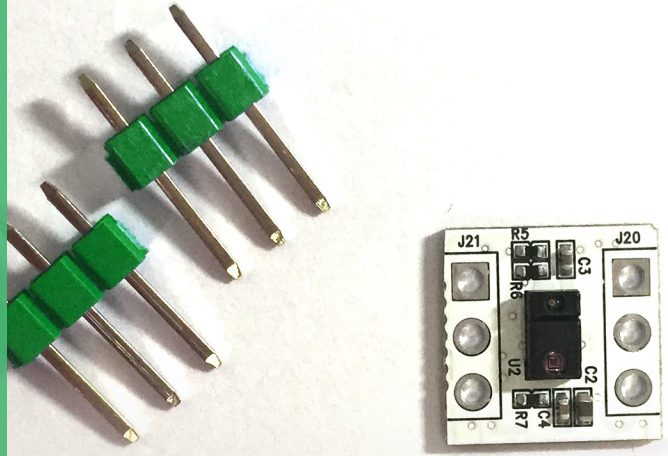


Gesture and RGB Sensor Module

#1



www.kong-tech.com
696-1, Bokjeong-dong, Sujeong-gu, seongnam, Republic of Korea



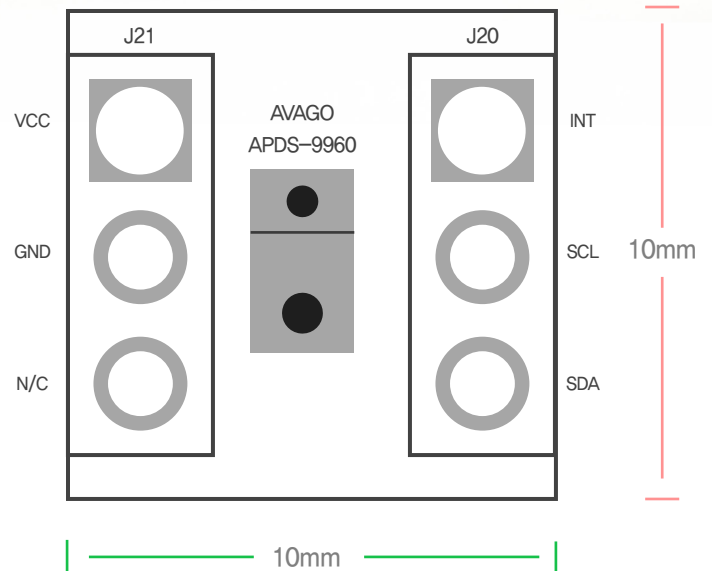
Description

AVAGO社의 APDS9960 센서를 이용하여 제작한 제스처 센서모듈 입니다.
APDS9960 모듈은 다음 세 가지의 측정이 가능합니다.

- Up, Down, Left, Right, Near, Far 6가지의 동작을 측정
- 주변환경의 밝기를 측정
- 주변환경의 색을 측정하여 RGB 값으로 추출 - 칼라센서

IR센서에서 반사된 에너지를 4방향의 포토다이오드로 검출하여 동작을 측정합니다. 주변환경의 밝기와 색을 측정하여 RGB 값으로 출력할 수 있습니다.

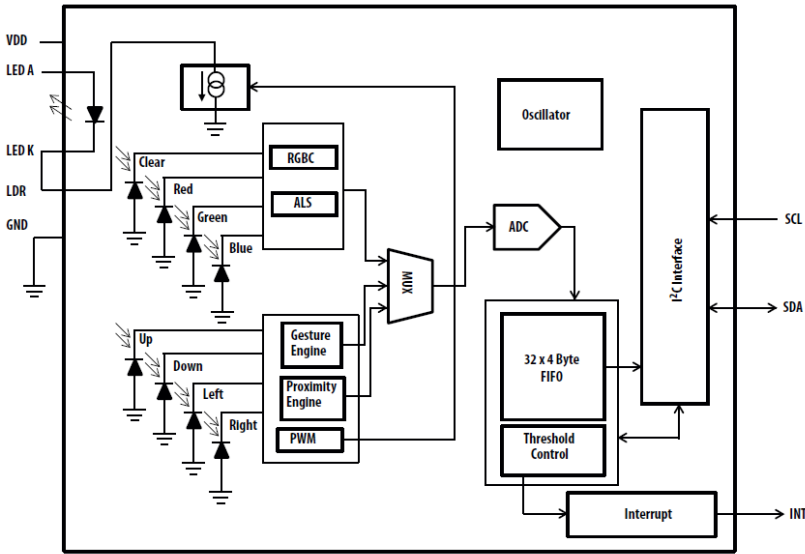
Dimensions



Features

- Ambient Light and RGB Color Sensing, Proximity Sensing, and Gesture Detection in an Optical Module
- Ambient Light and RGB Color Sensing
 - UV and IR blocking filters
 - Programmable gain and integration time
 - Very high sensitivity—Ideally suited for operation behind dark glass
- Proximity Sensing
 - Trimmed to provide consistent reading
 - Ambient light rejection
 - Offset compensation
 - Programmable driver for IR LED current
 - Saturation indicator bit
- Complex Gesture Sensing
 - Four separate diodes sensitive to different directions
 - Ambient light rejection
 - Offset compensation
 - Programmable driver for IR LED current
 - 32 dataset storage FIFO
 - Interrupt driven I2C communication
- I2C-bus Fast Mode Compatible Interface
 - Data Rates up to 400 kHz
 - Dedicated Interrupt Pin

Functional Block Diagram



Applications

- Gesture Detection
- Color Sense
- Ambient Light Sensing
- Cell Phone Touch Screen Disable
- Mechanical Switch Replacement

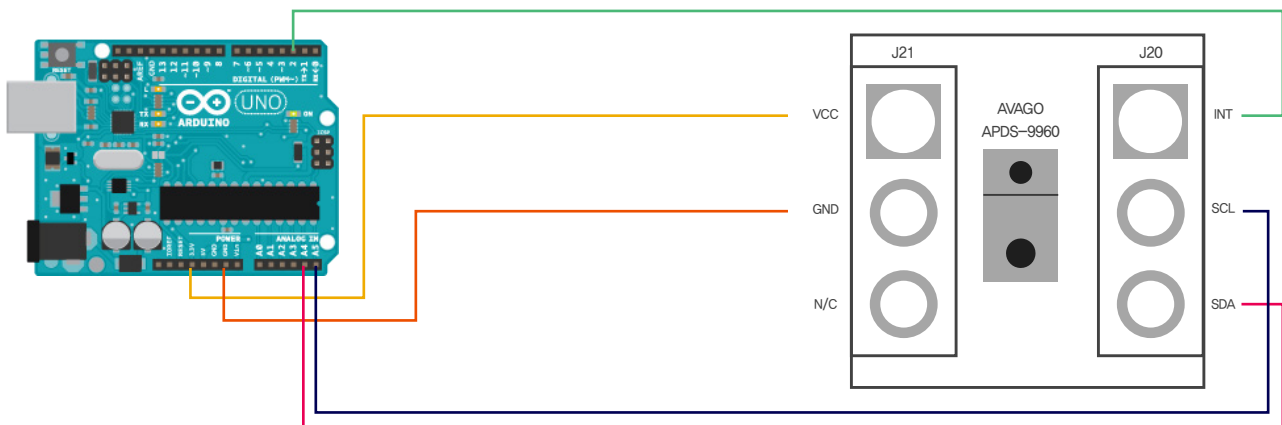
Pin Functions(Wiring)

APDS9960	Arduino Uno
VCC	3.3V
GND	GND
INT	PIN2
SCL	A5
SDA	A4

Includes

- Gesture and RGB Sensor Module #1 1E/A
- Pin Header Single 1x3Pin Straight(2.54mm) 2E/A

아두이노 연결 예시



참고링크

APDS9960 Datasheet - <http://www.farnell.com/datasheets/1801560.pdf>

Arduino library - https://github.com/sparkfun/APDS-9960_RGB_and_Gesture_Sensor