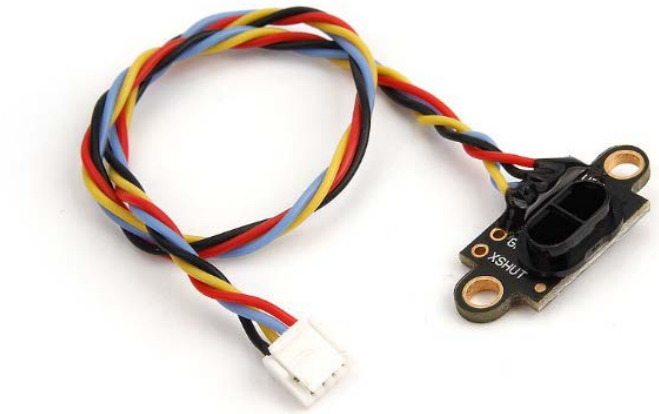
#19004

VL53L1X



Description

The VL53L1X is a state-of-the-art, Time-of-Flight (ToF), laser-ranging sensor, enhancing the ST FlightSense™ product family. It is the fastest miniature ToF sensor on the market with accurate ranging up to 4 m and fast ranging frequency up to 50 Hz

Features

- Fully integrated miniature module
  - Emitter: 940 nm invisible laser (Class1)
  - SPAD (single photon avalanche diode) receiving array with integrated lens
  - Low-power microcontroller running advanced digital firmware
- Pin-to-pin compatible with the VL53L0X FlightSense™ ranging sensor
- Fast and accurate long distance ranging
  - Up to 400 cm distance measurement
  - Up to 50 Hz ranging frequency
- Typical full field-of-view (FoV): 27 °
- Programmable region-of-interest (ROI) size on the receiving array, allowing the sensor FoV to be reduced

• Programmable ROI position on the receiving array, providing multizone operation control from the host

• Easy integration

– Single reflowable component

– Can be hidden behind many cover window materials

– Software driver and code examples for turnkey ranging

– Single power supply (2v8)

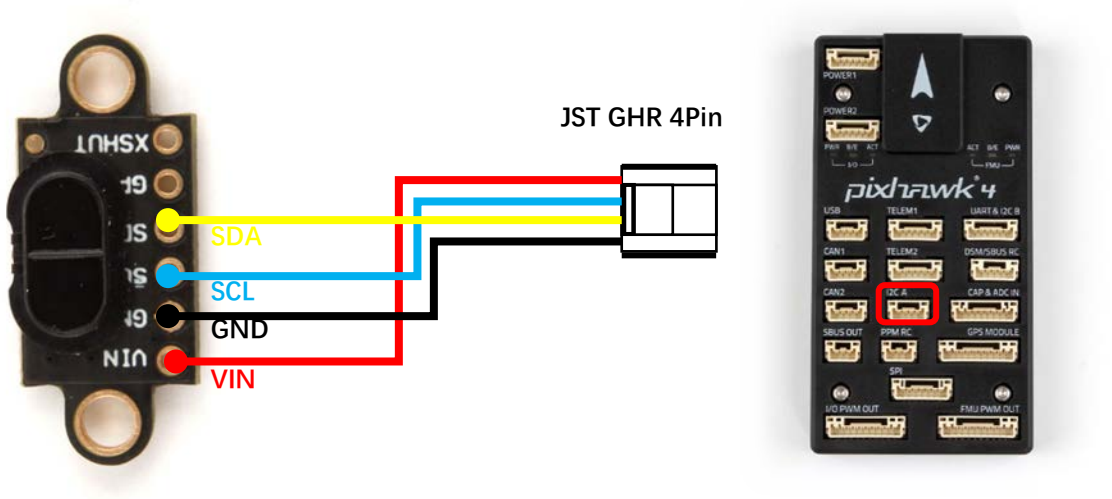
– I²C interface (up to 400 kHz)

– Shutdown and interrupt pins

SPECIFICATIONS

- Working voltage：3.3-5v
- Communication interface：I2C
- Dimensions：25x10.7x3.2mm
- Weight：2.4g

PIN OUTS



Package Included

1x VL53L1X

1x GH4P 200mm Cable(installed)

1x TPU Protective Case Shell

Some Tips:

https://ardupilot.org/copter/docs/common-vl53l0x-lidar.html