

**#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**

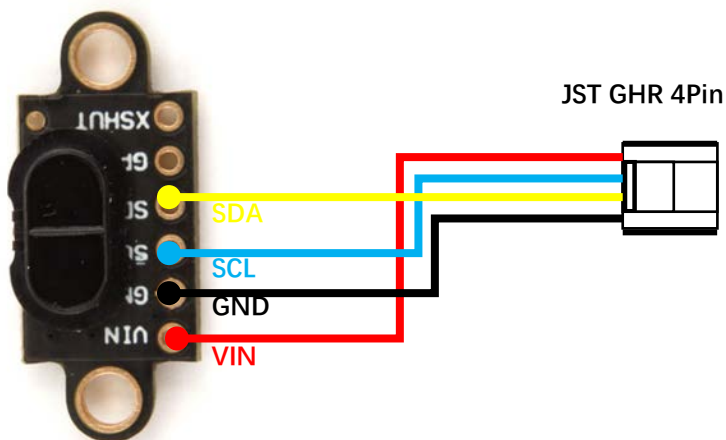
- Fully integrated miniature module
  - Emitter: 940 nm invisible laser (Class1)
  - SPAD (single photon avalanche diode) receiving array with integrated lens
  - Low-power microcontroller running advanced digital firmware
- Pin-to-pin compatible with the VL53L0X FlightSense™ ranging sensor
- Fast and 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)
  - I<sup>2</sup>C 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>