

Linux example code for the VL53L1X long-distance ranging Time-of-Flight sensor



Features

- Linux ranging example code
- Based on the VL53L1X_ULD API (ultra lite driver application programming interface) used as a library in Linux user space
- Built for Raspberry Pi 3

Description

The STSW-IMG013 contains a ranging example for using the VL53L1X_ULD API on devices running under Linux. It is based on the VL53L1X_ULD API (STSW-IMG009) which is used as a library in the Linux user space. This provided example has been designed for Raspberry Pi 3 but it can be ported to any Linux platform.

The VL53L1X_ULD API is a set of C functions controlling the VL53L1X device (e.g. init and ranging) to enable the development of end-user applications. The VL53L1X ULD is an optimized version of the initial VL53L1X driver.

The VL53L1X is the latest product based on ST's patented FlightSense technology. This is a ground-breaking technology allowing absolute long-distance to be measured independently of target reflectance. Instead of estimating the distance by measuring the amount of light reflected back from the object (which is significantly influenced by color and surface), the VL53L1X precisely measures the time the light takes to travel to the nearest object and reflect back to the sensor (Time-of-Flight).

The VL53L1X combines an IR emitter and a range sensor in a two-in-one, ready-to-use reflowable package.

Product status link

[STSW-IMG013](#)

Revision history

Table 1. Document revision history

Date	Version	Changes
29-Oct-2019	1	Initial release

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