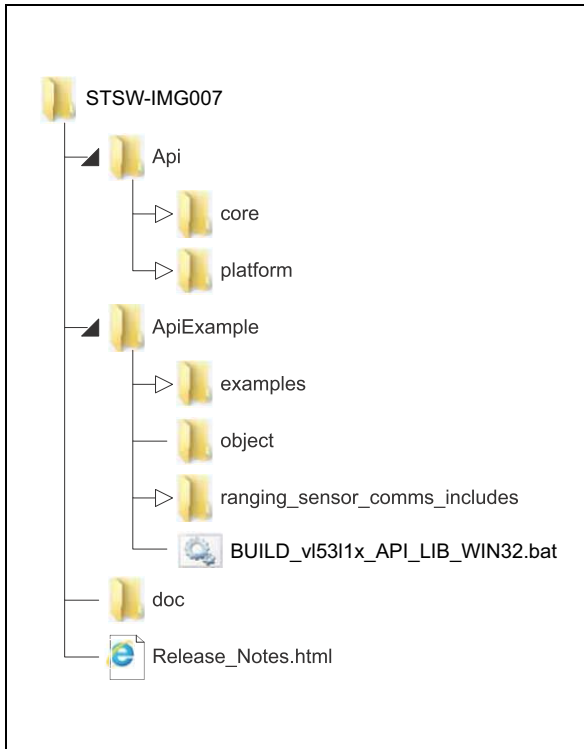


## VL53L1X long-distance ranging sensor application programming interface (API)

Data brief



### Description

The VL53L1X 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 API is structured in a way that it can be compiled on any kind of platform through a well isolated platform layer (mainly for low-level I2C access). One example code is provided to show how to use the API and perform ranging measurements.

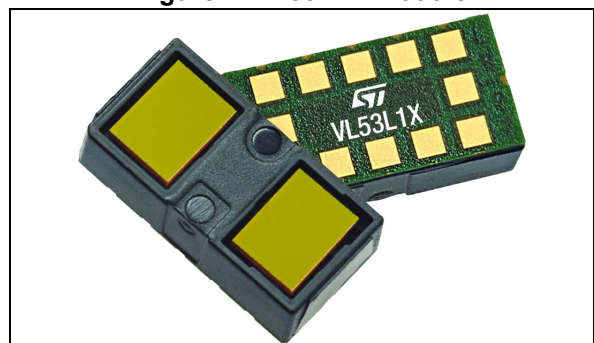
The VL53L1X is the latest product based on ST's patented FlightSense™ technology. This is a ground-breaking technology allowing absolute long-distance to be measured independently of target reflectance. Instead of estimating the distance by measuring the amount of light reflected back from the object (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.

### Features

- VL53L1X API is source code written in C language
- API provides control over full range of features
- API is structured in a way it can be easily ported/compiled on any microcontroller platform
- A simple code example is provided which shows how to use the API to perform ranging measurements with NUCLEO F401RE and VL53L1X expansion boards
- API documentation (.chm and .html) provided

Figure 1. VL53L1X module



# 1 Revision history

Table 1. Document revision history

Date	Revision	Changes
01-Feb-2018	1	Initial release

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