STSW-IMG031

Data brief

Linux driver for the VL53L4CX Time-of-Flight sensor with extended range measurement

Features

- Linux driver
- Based on VL53L4CX bare driver

Description

The STSW-IMG031 contains a driver running under Linux. It is based on the VL53L4CX bare driver. The user integrates the Linux device driver into the Linux as a specific implementation. Then, the Linux device driver implements the sequencing of actions, execution/threading of models, platform adaptations, and device structure allocations. The software is validated using Raspberry Pi 3. The driver is split into two parts: a kernel module and a user mode.

The VL53L4CX bare driver is a set of C functions controlling the VL53L4CX device (for example, init and ranging) to enable the development of end-user applications.

Specifically designed for long-range, multitarget measurements, the VL53L4CX provides very accurate distance measurements up to 6 m with excellent results over short distances. A new generation laser emitter with 18° field of view (FoV) improves performances under ambient light.

Thanks to ST's patented algorithms and innovative module construction, the VL53L4CX is also able to detect multiple objects within the FoV with depth understanding. ST histogram algorithms ensure cover glass crosstalk immunity beyond 80 cm and dynamic smudge compensation.

Product status link
STSW-IMG031

Revision history

Table 1. **Document revision history**

Date	Version	Changes
15-Oct-2021	1	Initial release