

Ultra lite driver (ULD) application programming interface (API) for the VL53L4CD Time-of-Flight high accuracy proximity sensor



Features

- VL53L4CD_ULD 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
- Several example codes showing how to use the API
- API documentation VL53L4CD_ULD API user manual (UM2931) included

Description

The VL53L4CD_ULD API is a set of C functions controlling the VL53L4CD device (for example, init and ranging) to enable the development of end-user applications. The VL53L4CD ULD is an optimized driver with only two files required for basic ranging. The API 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.

Specifically designed for proximity and short-range measurements, the VL53L4CD provides very accurate distance measurements from only 1 mm up to 1200 mm. A new generation laser emitter with 18° FoV improves performances under ambient light, with ranging speed up to 100 Hz.

With very low power consumption, thanks to an Autonomous mode with programmable distance threshold, the VL53L4CD is ideal for use in battery powered devices. Its fully embedded on-chip processing helps to reduce design complexity as well as BOM cost since less powerful and less expensive microcontrollers can be used.

Product status link

[STSW-IMG026](#)

Revision history

Table 1. Document revision history

Date	Version	Changes
15-Oct-2021	1	Initial release

IMPORTANT NOTICE – PLEASE READ CAREFULLY

STMicroelectronics NV and its subsidiaries (“ST”) reserve the right to make changes, corrections, enhancements, modifications, and improvements to ST products and/or to this document at any time without notice. Purchasers should obtain the latest relevant information on ST products before placing orders. ST products are sold pursuant to ST’s terms and conditions of sale in place at the time of order acknowledgement.

Purchasers are solely responsible for the choice, selection, and use of ST products and ST assumes no liability for application assistance or the design of Purchasers’ products.

No license, express or implied, to any intellectual property right is granted by ST herein.

Resale of ST products with provisions different from the information set forth herein shall void any warranty granted by ST for such product.

ST and the ST logo are trademarks of ST. For additional information about ST trademarks, please refer to www.st.com/trademarks. All other product or service names are the property of their respective owners.

Information in this document supersedes and replaces information previously supplied in any prior versions of this document.

© 2021 STMicroelectronics – All rights reserved