

P-NUCLEO-53L3A2 pack graphical user interface (GUI)



Features

- Live display of:
 - ranging distance in centimeters
 - signal strength
- Calibration procedure
- Maximum and minimum ranging threshold controls
- Data log outputs
- I2C transaction recording

Description

The STSW-IMG016 is a GUI for Windows 7 and Windows 10. The GUI controls the P-NUCLEO-53L3A2 pack which consists of the X-NUCLEO-53L3A2 expansion board connected to the STM32F401RE nucleo board.

It is possible to control one VL53L3CX external breakout board when it is connected to the X-NUCLEO-53L3A2 expansion board through one of the dedicated connectors.

The VL53L3CX is the latest Time-of-Flight (ToF) product from STMicroelectronics and embeds ST's third generation FlightSense patented technology. It combines a high performance proximity and ranging sensor, with multi target distance measurements and automatic smudge correction. The miniature reflowable package integrates a VCSEL 940 nm IR light emitter, a single photon avalanche diode (SPAD) array, and physical infrared filters to achieve the best ranging performance in various ambient lighting conditions, with a wide range of cover glass windows.

To install the STSW-IMG016 GUI, refer to the X-NUCLEO-53L3A2 quick start guide.

Revision history

Table 1. Document revision history

Date	Version	Changes
16-Apr-2020	1	Initial release

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