STSW-IMG004

P-NUCLEO-6180X1 and P-NUCLEO-6180X2 packs PC graphical user interface (GUI)

Data brief

Features

- PC screen display for
  - Ranging sensor
  - Signal strength
  - Ambient light sensor
- Calibration procedure
- Maximum and minimum ranging threshold controls
- Control up to four VL6180X
- Data logs output
- I2C transaction recording

Description

STSW-IMG004 is a personal computer graphical user interface for Windows vista, Windows 7 and Windows 8.
The GUI allows to control through an STM32 NUCLEO board the X-NUCLEO-6180XA1 expansion board, and up to three VL6180X-SATEL satellites boards connected to the X-NUCLEO-6180XA1.

It can be used with two NUCLEO packs, the P-NUCLEO-6180X1 based on the STM32F401RE, and the P-NUCLEO-6180X2 based on the STM32L053R8.

The VL6180X is the latest product based on ST's patented FlightSense™ technology. This is a ground-breaking technology allowing absolute distance to be measured independent 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 VL6180X precisely measures the time the light takes to travel to the nearest object and reflect back to the sensor (Time-of-Flight).

To install the PC GUI, refer to the following software installation user manual:
"UM1876 Getting started with proximity, gesture, ambient light sensor software expansion for STM32Cube".

Revision history

Table 1. Document revision history

Date	Revision	Changes
15-Apr-2015	1	Initial release.
02 June-2015	2	Update Description section