

## VL6180X premium evaluation kit (EVK)

Data brief



### Description

The VL6180X premium evaluation kit demonstrates the basic proximity, ranging and light sensing capabilities of the VL6180X sensor.

The evaluation kit is supplied with a cover glass material and a set of physical spacers to allow the user to understand how the device will behave in different setups.

The evaluation kit can either be run in the standard demo mode or in the developer mode.

In demo mode, the customer can observe the basic ranging capabilities of the device, and also modify many internal register settings via the SW GUI. In addition there is also the option to data log the system state when a range or ambient light sensor measurement is performed.

In the developer mode it is possible to directly load a custom I<sup>2</sup>C setup via the customer interface port to configure the device as required.

### Features

- VL6180X proximity sensor, gesture and ambient light sensor (ALS)
- Demo mode
  - Connected directly to PC via USB (cable provided)
  - STM32 provides USB to I2C bridge to all direct communication
  - All power is derived from USB
- Developer mode
  - Device fully controlled in developer mode via I<sup>2</sup>C bus and power and ground
  - The device GPIO signal can be used as interrupts
- 2 push buttons
  - Micro RST, returns STM32 to default state
  - Sensor RST, performs full power down reset of VL6180X
- Software graphical user interface (GUI), download from [www.st.com](http://www.st.com)
- Cover glass and full set of physical spacer material provided

**Table 1. Ordering information**

Order code	Description
MOB-EK2-180-03	VL6180X premium evaluation kit

**Revision history****Table 2. Document revision history**

<b>Date</b>	<b>Revision</b>	<b>Changes</b>
26-May-2014	1	Initial release.
10-Jun-2014	2	Change document properties
01-Oct-2014	3	Update disclaimer

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