

**VL6180X satellite boards compatible with VL6180X boards****Data brief**

- Full system SW supplied, download from [www.st.com/vl6180x](http://www.st.com/vl6180x)

**Description**

VL6180X proximity sensor, based on ST's FlightSense™ Time-of-Flight technology, providing very accurate ranging information, as well as ambient light sensing (ALS) information. The range measurements are independent of the target reflectance.

Thanks to the 2.8V regulator on the back side of the PCB, VL6180X satellite board can be used in all 3.3V up to 10V supply applications.

The PCB part supporting the 2.54 mm connector and the regulator can be removed, allowing the use, in a 2.8V supply application, of the mini PCB through wires connections.

**Table 1. Ordering information**

Order code	Description
VL6180X-SATEL	Two VL6180X satellite boards

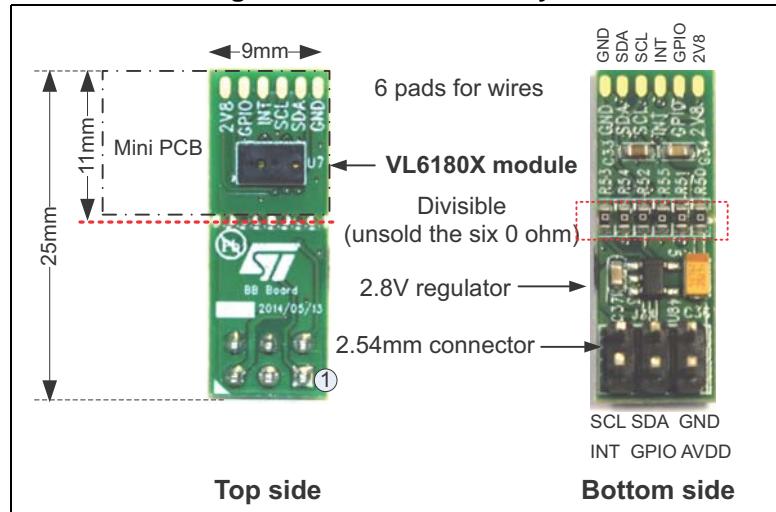
**Features**

- Each board integrates:
  - VL6180X 3-in-1 module (proximity, gesture and ambient light sensor).
  - 2.8V output regulator.
- Thanks to its small form factor, VL6180X satellite board can be easily integrated in the customer device.
- Compatible with X-NUCLEO-6180XA1
  - Through the 2.54mm connector, up to 3 satellite VL6180X boards can be plugged into the expansion board.
- VL6180X satellite can be connected as well through flying wires to the VL6180X plug-in board of the explorer kit EVALKIT-VL6180X.
- Divisible PCB allowing to use mini-PCB size.

## Divisible board

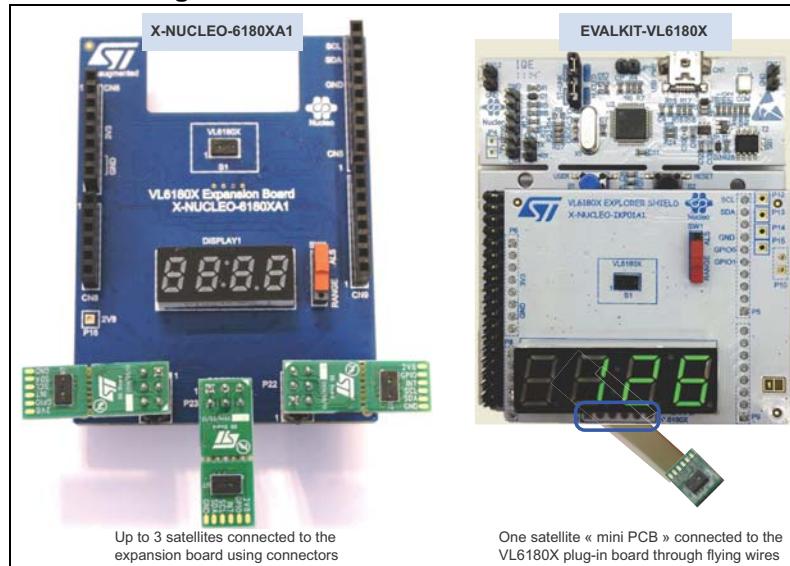
For 2.8V supply application, the satellite board can be divided along the red dotted line as shown in *Figure 1*, in order to only use the “mini PCB”, easier to integrate into a customer device due to its small form factor.

**Figure 1. Satellite board layout**



## Connection to VL6180X boards

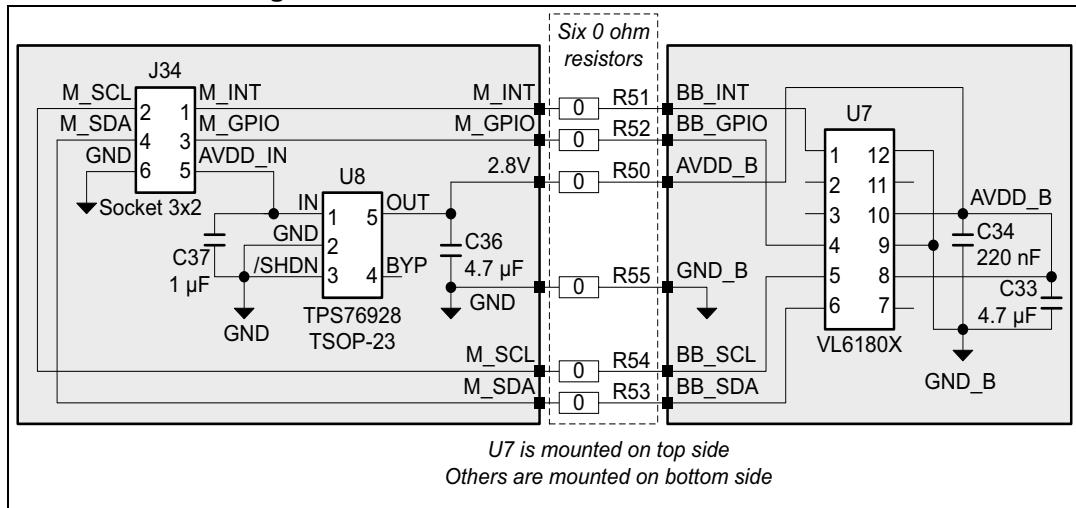
**Figure 2. Connection to VL6180X boards**



- EVALKIT-VL6180X is the first generation of evaluation kit.
- X-NUCLEO-6180XA1 is the new generation of expansion board, it can be used with all STM32 Nucleo family and can be plugged / superposed with ST expansion boards (e.g.: Bluetooth, WIFI, etc...).
- Both VL6180X boards support the same GUI (Graphical User Interface) and API.

## Schematic and list of material

Figure 3. Satellite schematic and list of material



## Revision history

Table 2. Document revision history

Date	Revision	Changes
15-Jan-2015	1	Initial release.

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