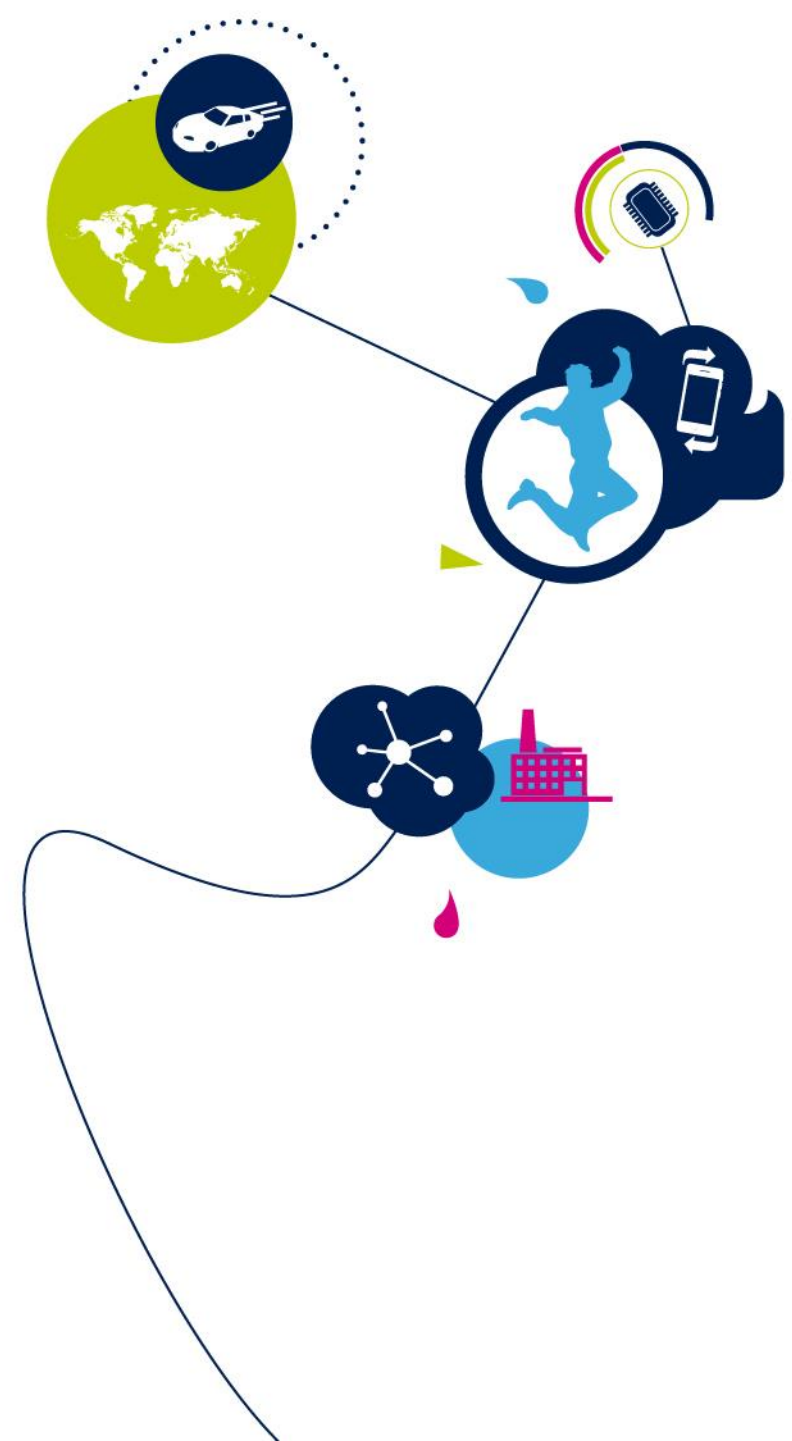


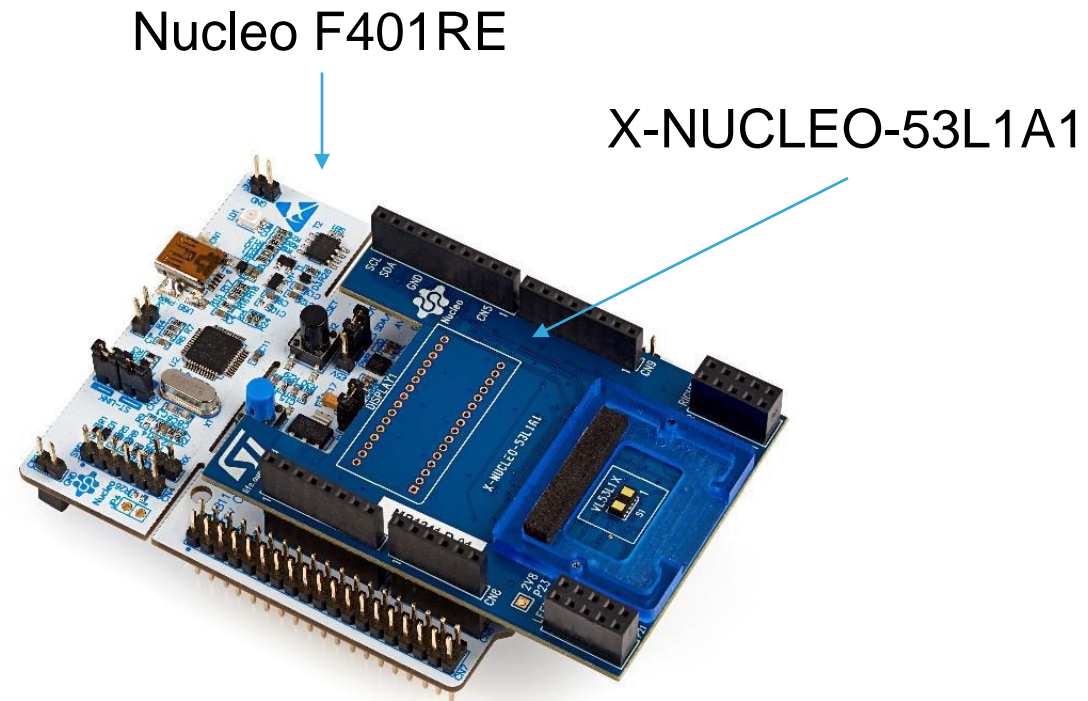
# API Example Setup Guide



# Hardware and software requirements

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- Hardware requirements:
  - Nucleo F401RE
  - X-NUCLEO-53L1A1
  - Windows PC
- SW requirements
  - STSW-XXX



# Example folder content

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- Search for STSW-XXX on st.com, download and unzip the file in your hard drive C:\ recommended.
- Go to the “Example” folder
- The example project has been pre-compiled for IAR, KEIL and Eclipse as shown below

Contains binary application file

VL53L1X ULD API and other STM32 drivers

Precompiled IAR project

Precompiled KEIL project

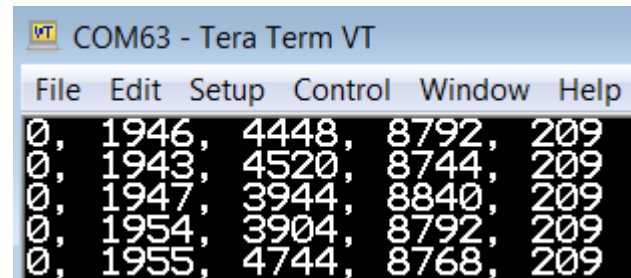
Precompiled Eclipse project

Name	Date modified
Binary	4/25/2019 11:33 A...
Documentation	4/25/2019 2:33 PM
Drivers	4/25/2019 11:33 A...
EWARM	4/25/2019 11:33 A...
Inc	4/25/2019 11:33 A...
MDK-ARM	4/25/2019 11:33 A...
Src	4/25/2019 11:33 A...
SW4STM32	4/25/2019 11:33 A...
NucleoF401RE_53L1_Expansion.ioc	12/8/2017 1:13 PM
readme.txt	1/11/2018 10:10 PM

# Run the example

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- Plug the expansion board on the F401RE Nucleo board
- Connect the F401RE Nucleo board to a PC USB port
- Flash the demo application by drag and drop the binary file located in the Binary directory, the demo will start immediately once the FW is loaded
- Open a Tera-Term to monitor the ranging data



The screenshot shows a Tera-Term VT window titled 'COM63 - Tera Term VT'. The window has a menu bar with 'File', 'Edit', 'Setup', 'Control', 'Window', and 'Help'. The main display area shows a table of ranging data with five columns: Range status, distance in mm, return signal rate, ambient rate, and number of actual active SPAD. The data is as follows:

Range status	distance in mm	return signal rate	ambient rate	number of actual active SPAD
0	1946	4448	8792	209
0	1943	4520	8744	209
0	1947	3944	8840	209
0	1954	3904	8792	209
0	1955	4744	8768	209

Range status, distance in mm, return signal rate, ambient rate, number of actual active SPAD

# Modifying, compiling and running the example code

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- The example code is precompiled for the most popular professional IDEs (KEIL,IAR and Eclipse)
- I suppose that you already have your favourite IDE and familiar with.