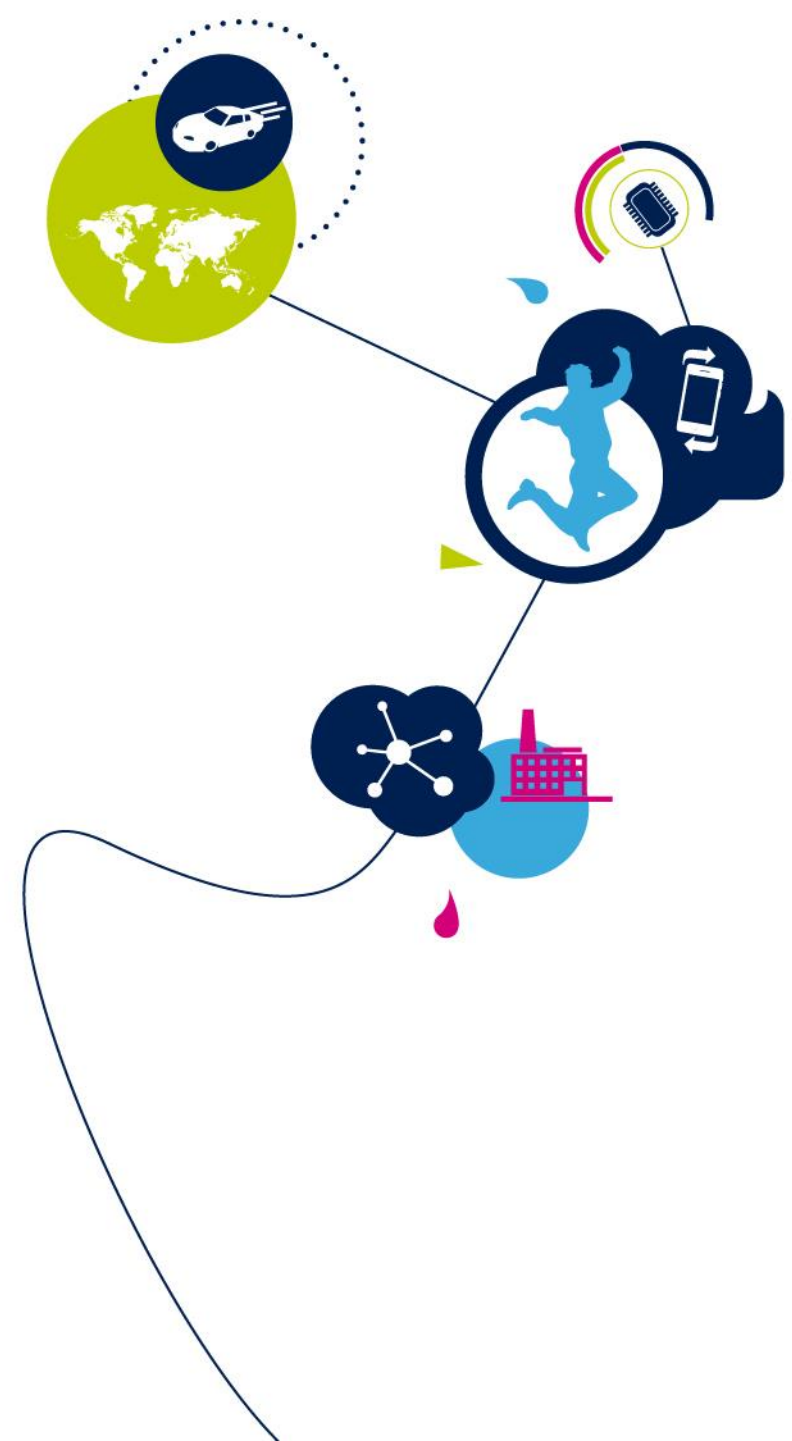


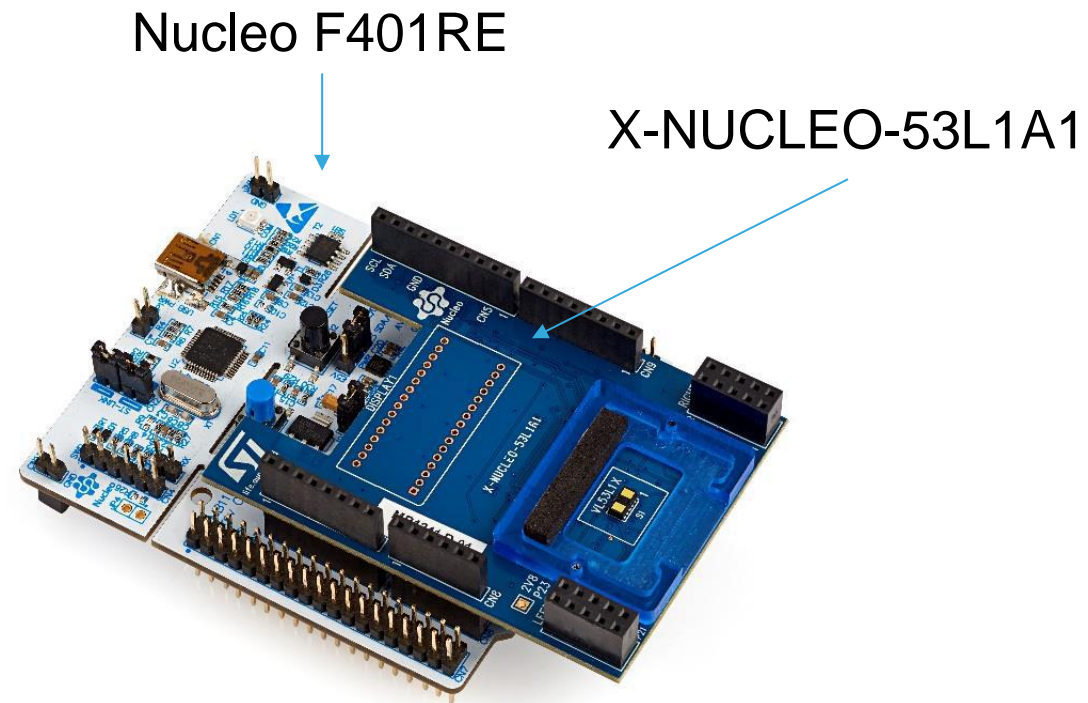
API Example Setup Guide



Hardware and software requirements

2

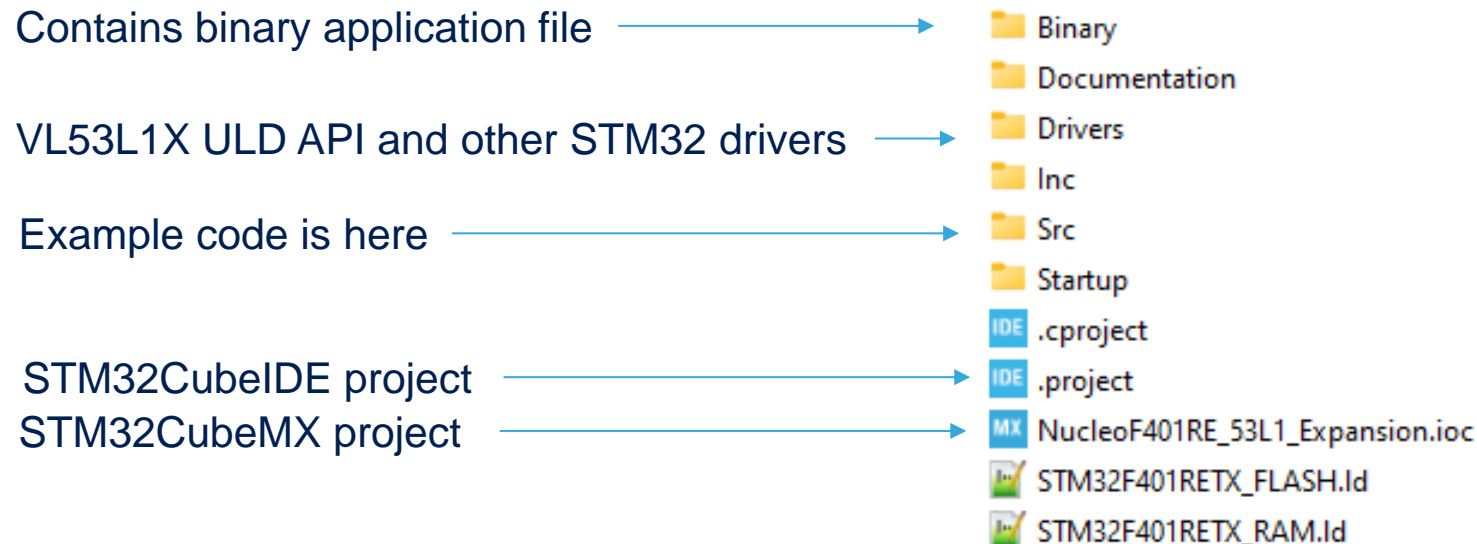
- Hardware requirements:
 - Nucleo F401RE
 - X-NUCLEO-53L1A1
 - Windows PC
- SW requirements
 - STSW-IMG009



Example folder content

3

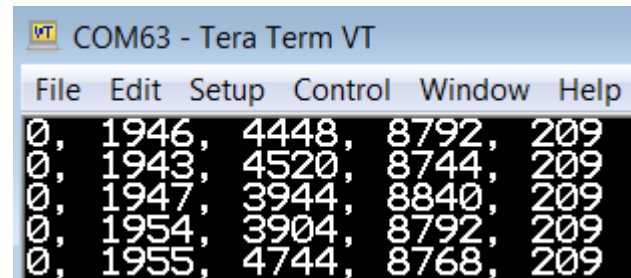
- Search for STSW-IMG009 on st.com, download and unzip the file in your hard drive C:\ recommended.
- Go to the “Example” folder
- The example project has been pre-compiled for STM32CubeIDE as shown below



Run the example

4

- 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

compiling and running the example code

- The example code is prepared for the STM32CubeIDE

