How to setup Blinky on Nucleo-F466RE board.

- 1. Open any Integrated Development Environment (IDE)/compiler that is available. For this task, we are using STM32CubeIDE compiler.
- 2. Connect the Nucleo board to your computer.
- 3. From the compiler interface, select *File* > *New* > *STM32* Project to start a new project. A new interface will pop-out. From here, we select our board by searching Nucleo-F466RE board.
- 4. Set the name of the project to Blinky and finish.
- 5. After that, at the left side, you will see a list of files associated with the board configuration.
- 6. The only things we care about is main.c file. To open this file, on the left side, double click Src > main.c.
- 7. In this main.c file, we need to edit the *while(1) function*.
- 8. Before editing this main.c file, we need to check the pin configuration for LED so that to make sure, we are assigning a correct pin.
- 9. To do so, we need to download/see the board configuration either download or open .ioc file which is located at the left side of the interface.
- 10. After confirming our LED pin configuration, in this case our Nucleo-F466RE board is GPIOA PIN 5, we go back to main.c file and edit it.
- 11. Go to while(1) function and add this line:

```
HAL_GPIO_TogglePin(GPIOA, GPIO_PIN_5); HAL_Delay (1000);
```

- 12. After adding those two lines, go to the *Project* > *Build Project* to compile the code.
- 13. Go to Run > Debug As > STM32 MCU C/C++ Application.
- 14. An interface will pop-out, just leave it as default and click OK.
- 15. Confirmation windows will pop-out be asked to change perspective. Click switch to open a new windows perspective, where a new toolbar at the top can be seen.
- 16. At the toolbar, you can see a play button. Click the play button to start running your Blinky application on your Nucleo board.
- 17. You can see your *GREEN LED* labelled *LD2* turn on and off. To change the timing of the on and off the the *LD2*, you can edit the *HAL_DELAY(TIME)* according to your preference.

Video