Getting Started with STM8S using STVD

Installation Procedure

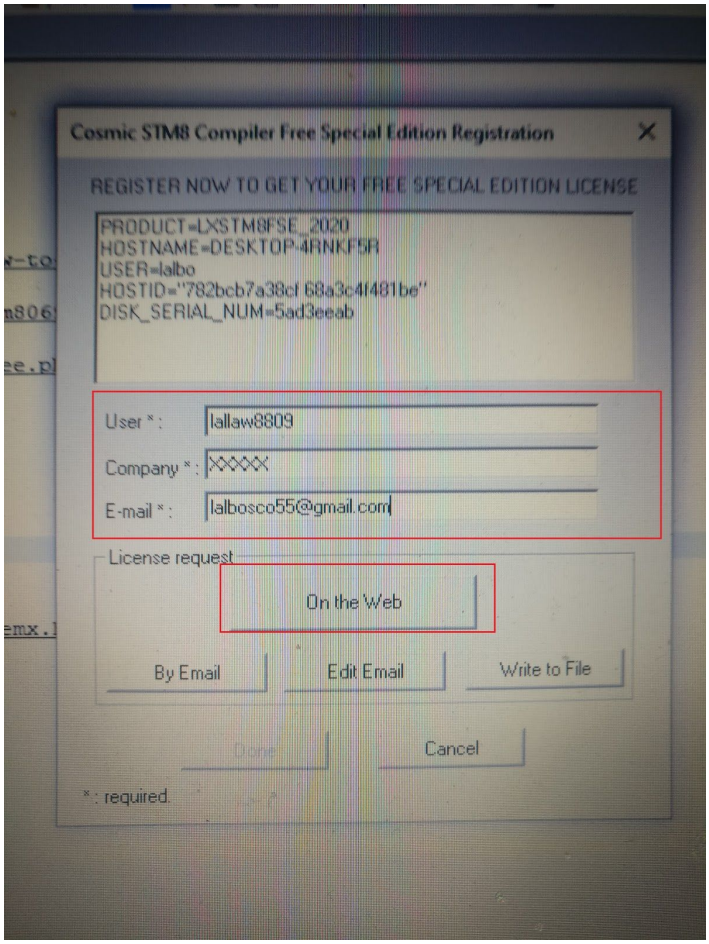
Step 1: [Download and Install ST Visual Studio (STVP)]

Step 2: Setup the Cosmic C Compiler

[Download and Install the Cosmic C COmpiler]

Step 3: Get the free license key for the Installation process

During the installation of Cosmic C compiler, you will get a pop up as below and fill the information and click the ‘On the Web’



You will get a license key to your gmail as given in the below picture.

lallaw8809,

Thank you for using Cosmic Products.

According to your request, please find attached the free license that will allow you to use the STM8 and STM32 (limited) compilers for 1 year.

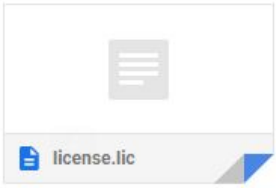
This file must be copied into the "license" sub-folder of the compiler installation folder.

Support is provided via:

- support.stm8.free@cosmic.fr or
- the STM8 discussion forum on ST Community website

Regards,

The Cosmic Software Team.

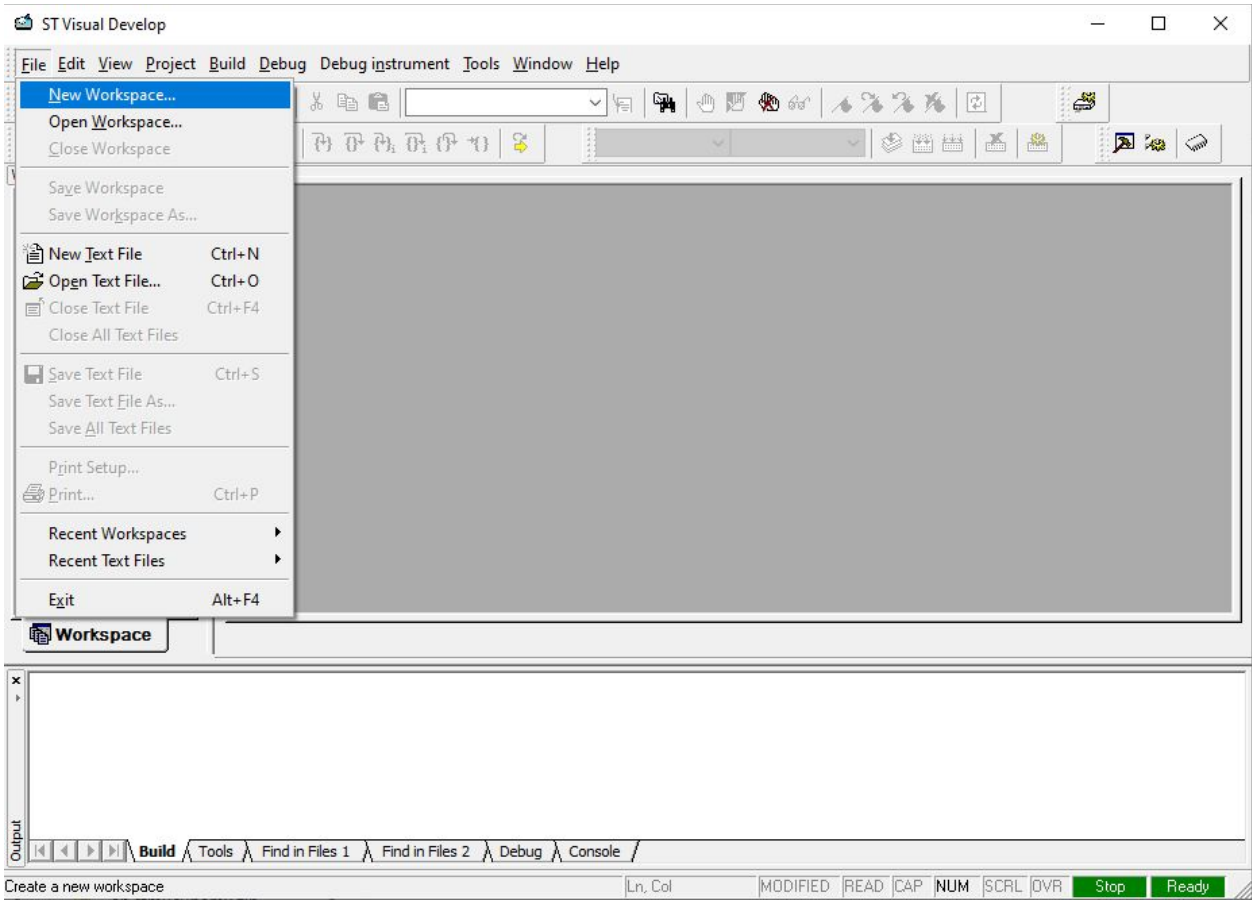


Step 4: Download the license.lic
Step 5: Get the Standard Peripheral Library for STM8S02x.

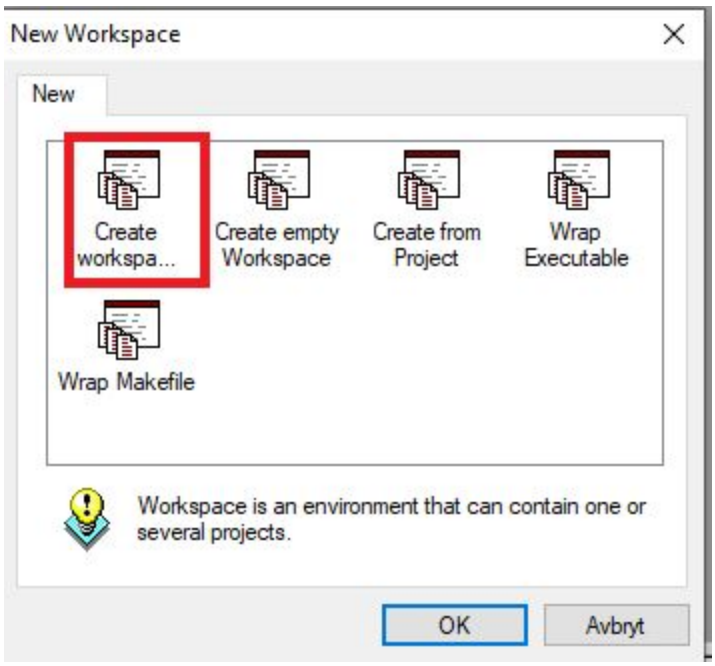
https://github.com/lallaw8809/STM-Tutorials/tree/master/STM8S02xx/STM8S02xx_Lib

Step 6: Start the first project

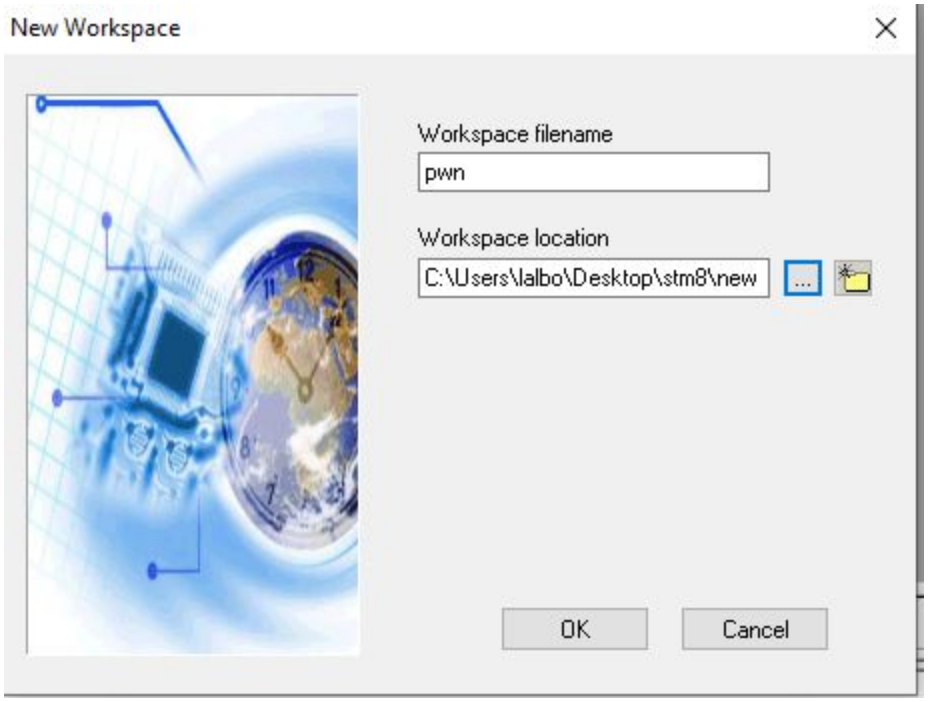
Start the STVD and open the File..> New workspace



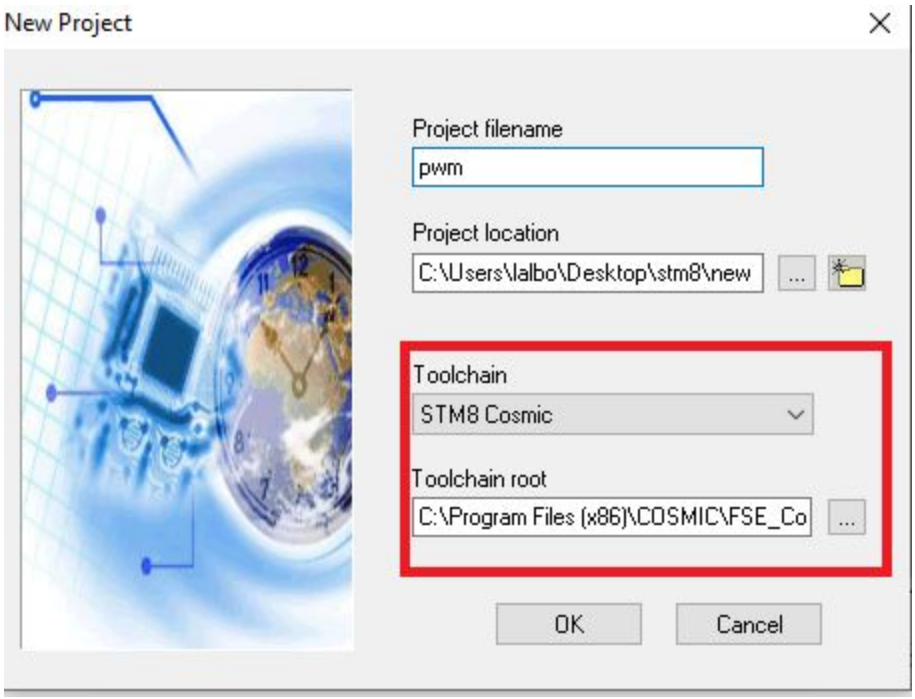
Create a new work space



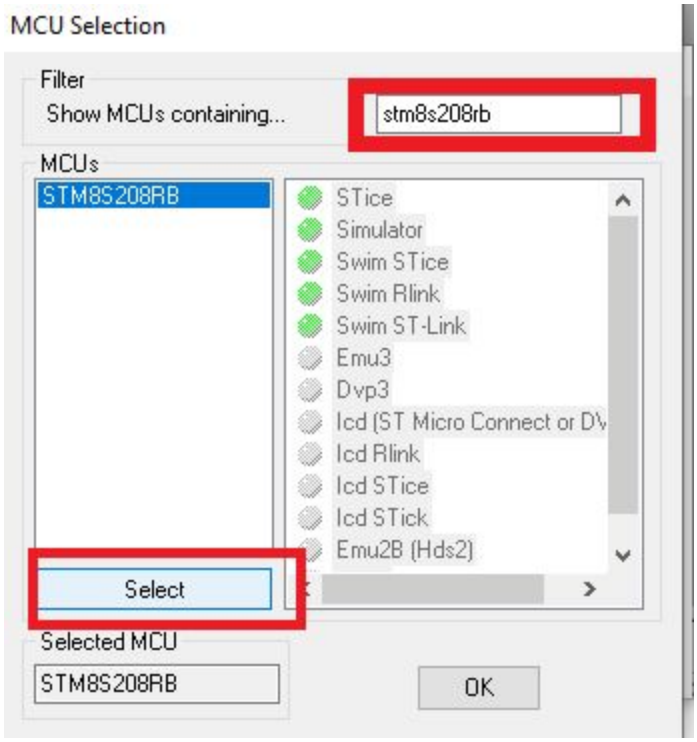
Set the location for the new workspace



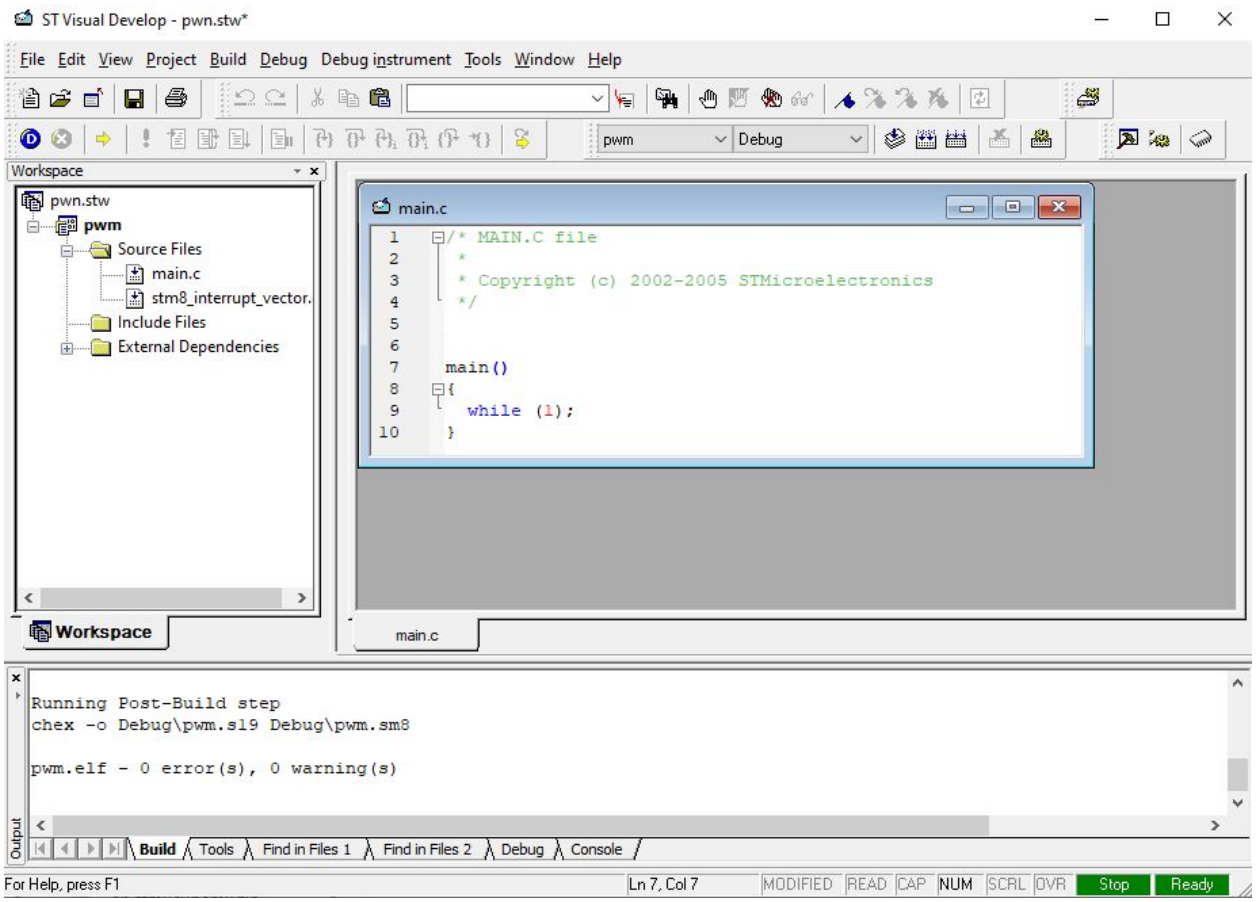
Set the tool chain location as **STM8 Cosmic**
Set the project location path (*C:\Program Files (x86)\COSMIC\FSE_Compilers\CXSTM8*)



Select the mcu

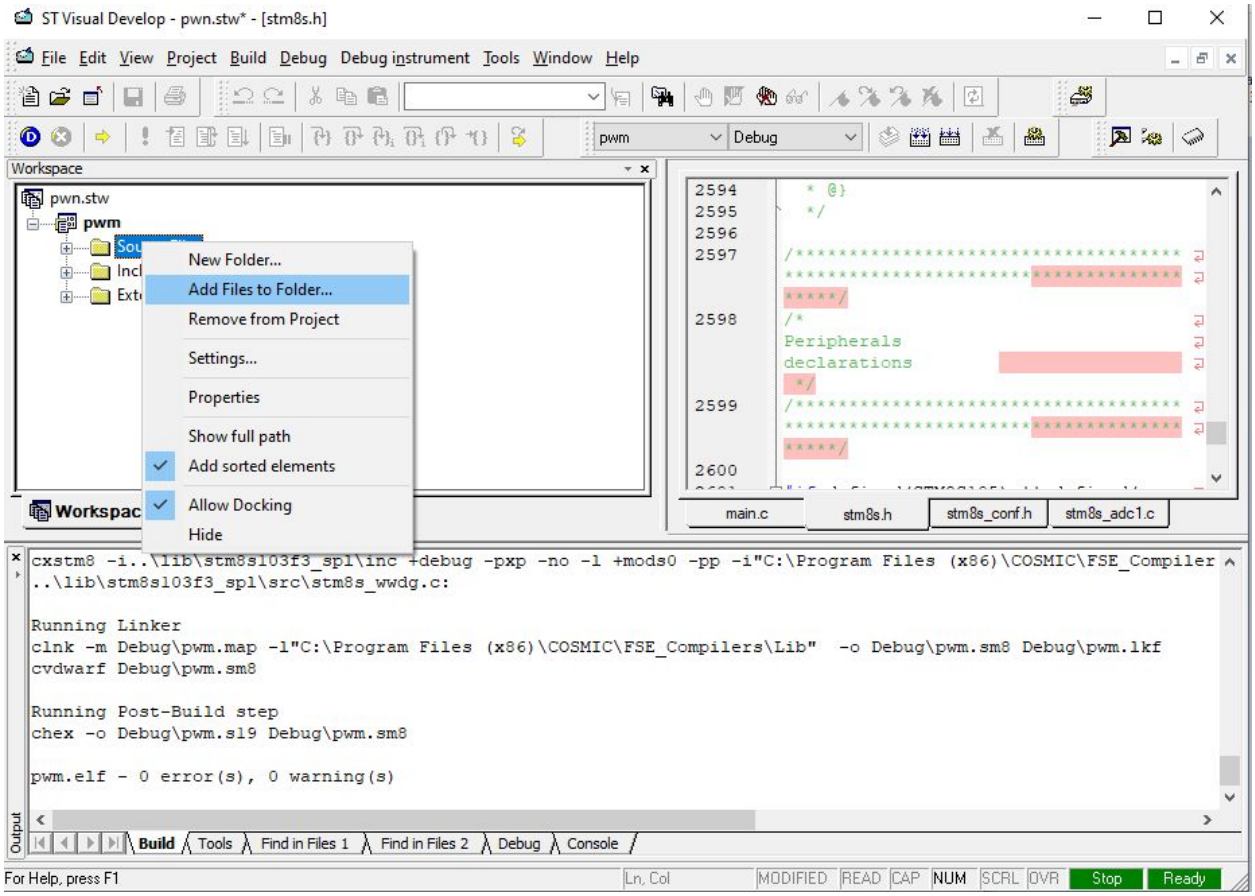


This will open a new project for STM8S103F3P on STVD, the windows should look like this when done.



Add the lib

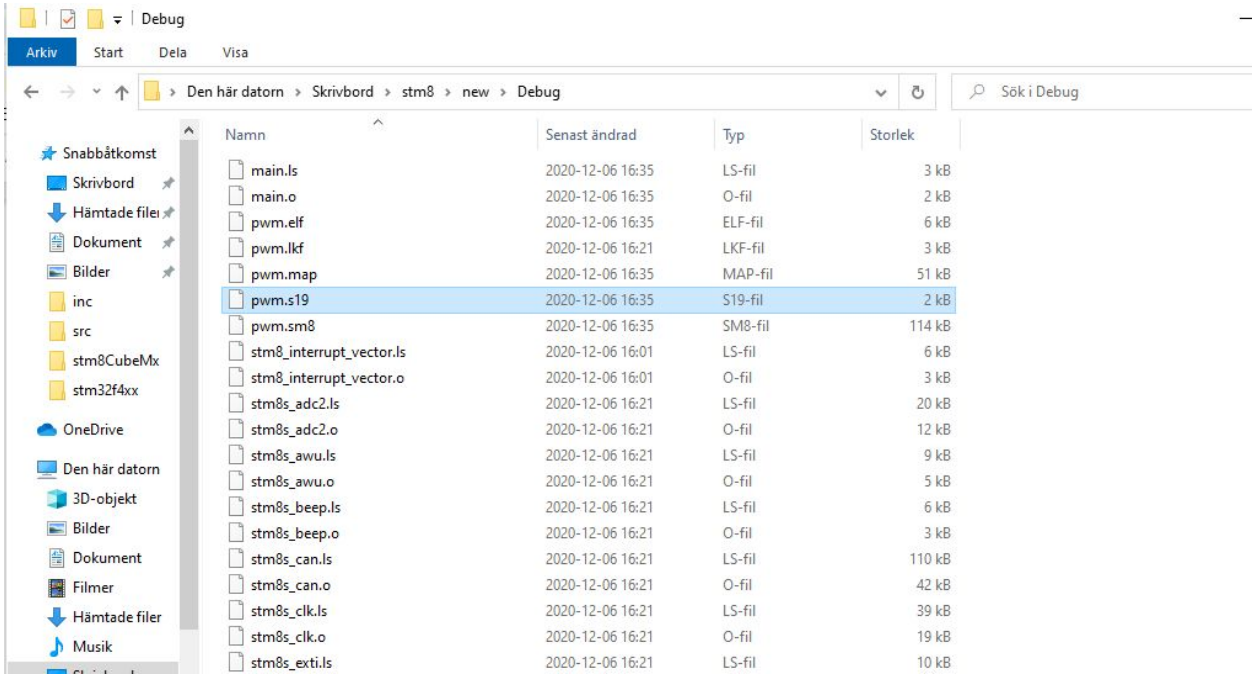
Right-click on “source file” and select “Add files to folder” to include all the c files from our SPL library (https://github.com/lallaw8809/STM-Tutorials/tree/master/STM8S02xx/STM8S02xx_Lib/src), similarly right-click on Include files to include all the header files (https://github.com/lallaw8809/STM-Tutorials/tree/master/STM8S02xx/STM8S02xx_Lib/inc). If you have any questions, you can refer to the video below. Once all the files are added, click *Build -> rebuil*d all and then Compile to check if the compiler and SPL are working as expected. If everything goes well, you should see the following screen with build result 0 error and 0 warning.



Replace main.c
https://github.com/lallaw8809/STM-Tutorials/blob/master/STM8S02xx/main.c

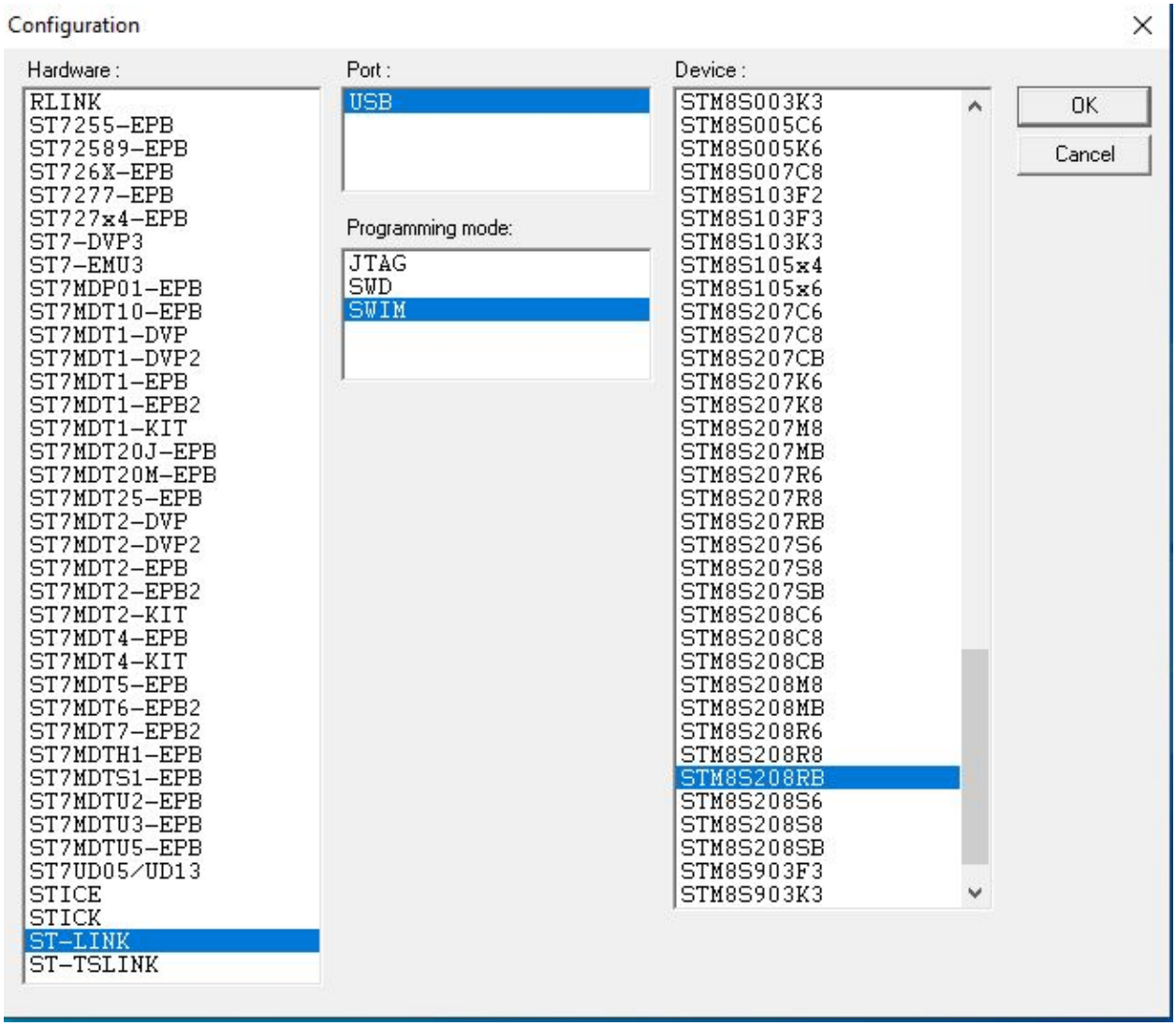
Rebuild the project

Now the binary is created under you project directory (Debug)



Flash the bin to stm8S2008RB

To upload the program, open ST Visual Programmer (STVP) which should have installed along with STVD. Then in the configuration window, select as shown in the below image and click OK.



Then click on *File->Open* and navigate to the S19 file that we showed earlier. Then to flash the device, follow *Program -> Current* Tab. If the flashing was successful, you should see the following output.

```
Verify after programming is ON.
Clear memory before loading a file is ON.
Erase device memory before programming (when available) is OFF
Display a popup window when an error occurs is ON.
Log activity is OFF
> Loading file C:\Users\karth\Desktop\BareMinimum\Debug\bareminimum.s19 in PROGRAM MEMORY area  ...
< File successfully loaded. File Checksum 0x5FD6
> Programming  PROGRAM MEMORY area...
Cut Version and Revision of device: 1.2
< PROGRAM MEMORY programming completed.
> Verifying PROGRAM MEMORY area...
Cut Version and Revision of device: 1.2
< PROGRAM MEMORY successfully verified.
```

Now the green LED should be blinking.