## Configuration of Microduino-CoreEFM32 development environment

\*Development environment: Simplicity Studio

\*Core board: Microduino-CoreEFM32

\*Modules to download: JLINK

- Download and installation of the development environment

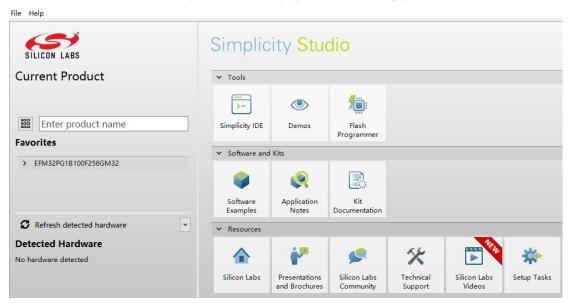
1 . The download address of the software :

http://www.silabs.com/products/mcu/Pages/simplicity-studio.aspx

We can choose the suitable version of the software for our computers, and the version downloaded here is as shown in the following picture:



- b. After download the software, you should install it step by step according to the prompt.
- c. After the installation, you will see the page in the following picture.

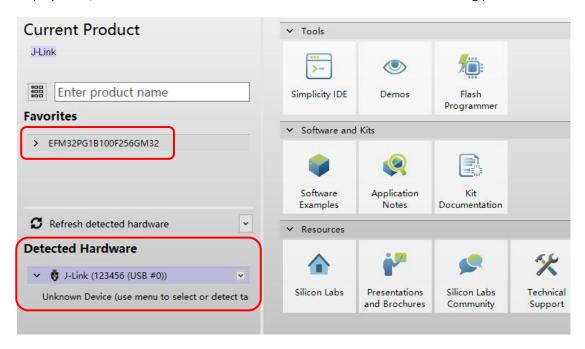


2 . The connection way of the pins when use module JLINK to download program to Microduino-CoreEFM3:

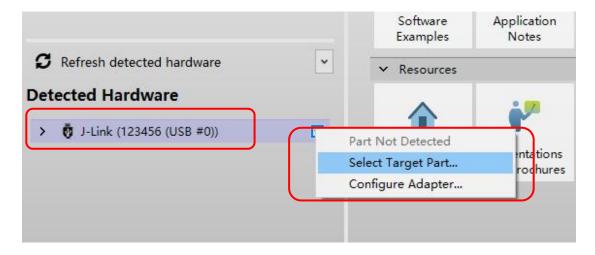
Microduino-CoreEFM32	JLINK
D5	SWD
D6	SWC
3V3	VCC
GND	GND
RST	RESET

## 3. New project and download configuration

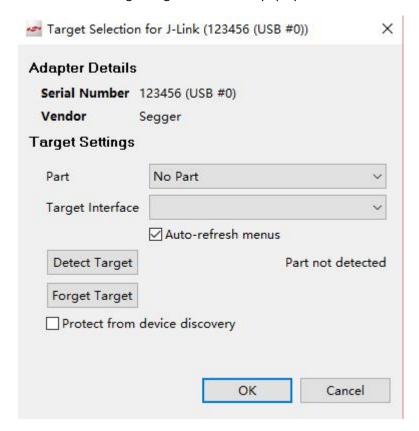
a.Open the software Simplicity Studio, and choose the type EFM32PG1B100F256GM32 of the core board. And connect the core board with JLINK, then insert them into the computer. After installing the JLINK driver, in Detected Hardware on the software Simplicity Studio's interface will display JLINK, but it is Unknown Device. The interface is as shown in the following picture:



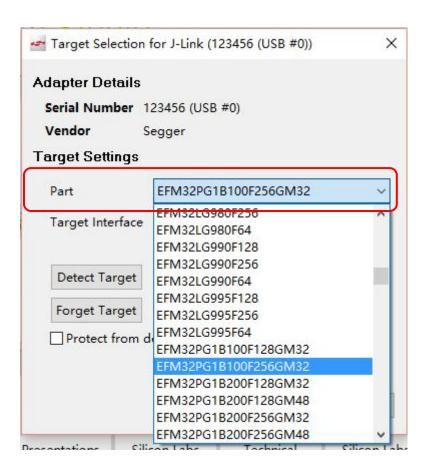
b.Left click J-LINK, , and the following select box will appear. Choose according to the following picture:



c.Then the following configuration box will pop up:



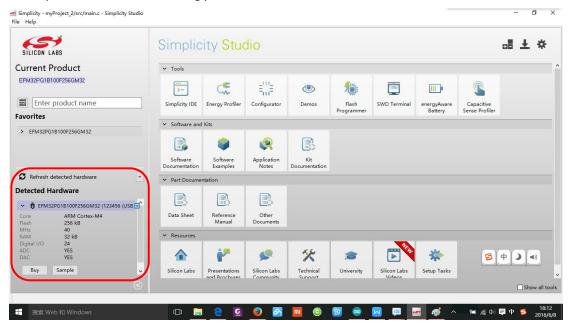
d.Find EFM32PG1B100F256GM32 in the option Part and select it:



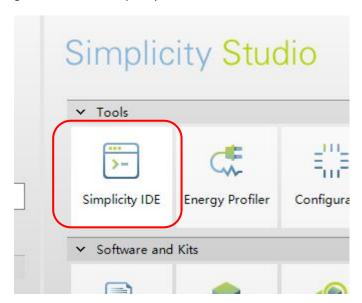
e. After selecting the Part, Target Interface is SWD by default, and click OK.



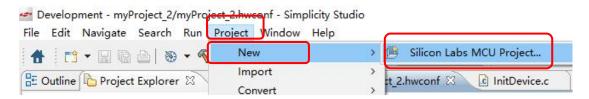
f.Then return to the initial interface, and the specific hardware information in Detected Hardware already, as shown in the following picture:



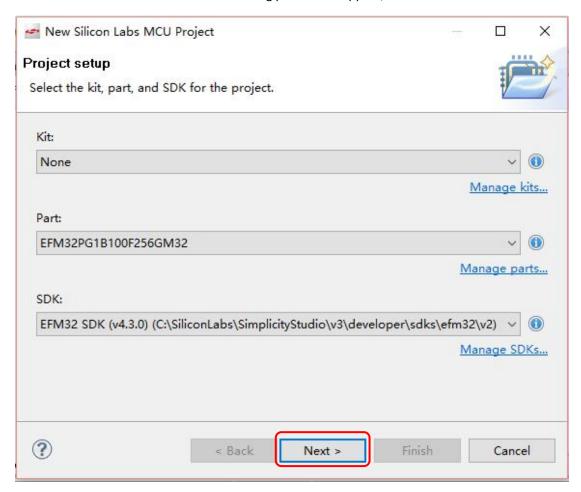
g.Then click the Simplicity IDE in the initial interface to enter the programming interface.



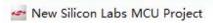
h.Then start the new project, and choose and configure according to the following chart step by step.



i.Then the interface as shown in the following picture will appear, and click NEXT.



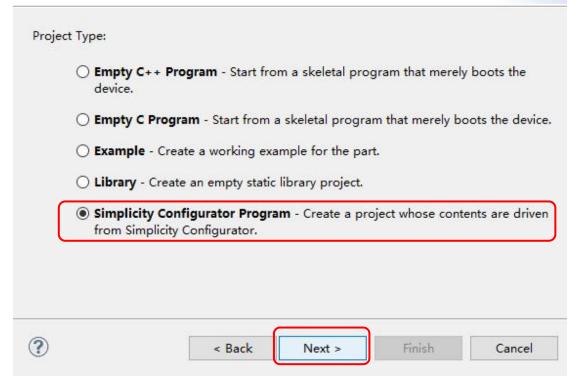
j. Then the interface as the following project shows will appear. There are several project types to select, which the users can select according to their own need. The one selected here is shown as the following picture shows:



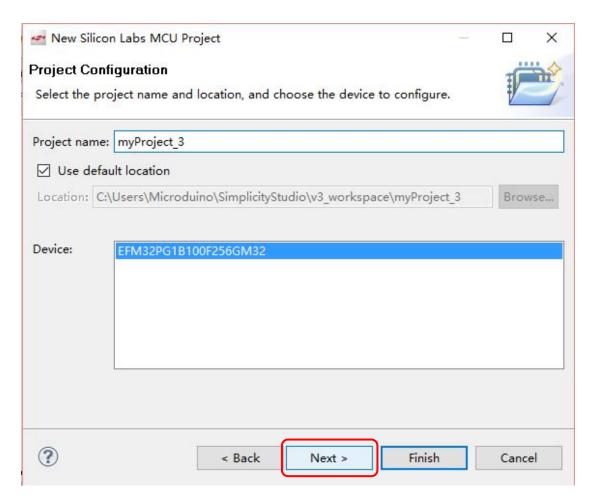
## Project setup

Select the type of project.

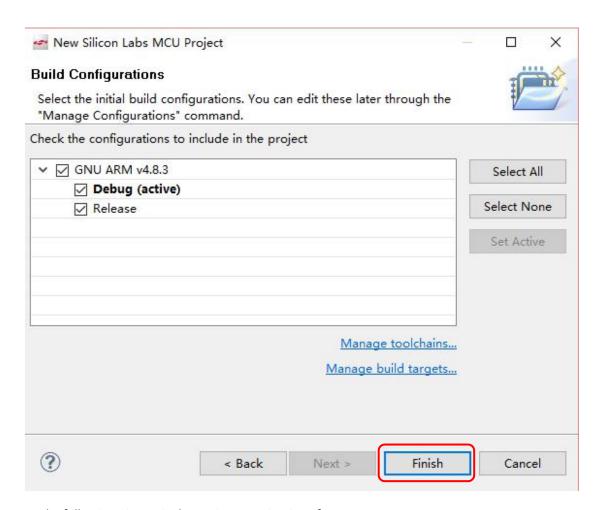




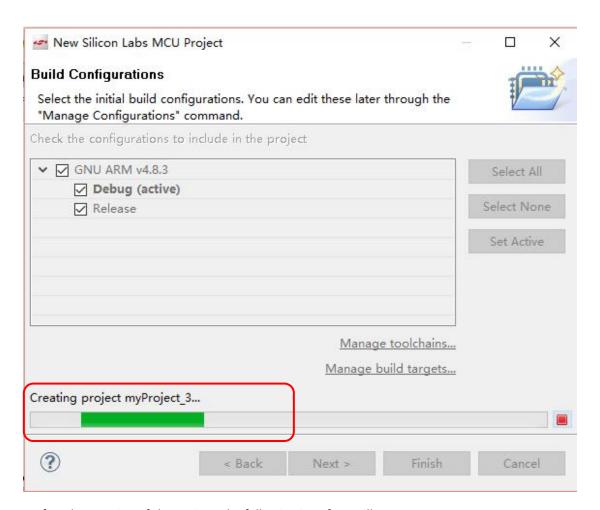
k.After selecting, click "NEXT", and the following interface will appear. You need to edit the name of the project. Device will set it as EFM32 core board that is selected before by default, and then click "NEXT".



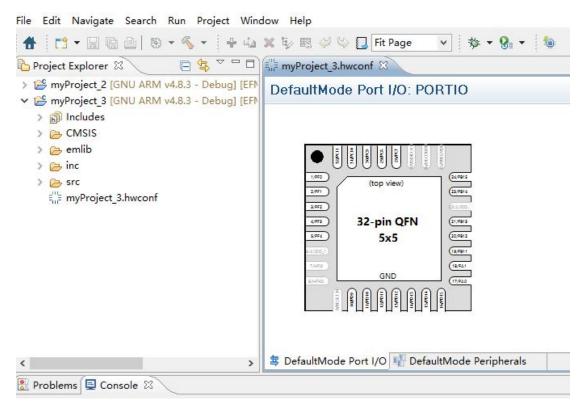
I.Then the following interface will appear, and click "Finish".



m.The following picture is the project creation interface.

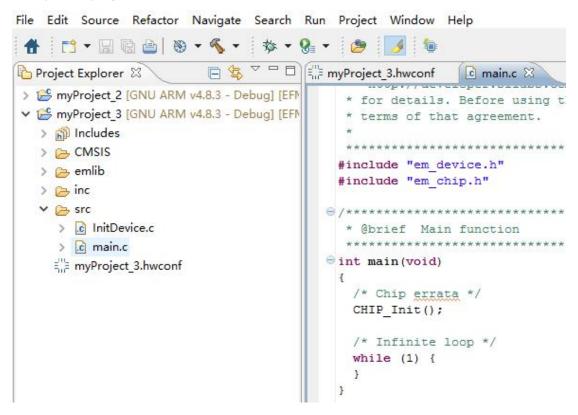


n. After the creation of the project, the following interface will appear:

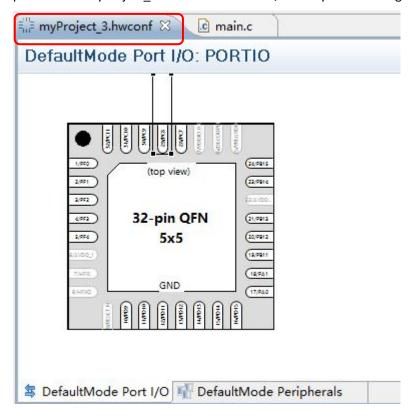


o. After the creation of the new project, open the main.c in scr, as shown in the following picture.

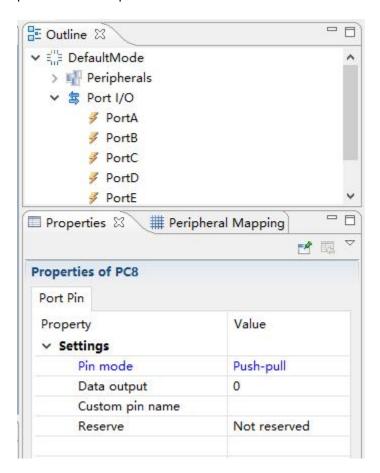
Then you can program.



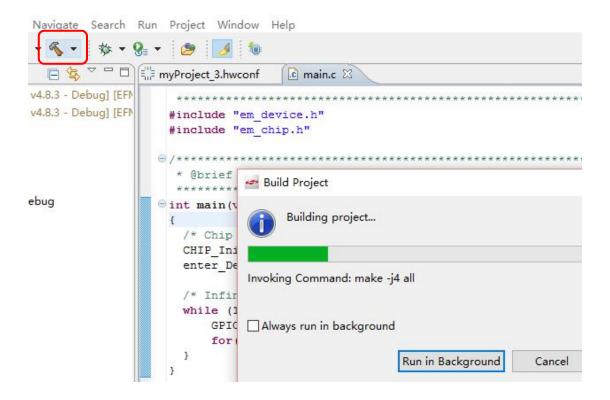
p.Clcik the "myProject\_3.hwconf" interface, where you can configure IO mode.



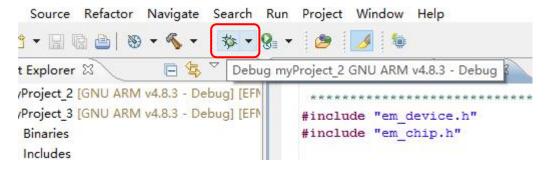
q.The detailed content of the configuration is as the interface shown in the following picture, which you can see on the left of the interface, and you should configure the Pin mode and other parameters in Properties.



r.After programming, click the hammer-shape icon on the top left corner to compile.



s.After the compilation, click the insects-shape icon next to the hammer icon to dowmload the program.



 $t. After downloading, click the \, RUN \, TO \, LINE \, in \, RUN \, to \, run \, the \, program \, online.$ 

