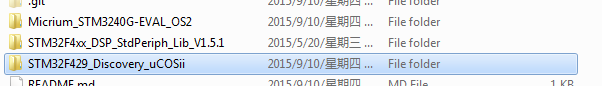
STM32F429 DISCOVERY board uCOSii transplantation Guide

1. Download STM3240G-EVAL\_OS2.zip from Micrium or from my github <https://github.com/lanniaoershi/STM32F429_Discovery_UCOSII_Transplantation/tree/master/Micrium_STM3240G-EVAL_OS2>

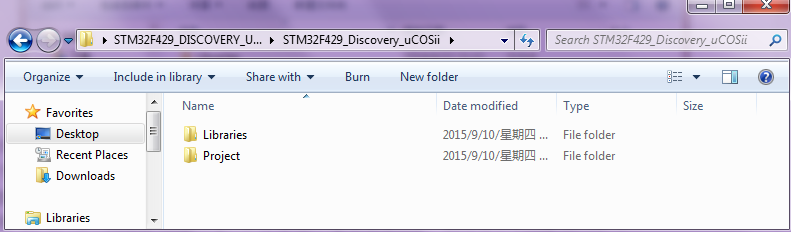
Download stm32f4\_dsp\_stdperiph\_lib.zip from ST or from my github

<https://github.com/lanniaoershi/STM32F429_Discovery_UCOSII_Transplantation/tree/master/STM32F4xx_DSP_StdPeriph_Lib_V1.5.1>

1. Create a folder for transplantation, my folder named “STM32F429\_Discovery\_uCOSii”



Create two folders in “STM32F429\_Discovery\_uCOSii”



Create folder “CMSIS” in Libraries folder,

Create folders “ARM-MDK” and “User” in Project folder.

1. Add file in to folder, put STM32F4xx\_DSP\_StdPeriph\_Lib\_V1.5.1\Libraries\STM32F4xx\_StdPeriph\_Driver whole folder in to Libraries folder create before.

Put STM32F4xx\_DSP\_StdPeriph\_Lib\_V1.5.1\Libraries\CMSIS\Device\ST\STM32F4xx\Source\Templates\arm\startup\_stm32f429\_439xx.s in to STM32F429\_Discovery\_uCOSii\Libraries\CMSIS

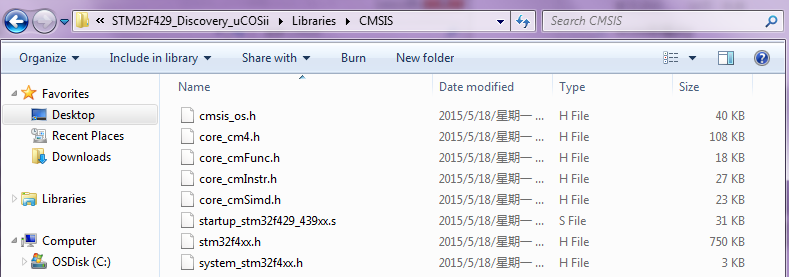
Put

STM32F4xx\_DSP\_StdPeriph\_Lib\_V1.5.1\Libraries\CMSIS\Device\ST\STM32F4xx\Include stm32f4xx.h and system\_stm32f4xx.h into STM32F429\_Discovery\_uCOSii\Libraries\CMSIS

Put STM32F4xx\_DSP\_StdPeriph\_Lib\_V1.5.1\Libraries\CMSIS\Include\core\_cm4.h and core\_cmFunc.h and core\_cmInstr.h and core\_cmSimd.h in to STM32F429\_Discovery\_uCOSii\Libraries\CMSIS

Put STM32F4xx\_DSP\_StdPeriph\_Lib\_V1.5.1\Libraries\CMSIS\RTOS\Template\cmsis\_os.h in to STM32F429\_Discovery\_uCOSii\Libraries\CMSIS

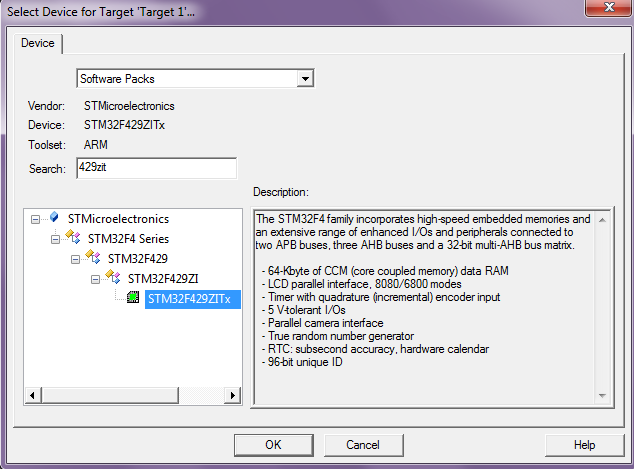
And CMSIS folder will look like



Put STM32F4xx\_DSP\_StdPeriph\_Lib\_V1.5.1\Project\STM32F4xx\_StdPeriph\_Templates

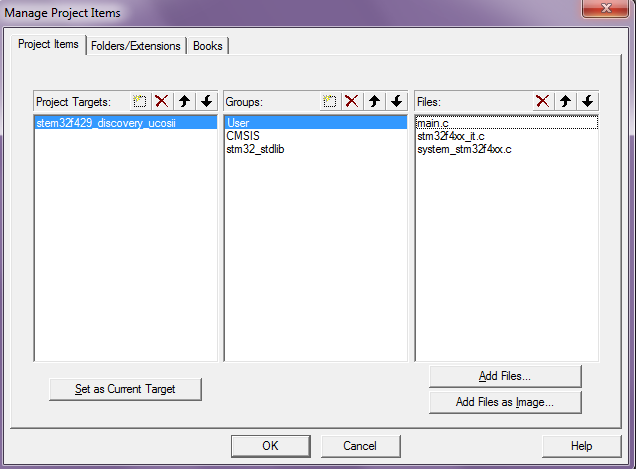
main.c main.h stm32f4xx\_conf.h stm32f4xx\_it.c stm32f4xx\_it.h system\_stm32f4xx.c in to STM32F429\_Discovery\_uCOSii\Project/User

1. Create new Keil project, and chose 429ZITx

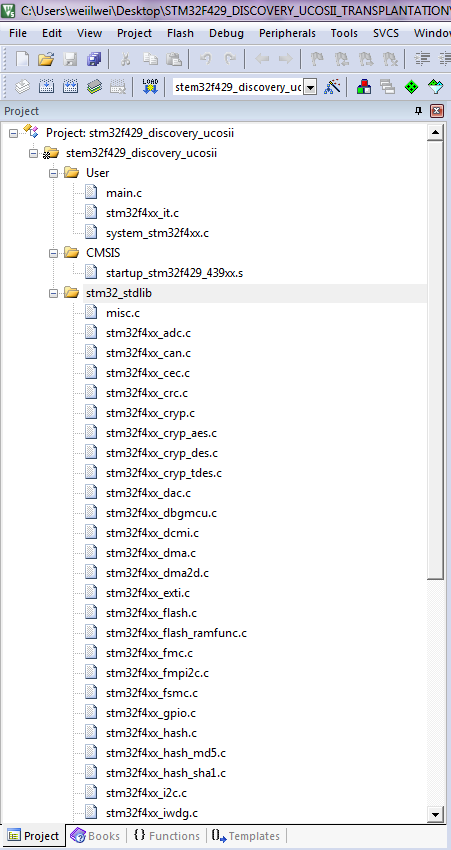


Then “OK”, if asking put startup file in to project, chose no, and now have a clean 429ZITx project.

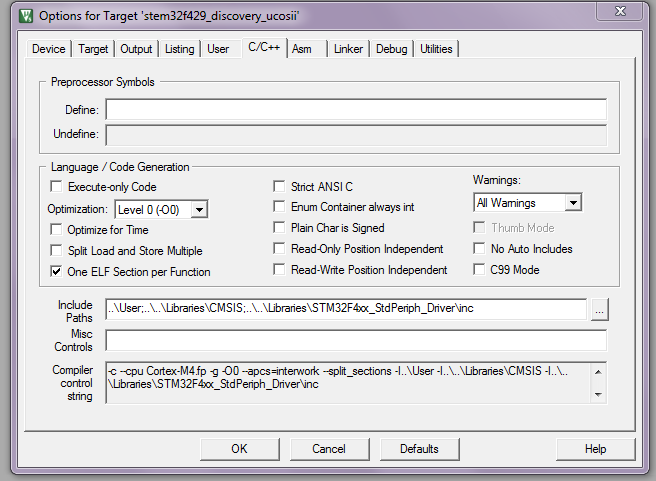
Project-> manage-> Project Items… create group and add files



Finally project structure look like



Add build include path

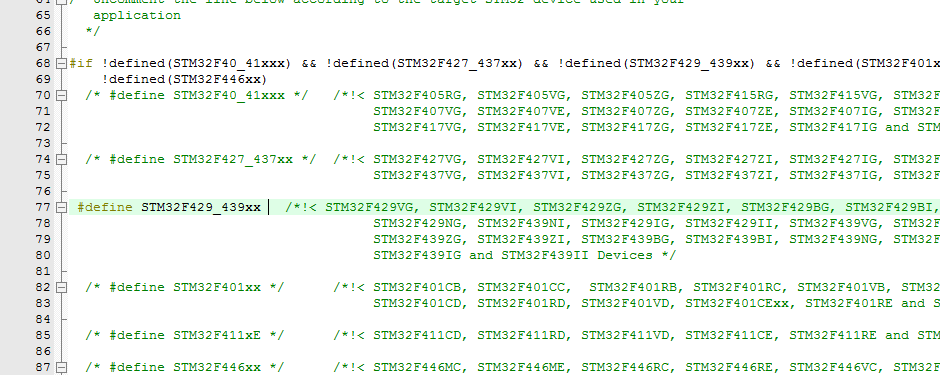


Then build, it should be have some error, here listed all error I have met

1. Not specific product

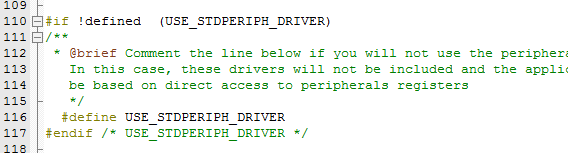


Solution: open stm32f4xx.h in STM32F429\_Discovery\_uCOSii\Libraries\CMSIS uncomment “#define STM32F429\_439xx”



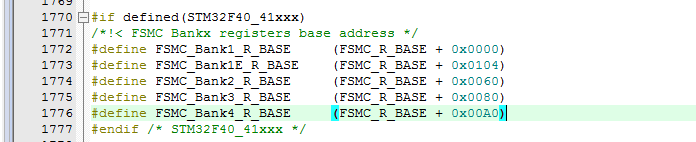
1. identifier "RCC\_ClocksTypeDef" is undefined

Cause by stm32f4xx\_rcc.h not include, and because in stm32f4xx.h “USE\_STDPERIPH\_DRIVER” is commented, uncomment it.



1. identifier "FSMC\_XXXXXXXXX" is undefined

In file stm32f4xx.h FSMC\_XXXX was define for F40\_41xx



Delete stm32f4xx\_fsmc.c from Libraries or un-include from build

After solved error, build should be done.

1. Option for debugger, stm32f429 discovery use on board st-link download with SWD

Set it up, and download in to discovery board.

In order to test, in main.c, code for blink led3 and led4.

Git commit point 784575d14c866d4466d2773dd3ec46b5a9fe46df