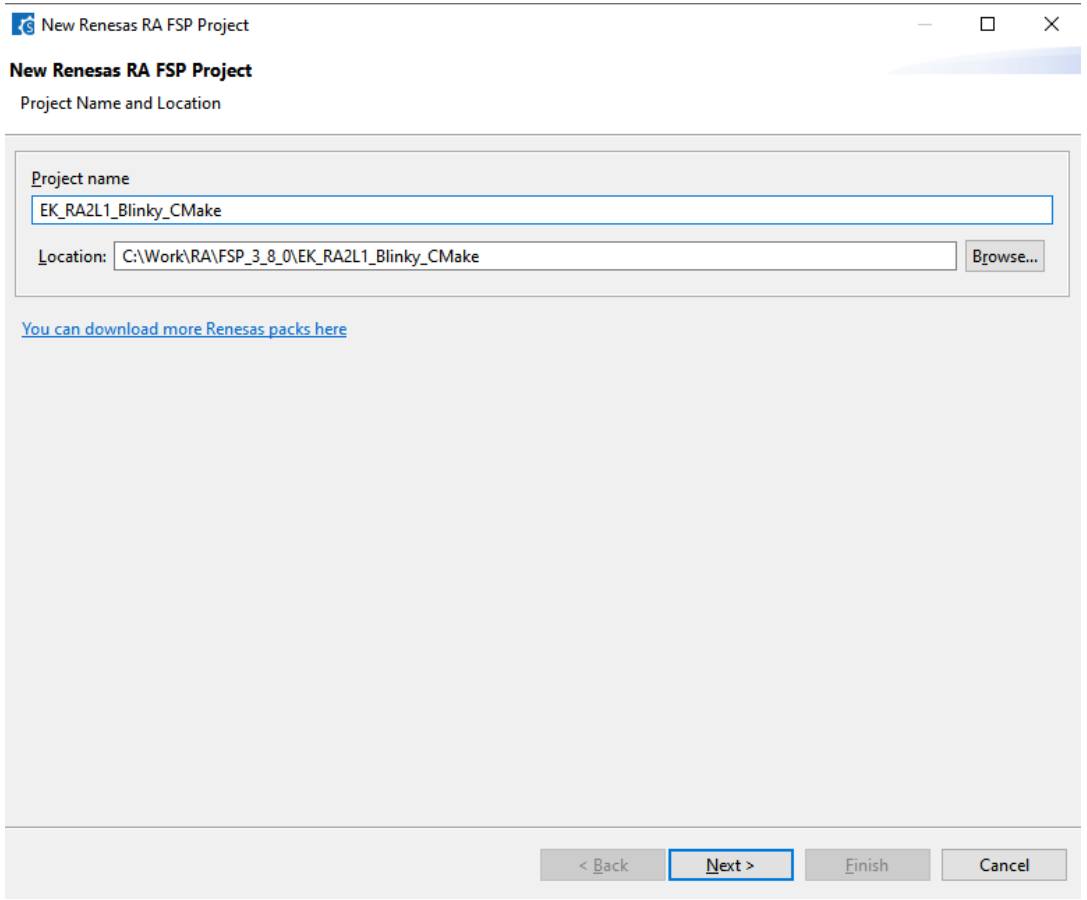
USING CMAKE

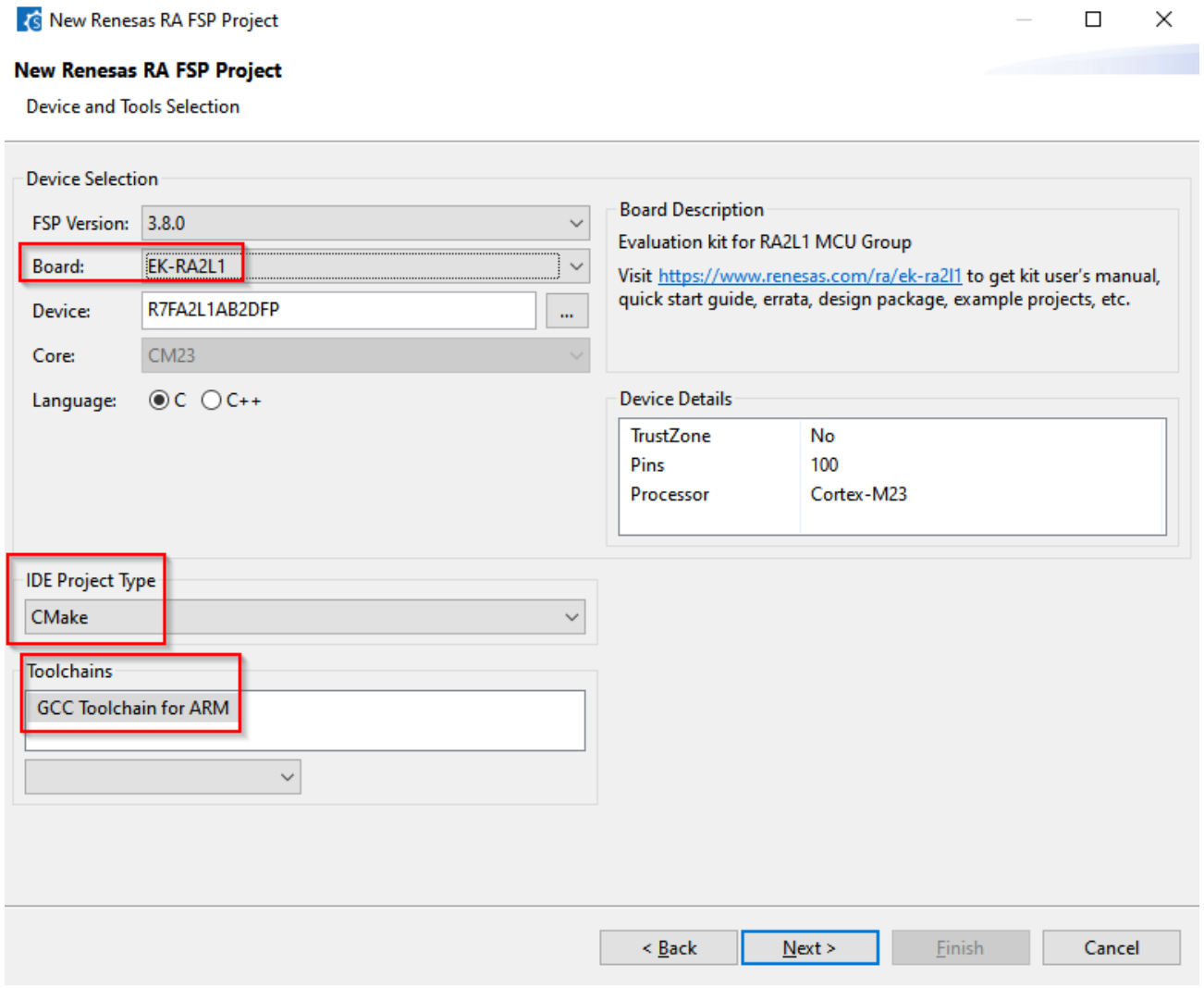
WITH RASC

CREATING A CMAKE PROJECT WITH RASC

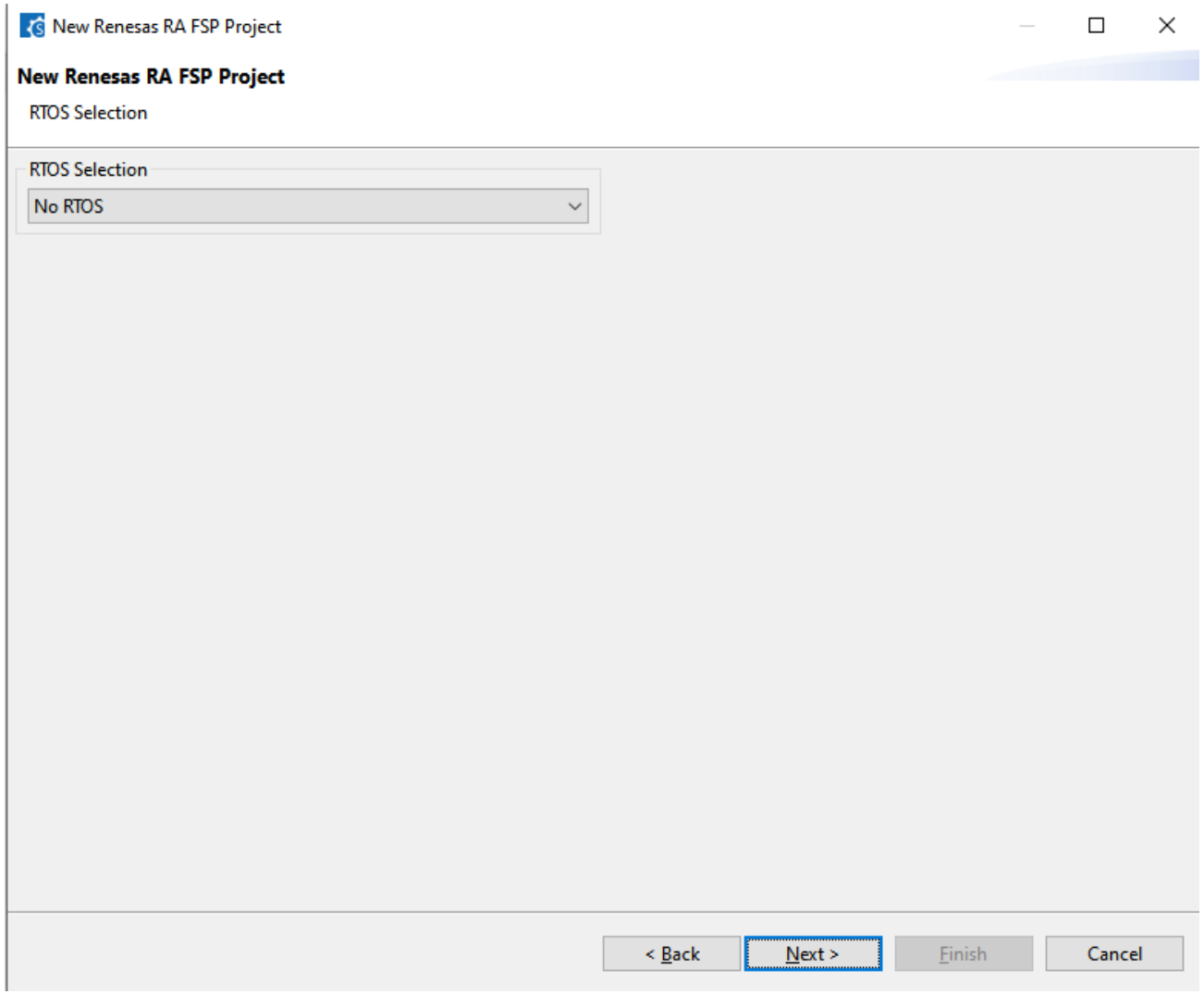
- Start RASC (instructions for 2022-04, FSP 3.8.0)



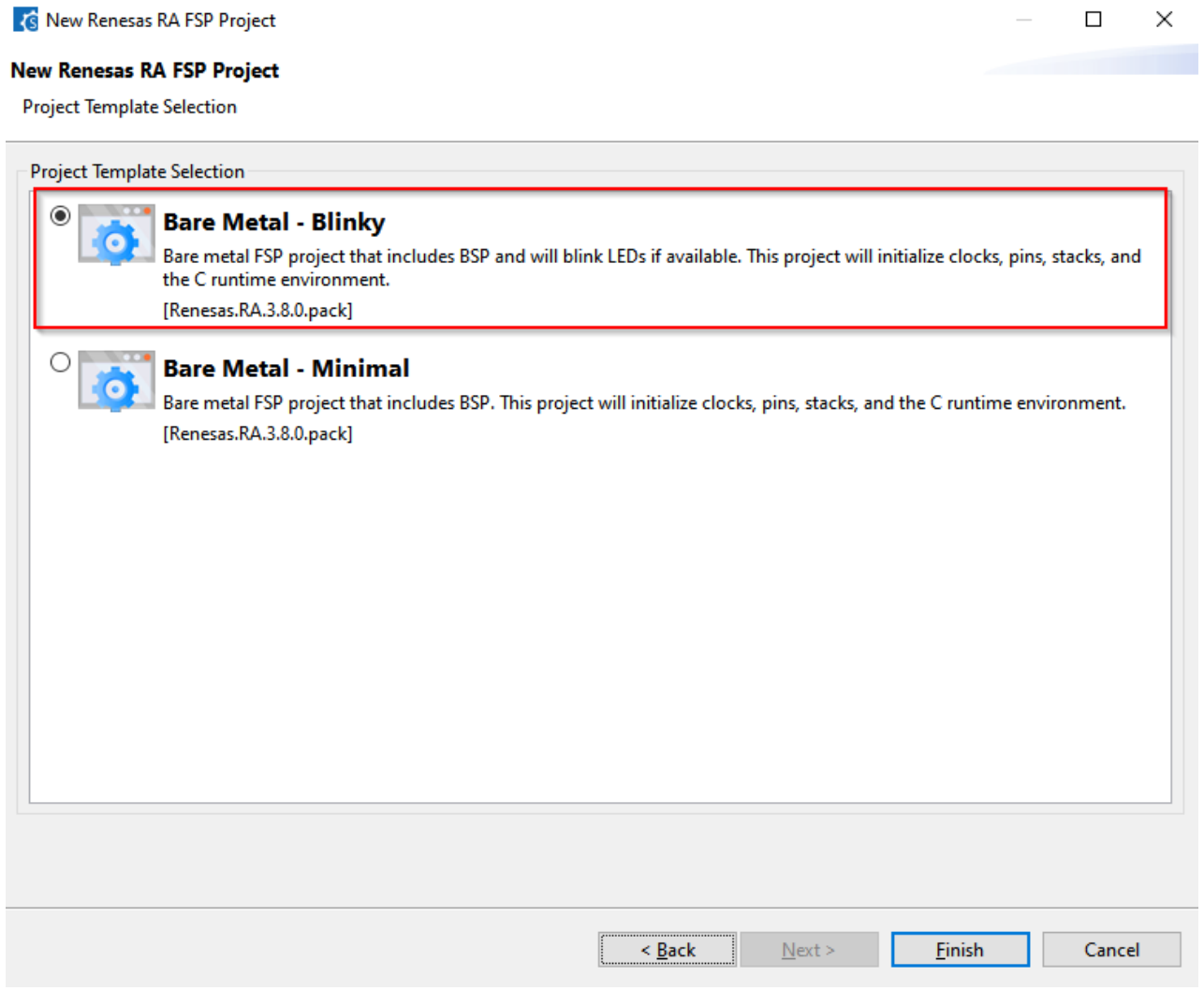
FSP PROJECT



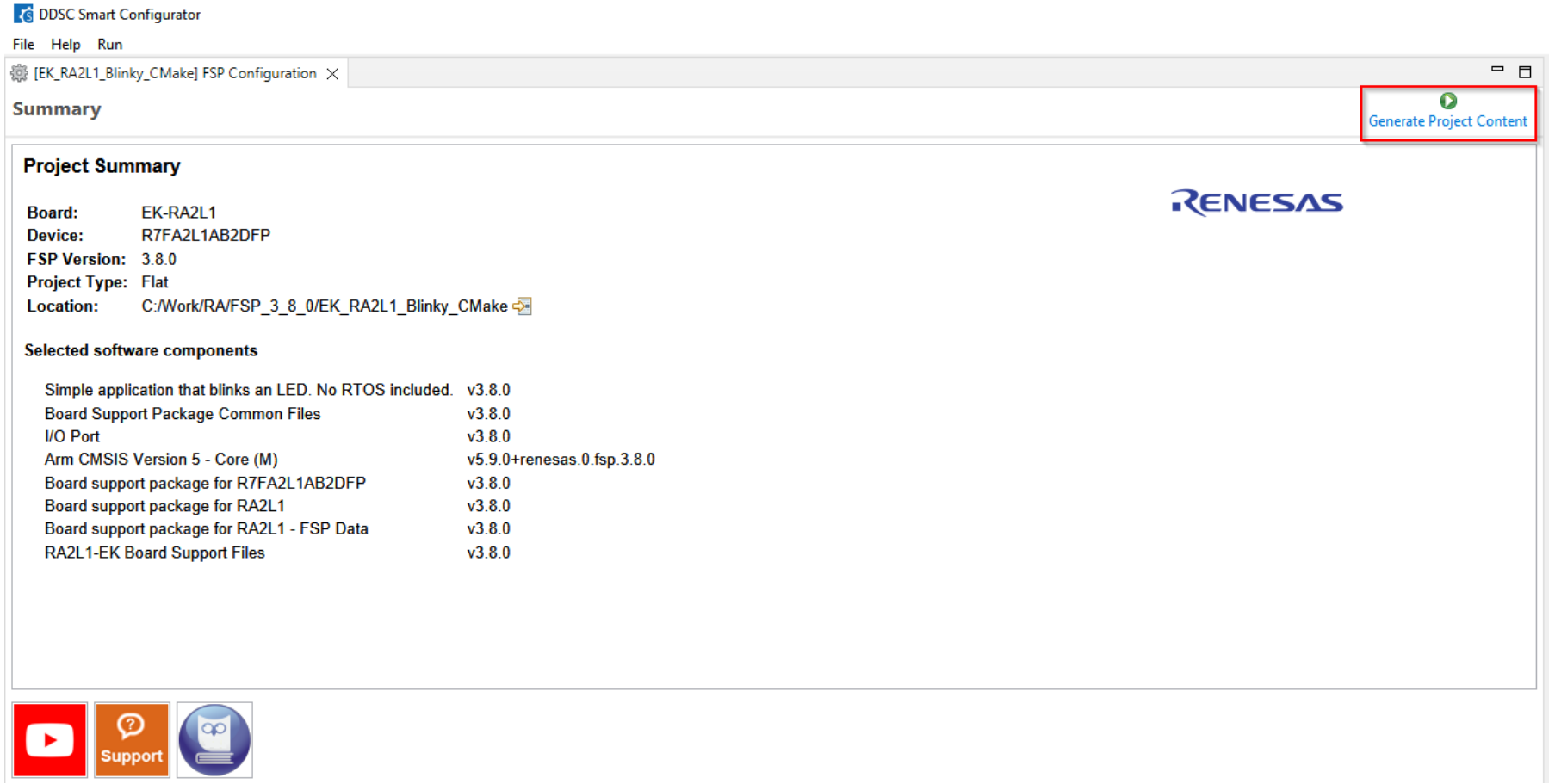
NO RTOS



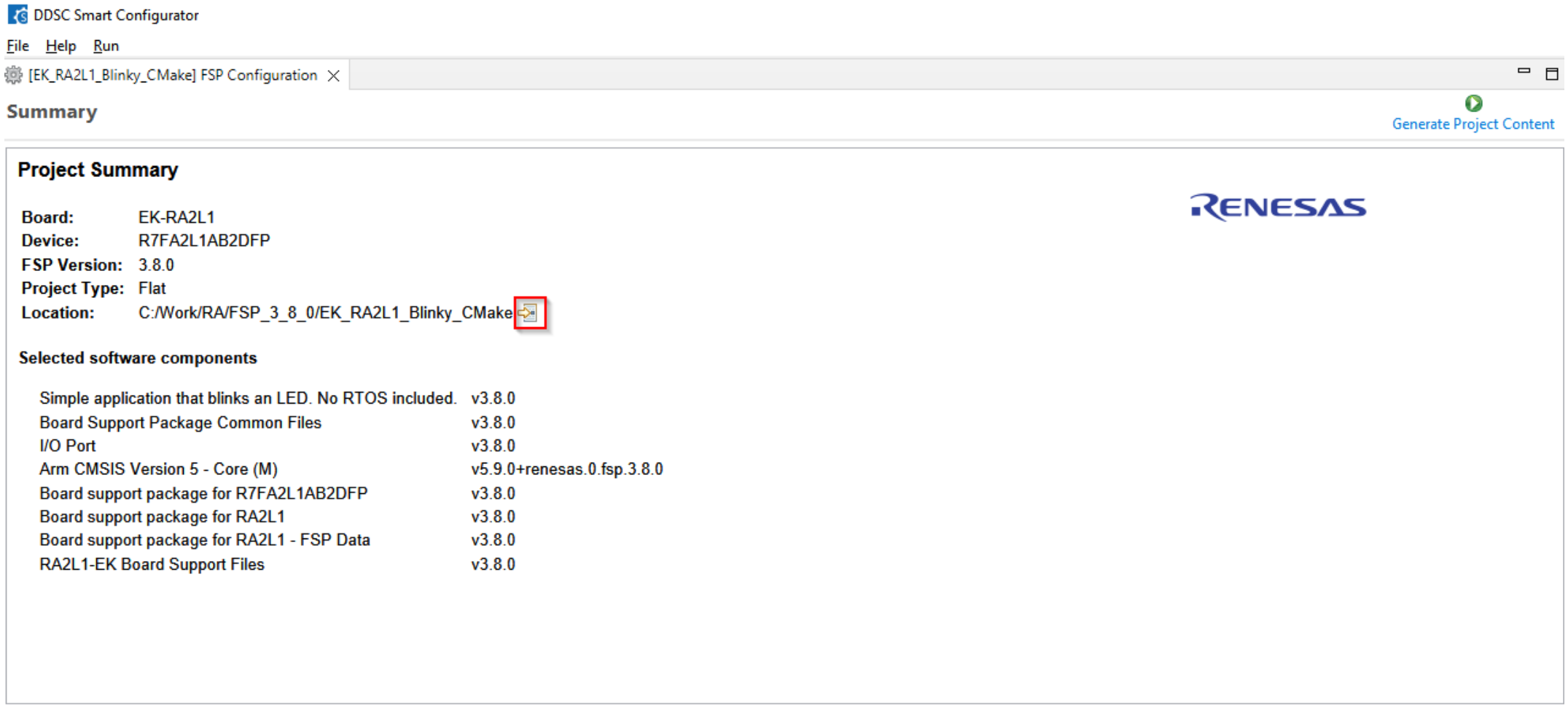
BLINKY PROJECT



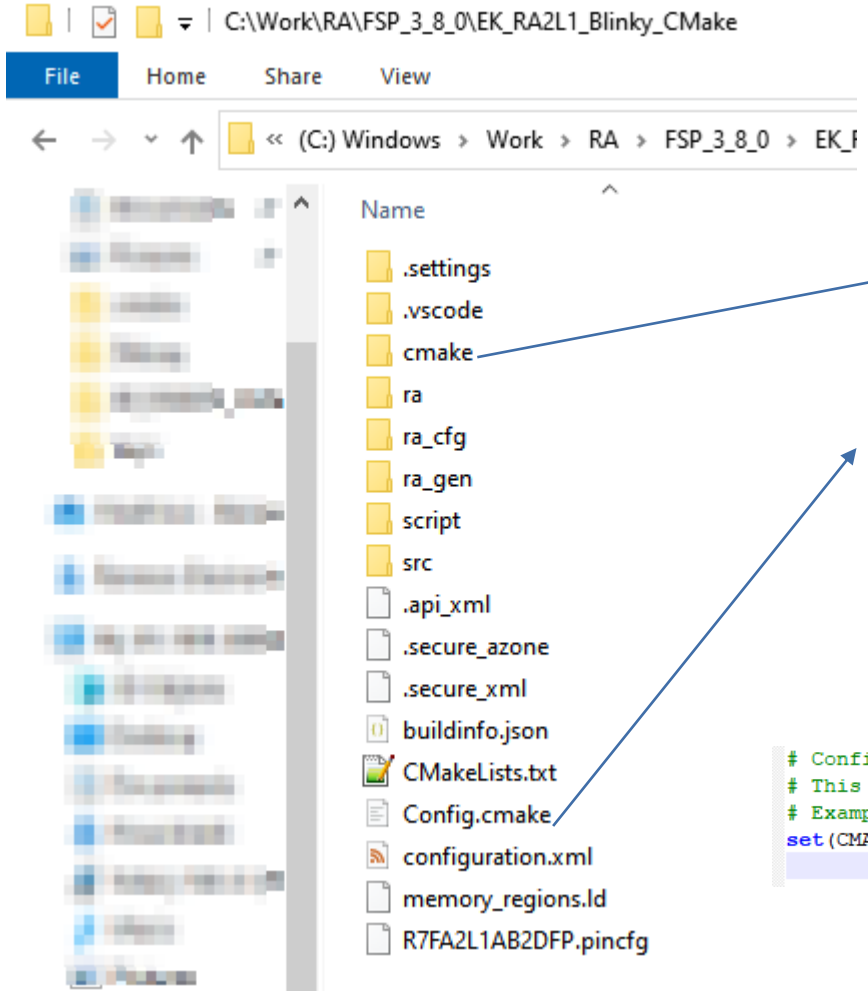
GENERATE PROJECT CONTENT

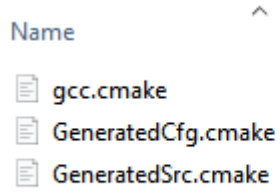


OPEN PROJECT LOCATION



EDIT CONFIG.CMAKE



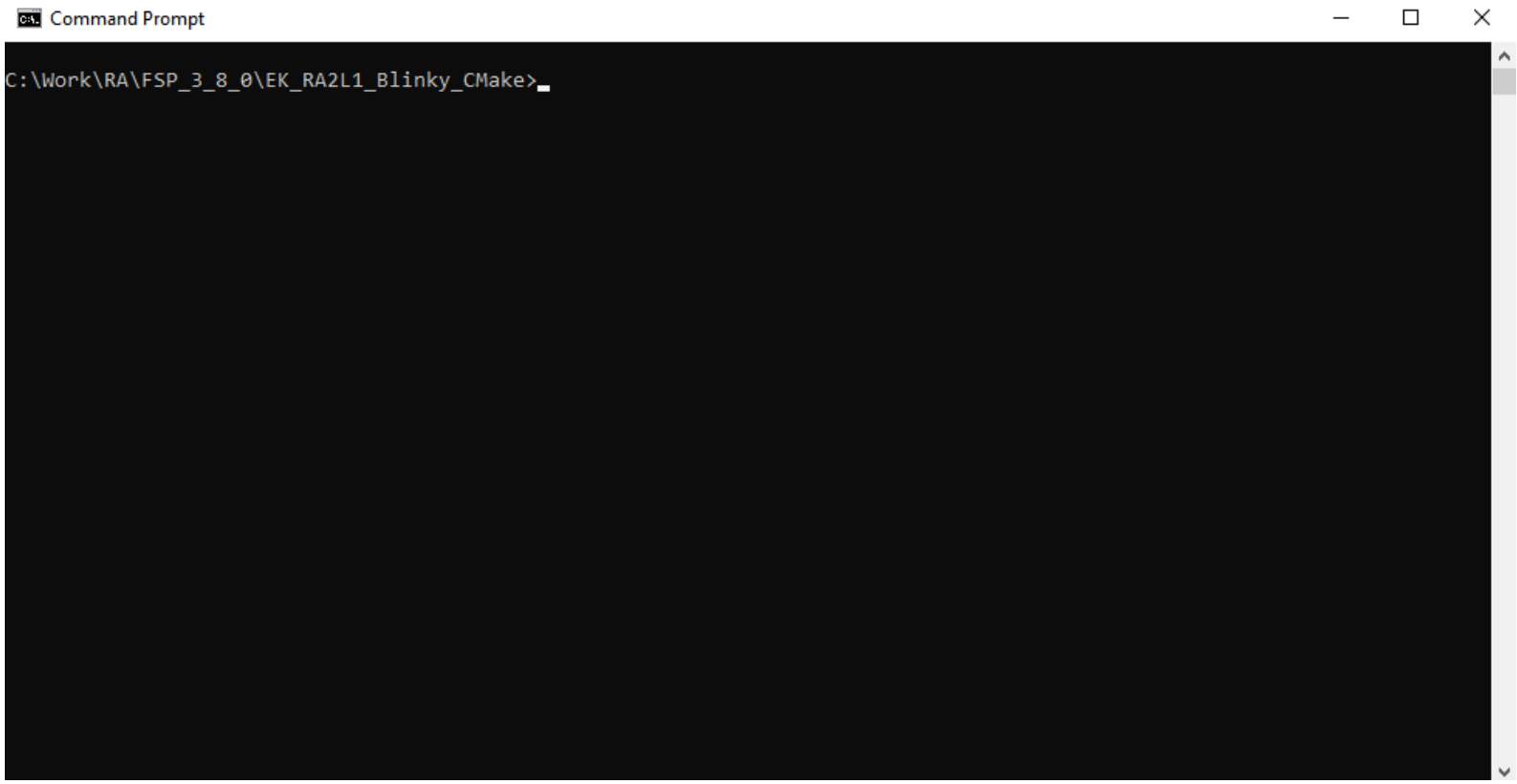



```
# Configuration file for user settings
# This file should include the path for toolchain and other settings that user would like to override.
# Example toolchain path definitions
# set(CMAKE_FIND_ROOT_PATH "C:/GNUArmEmbeddedToolchain/9-2020-q2-update/bin")
```

Edit Config.cmake to uncomment the setting of the root path to the tools.
Change the path for your system making sure the correct slash “/” type is used.

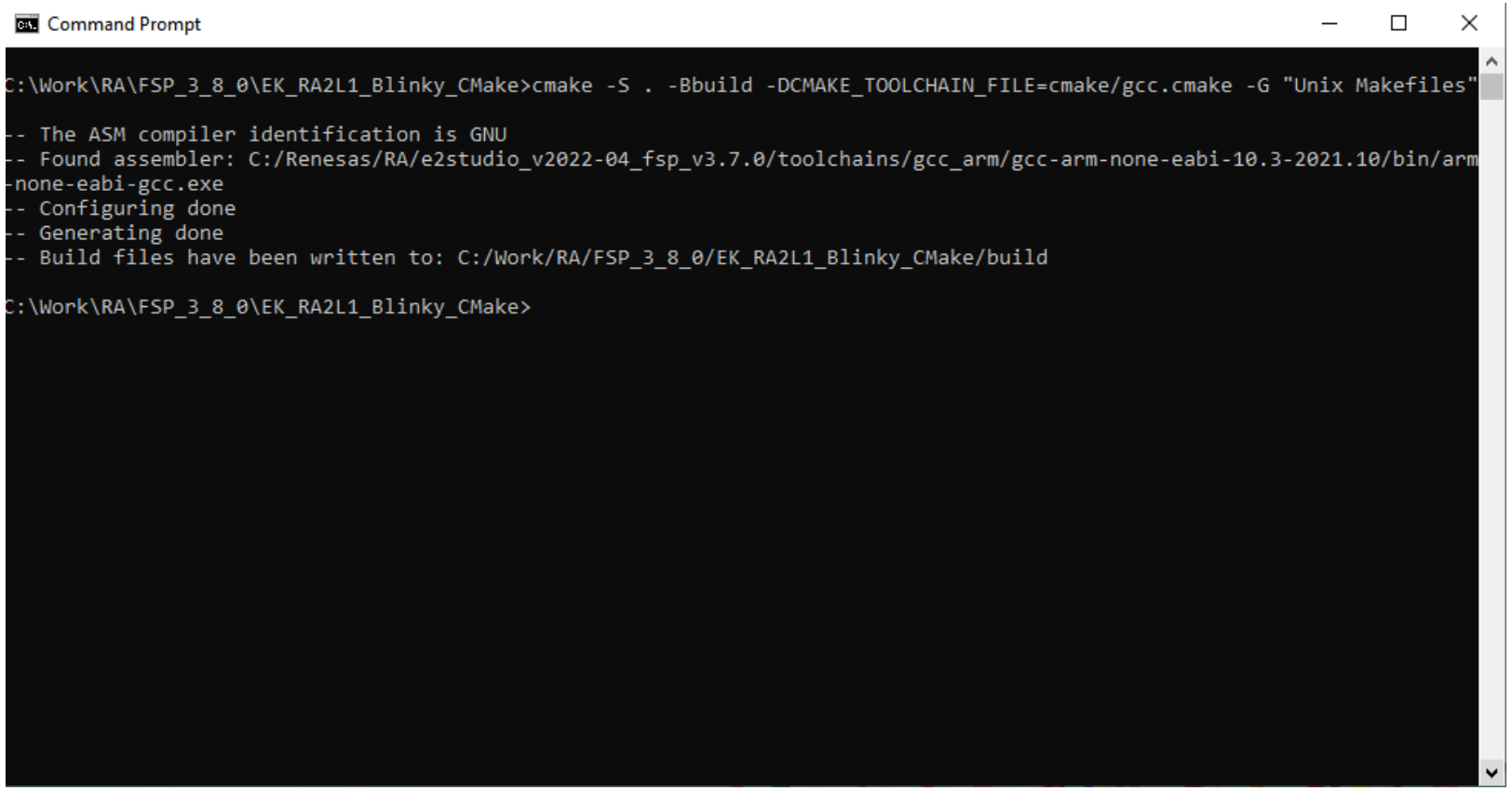
```
# Configuration file for user settings
# This file should include the path for toolchain and other settings that user would like to override.
# Example toolchain path definitions
set(CMAKE_FIND_ROOT_PATH "C:/Renesas/RA/e2studio_v2022-04_fsp_v3.7.0/toolchains/gcc_arm/gcc-arm-none-eabi-10.3-2021.10/bin")
```

OPEN A COMMAND WINDOW IN THE PROJECT ROOT FOLDER



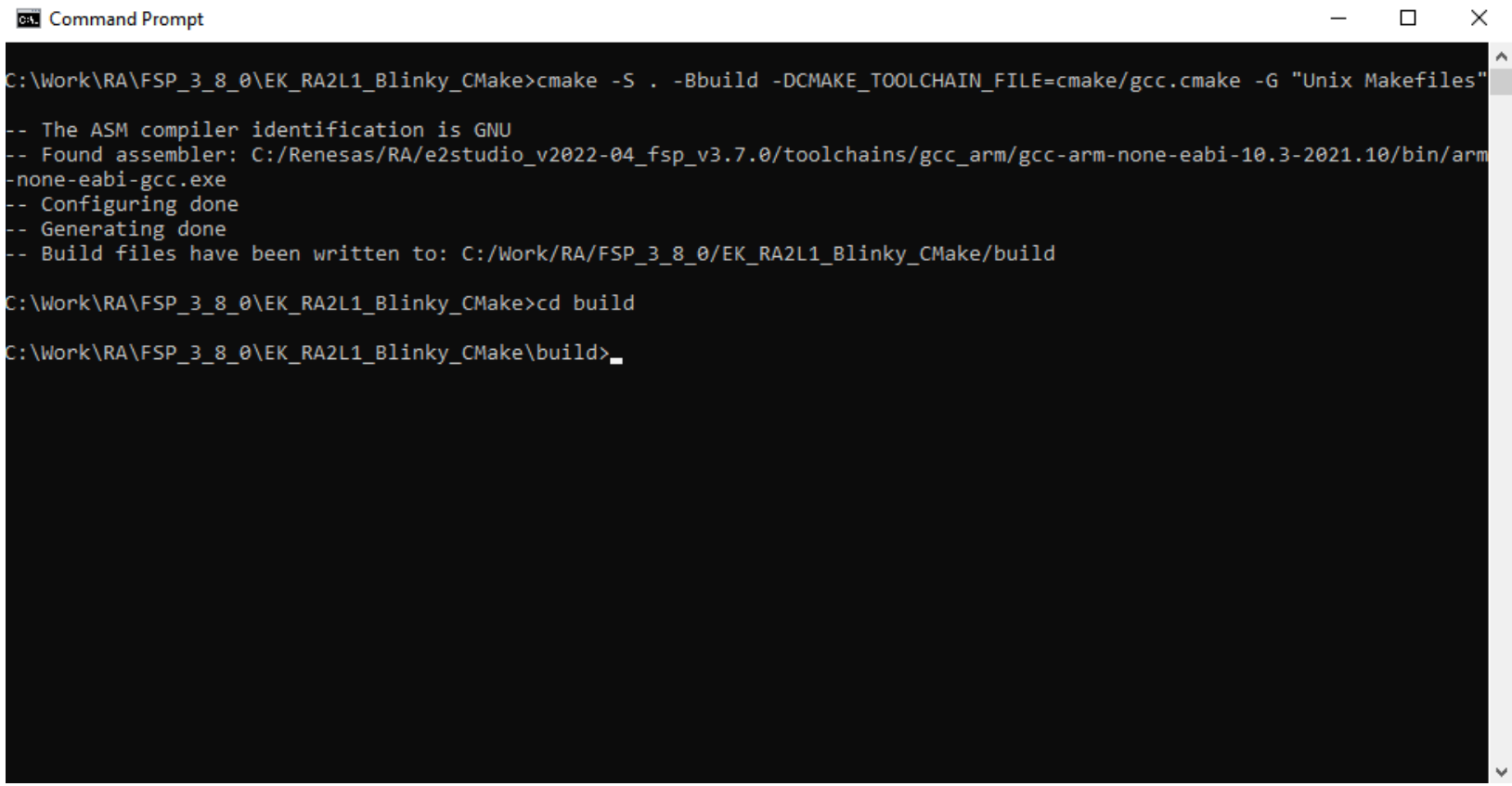
RUN CMAKE TO GENERATE A MAKEFILE

```
cmake -S . -Bbuild -DCMAKE_TOOLCHAIN_FILE=cmake/gcc.cmake -G "Unix Makefiles"
```



CHANGE TO THE “BUILD” FOLDER

```
cd “build"
```



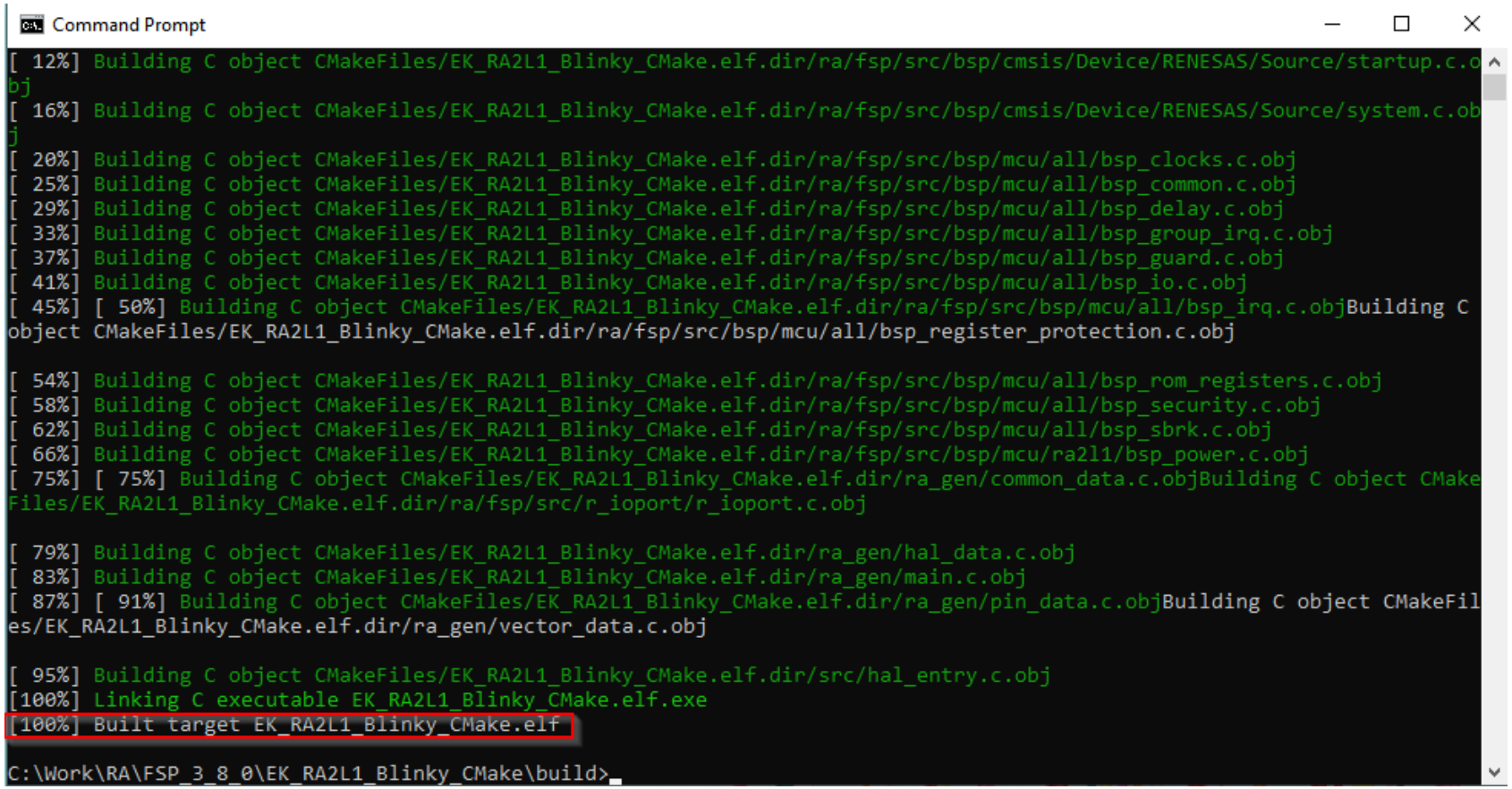
RUN MAKE

```
make -j8
```

‘-j [*jobs*]’

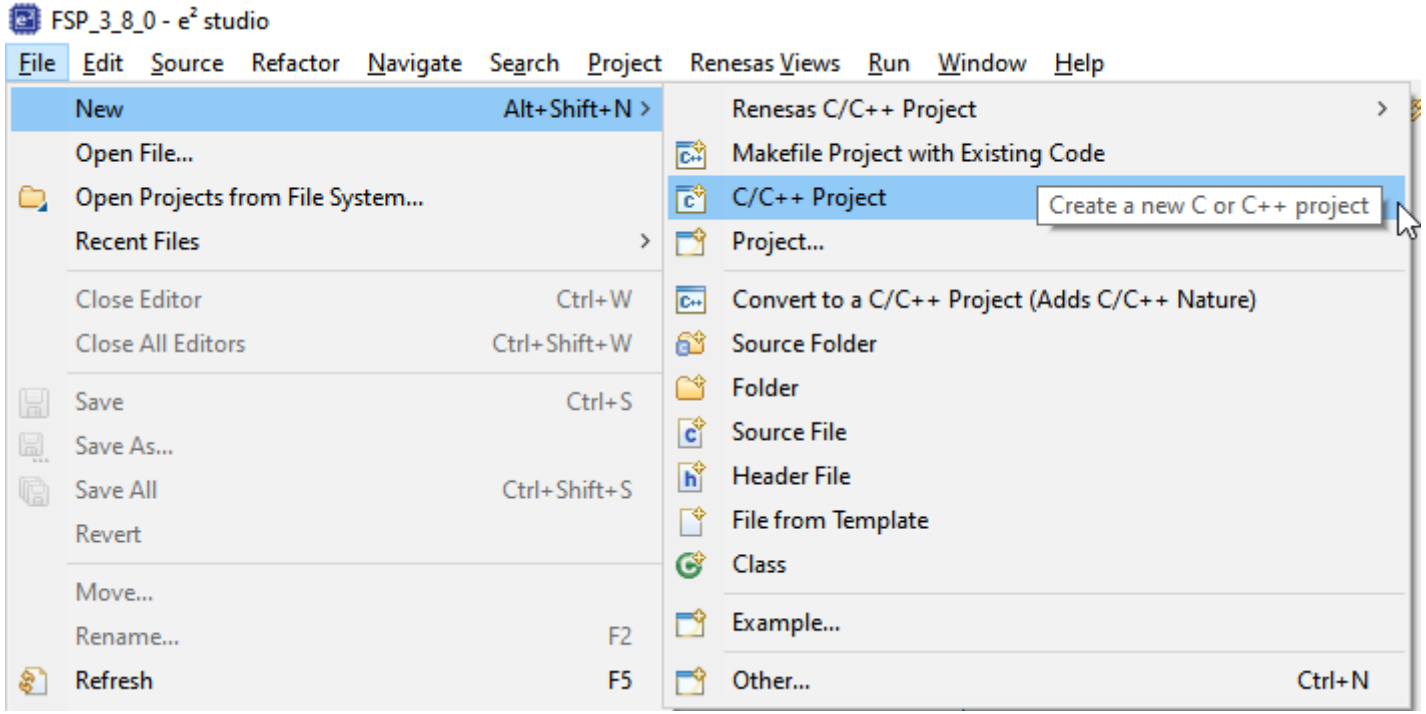
‘--jobs[=*jobs*]’

Specifies the number of recipes (jobs) to run simultaneously. With no argument, `make` runs as many recipes simultaneously as possible. If there is more than one ‘`-j`’ option, the last one is effective. See Parallel Execution, for more information on how recipes are run. Note that this option is ignored on MS-DOS.

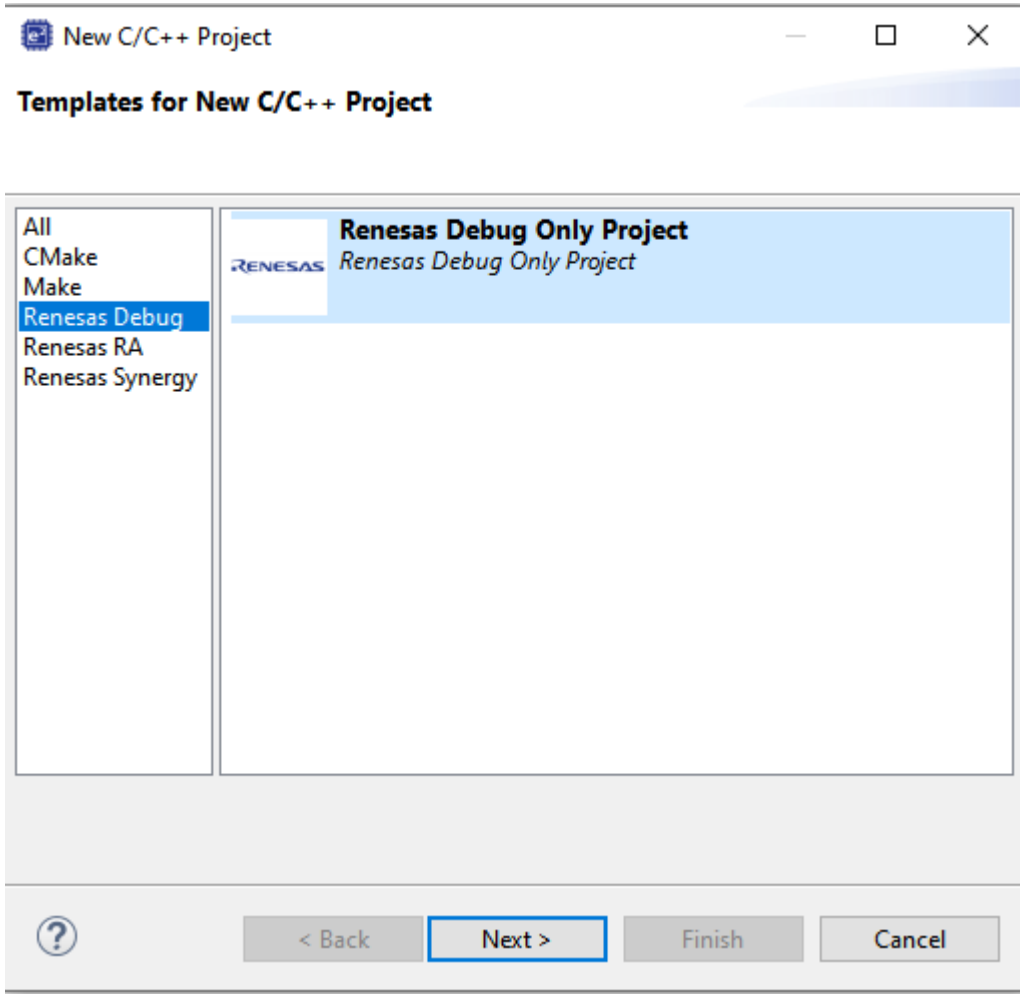


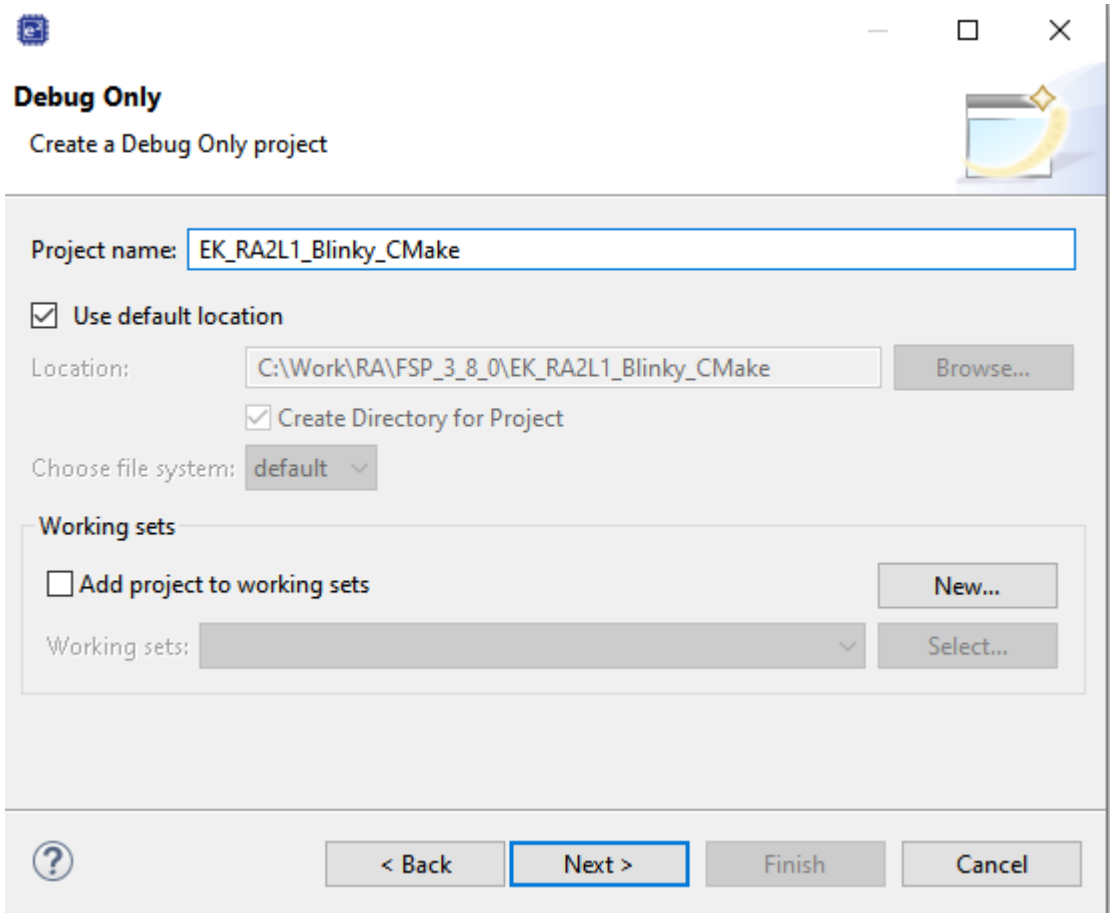
DEBUGGING WITH E2STUDIO

E2STUDIO

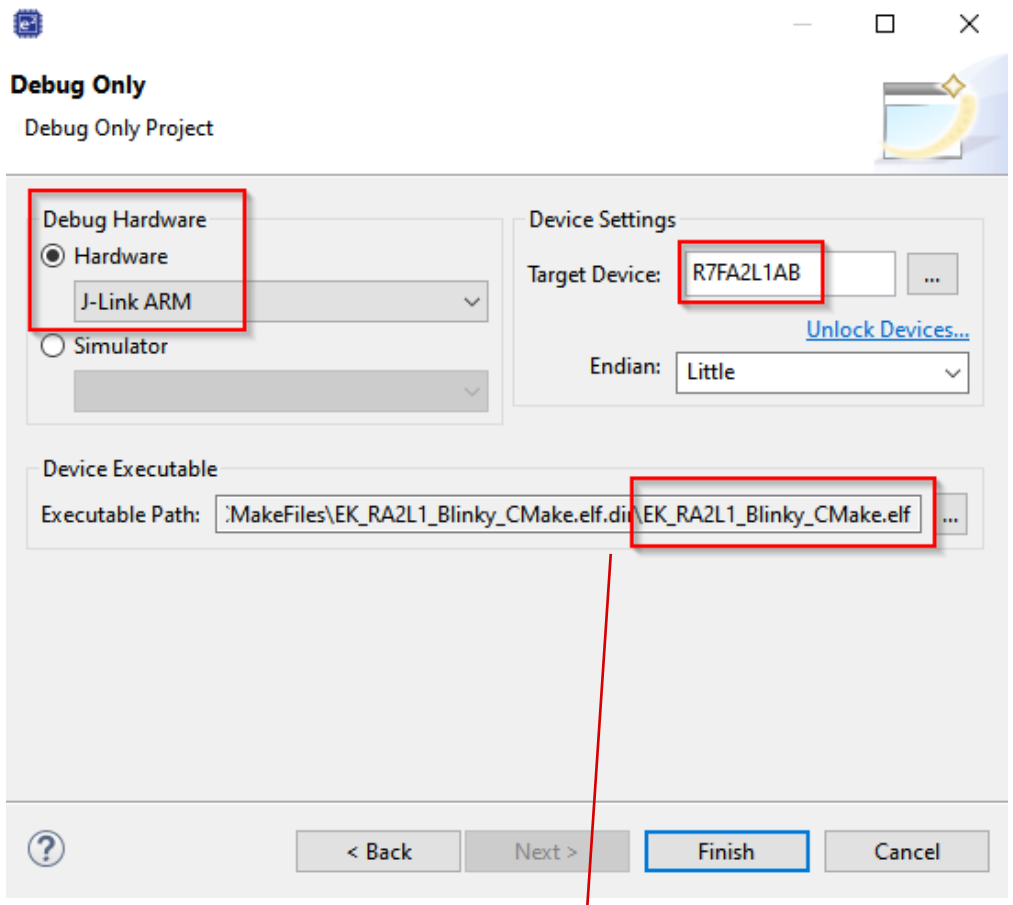


E2STUDIO





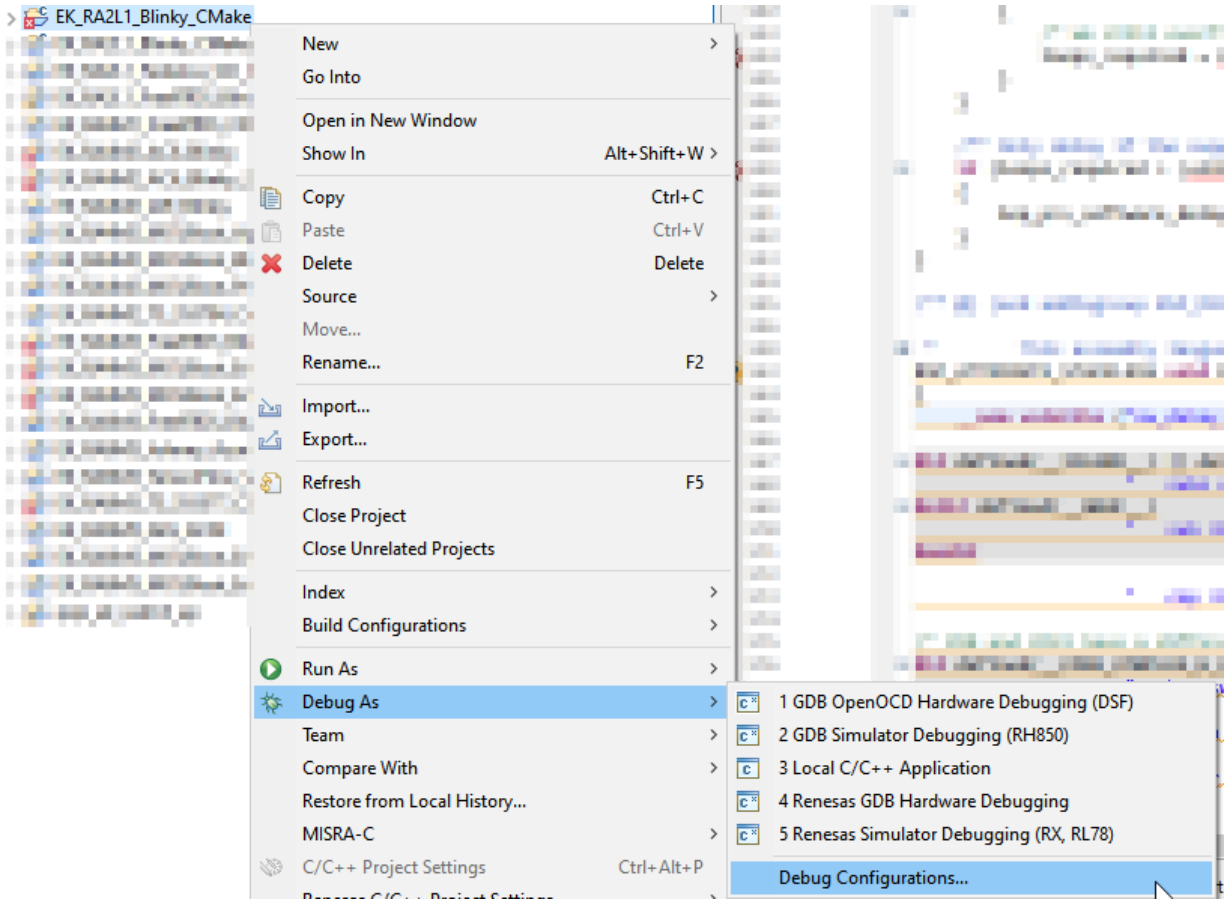
DEBUG SETTINGS



C:\Work\RA\FSP_3_8_0\EK_RA2L1_Blinky_CMake\build\CMakeFiles\EK_RA2L1_Blinky_CMake.elf.dir\EK_RA2L1_Blinky_CMake.elf

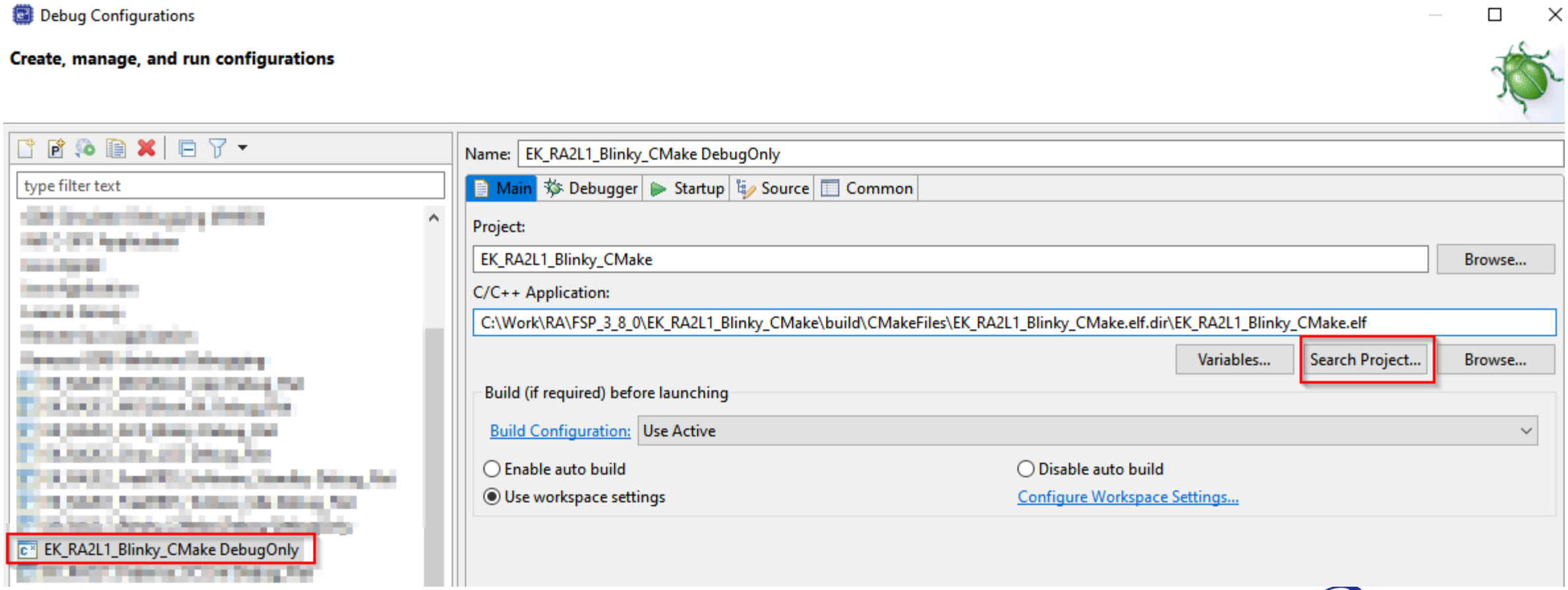
DEBUG CONFIGURATIONS

- Right-click debug project and select “Debug As -> Debug Configurations”



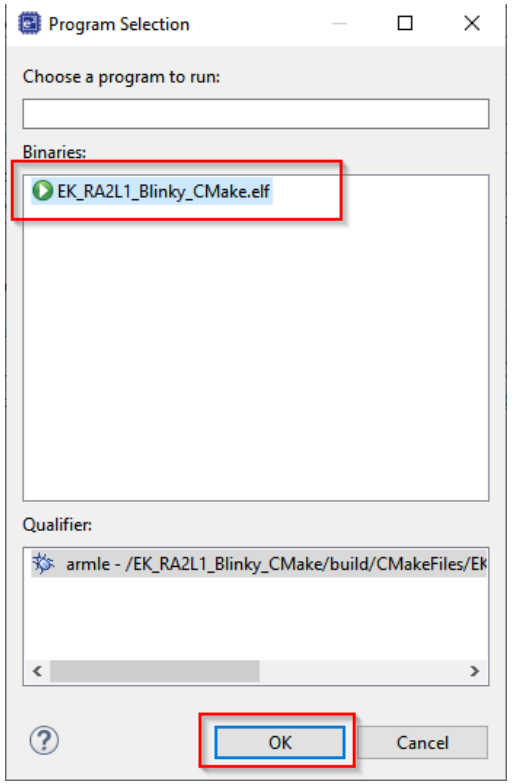
RESELECT FILE TO CHANGE SLASH DIRECTION

- Select the “EL_RA2L1_Blinky_CMake DebugOnly” project.
- Click “Search Project…”



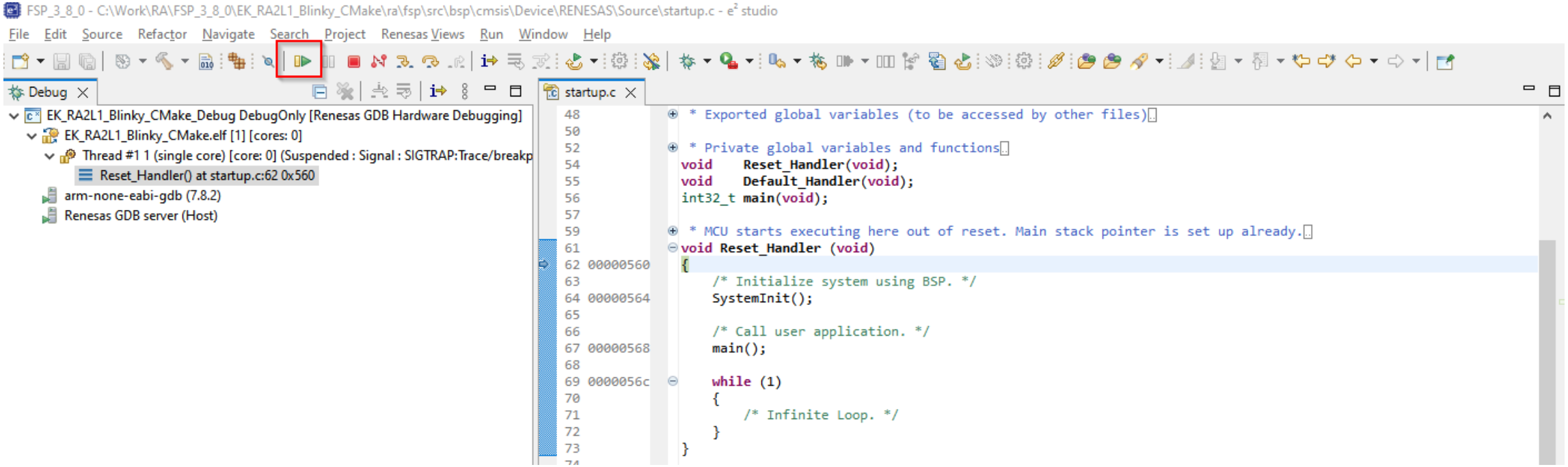
RESELECT FILE TO CHANGE SLASH DIRECTION

- Select “EK_RA2L1_Blinky_CMake.elf” – needed to change the direction of the slashes
- Click “OK”



CLOSE DEBUG CONFIGURATION

- Click “Apply”
- Connect a USB cable between the host PC and J10 on the EK-RA2L1
- Click “Debug”
- Press the Resume button to start the application, press it a second time. LEDs will flash.



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