Changing MCU for SDK2.0 project in KDS

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Recently, there were some customers asking how to change MCU for a KDS2.x project in KDS. It's not difficult but it's typical. So I am writing something on this topic.

This document sets an example of porting a KSDK2.0 K21F project to K22F, step by step.

User can use it as a reference to change MCU for other kinetis device.

1. Create two KSDK2.0 project under KDS3.2 for K21F and K22F separately. Project name is "21" and "22". I select "Processors" in both of the project wizard.
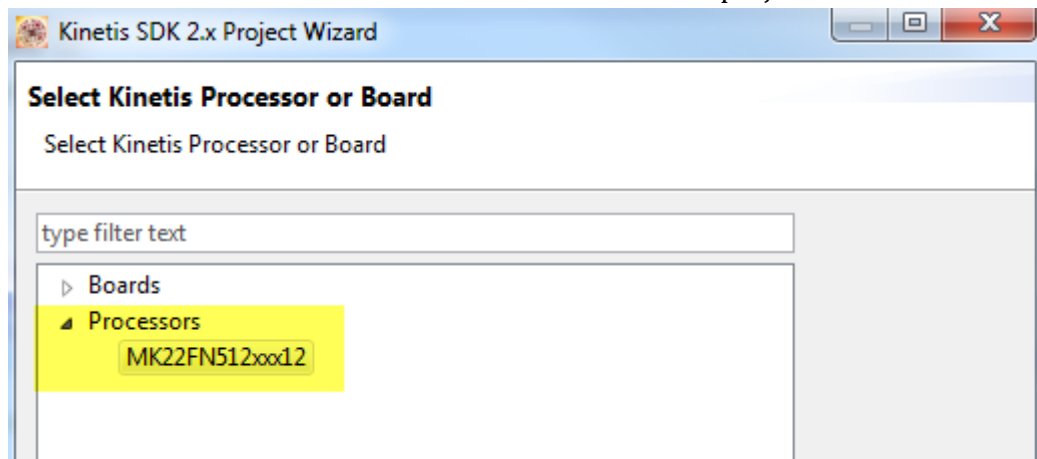
2. In order to change project "21" to "22", remove these four folders in '21' and replaced the same from folder "22". If the project uses freertos, "freertos" folder is also needed to be removed/copied.
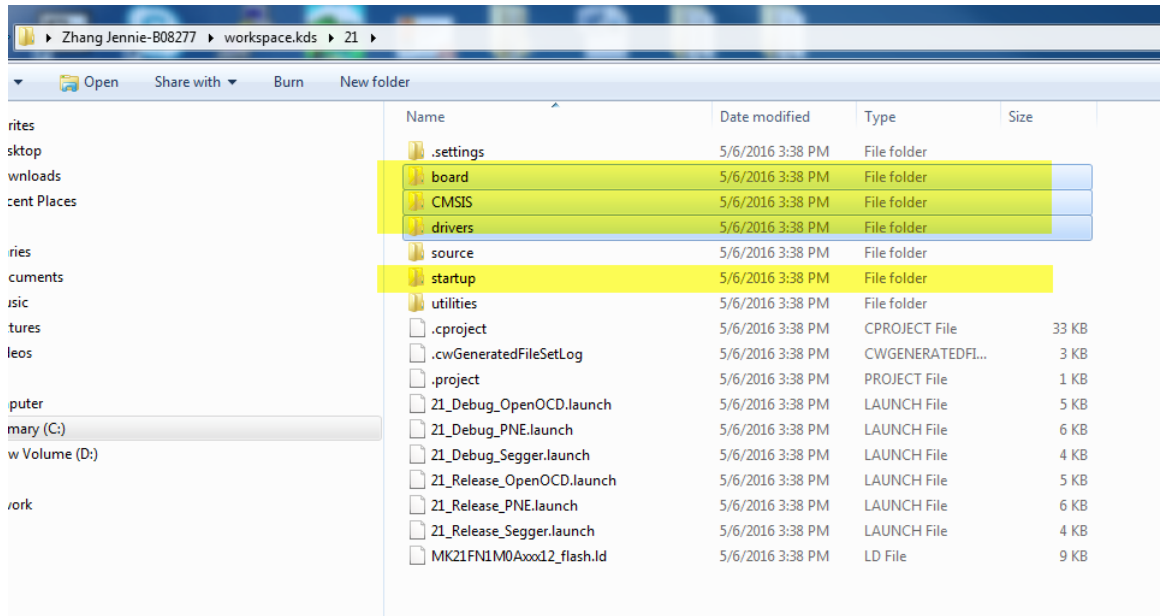
Here is the description of the folders:

"board" – Board macro definition (LEDs, buttons, clock, etc),application-specific pin mux configuration

"CMSIS" – ARM core files, MCU features files,etc

"drivers" - All of the peripheral drivers for the specific MCU

"**startup**" - Toolchain-specific startup code. Vector table definitions are here

"utilites" - Items such as the debug console that are used by many of the example applications.

"**source"** – User application files

3. In reprocessor setting, change defined symbols from "CPU_MK21FN1M0AVLQ12" to "CPU_MK22FN512VDC12"
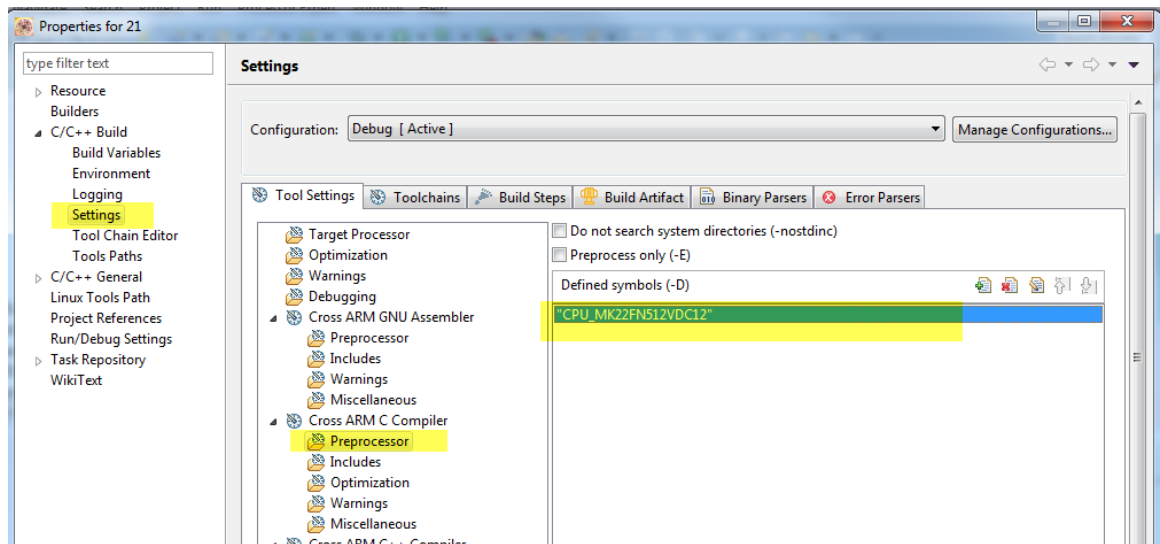
4. Then reopen project "21" with KDS3.2, perform "project", "clean". Then rebuild the project. It can pass build without problem

5. In debugger configuration, change Device name from **MK21FN1M0Axxx12** to **MK22FN512xxx12.** Then we can launch debugger and debug code without problem.
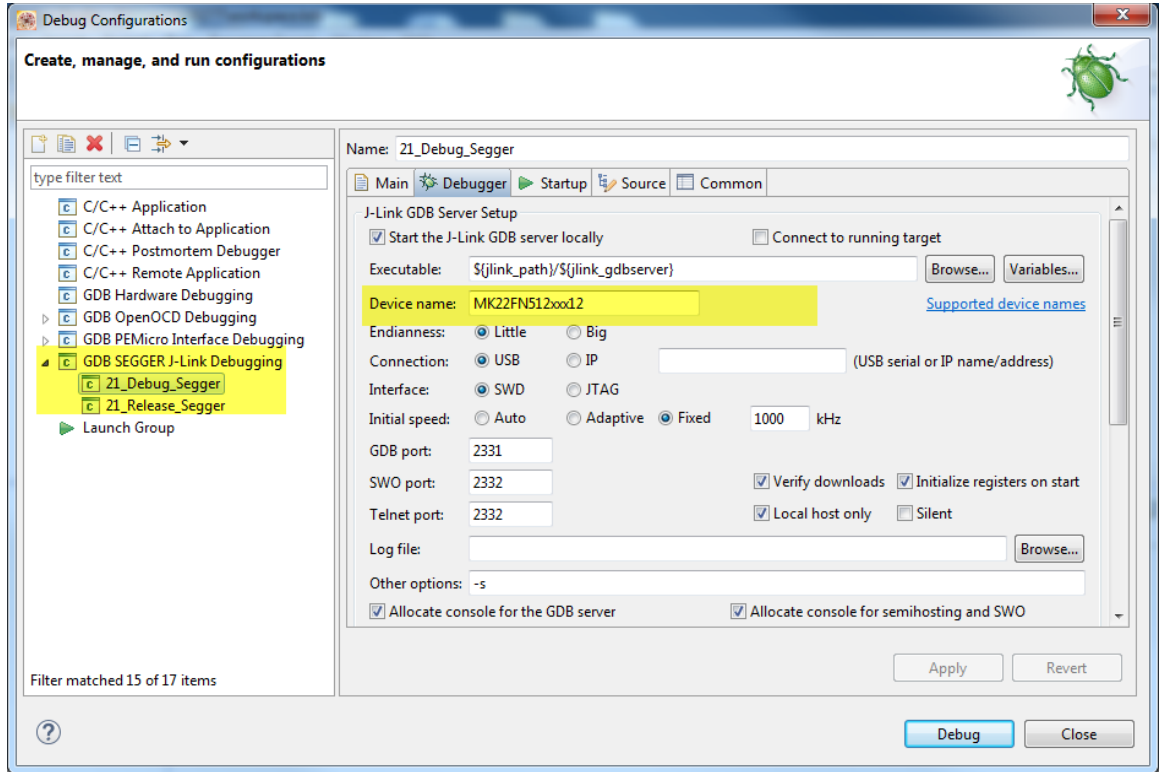
6. Finally, to change the project name:
   a. Change folder name from 21 to "new22"

   b. In debug Configurations main window, make sure the application name is updated:
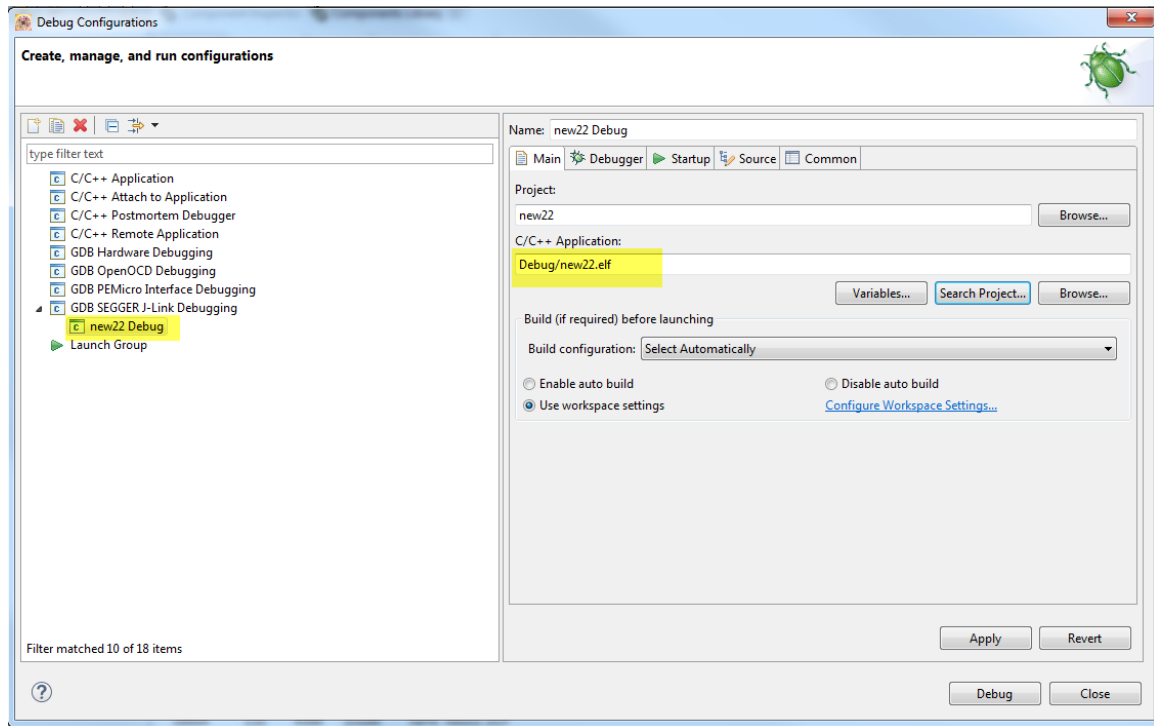
C. Then apply all the changes, build the project, we can from on this customized project as our start.