

# HOWTO: Create FreeRTOS project in S32 Design Studio

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This document describes, how to create FreeRTOS project for S32K144 microcontroller using S32 Design Studio v1.3 ARM and S32K144\_SDK\_gcc 1.0.0 RTM. Be sure, you have correctly installed all available updates.

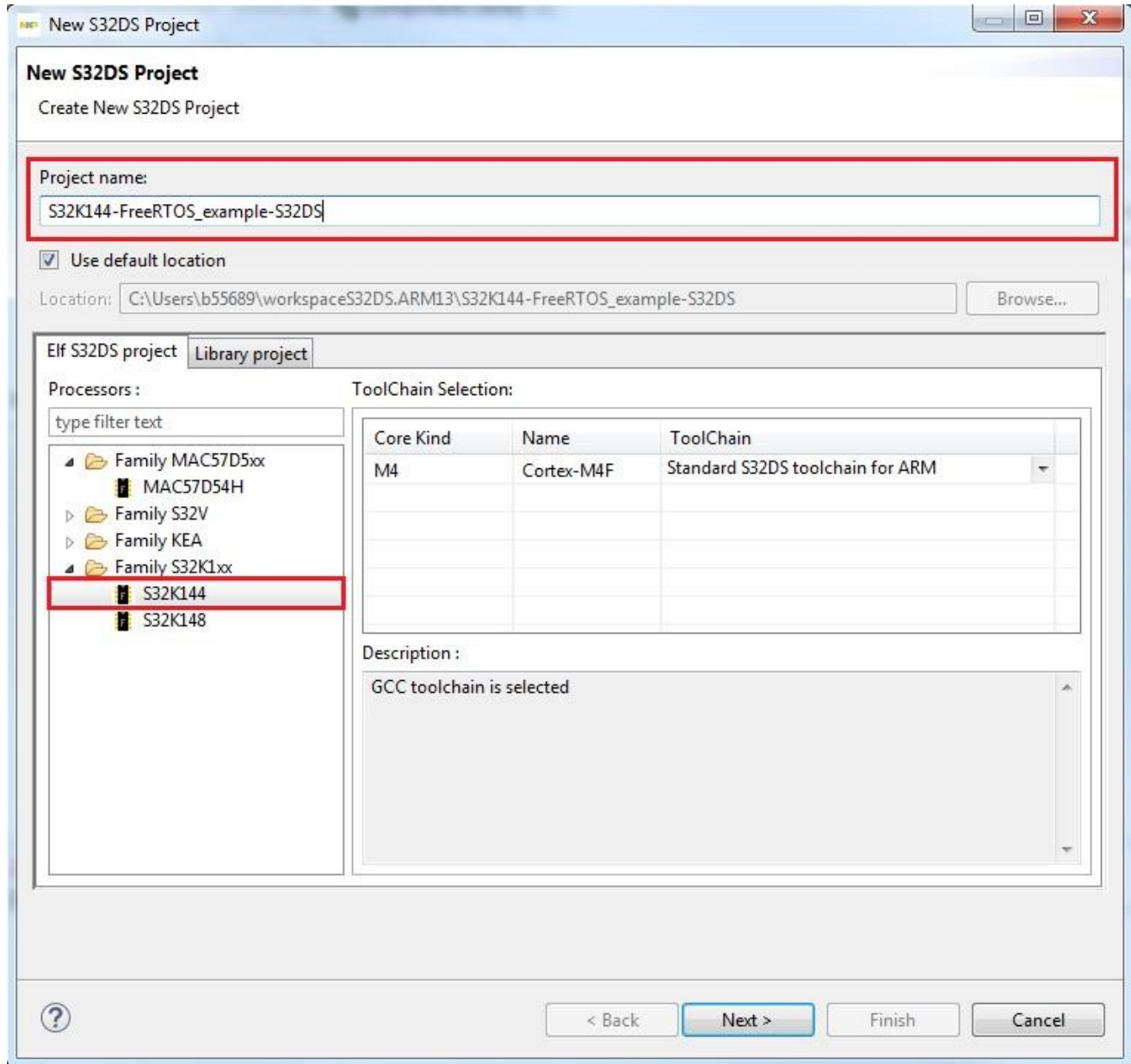
[S32 Design Studio for Arm v1.3 - Update 1 available](#)

[S32 Design Studio for Arm v1.3 - Update 2 available](#)

[S32 Design Studio for Arm v1.3 - Update 3 & 4 available](#)

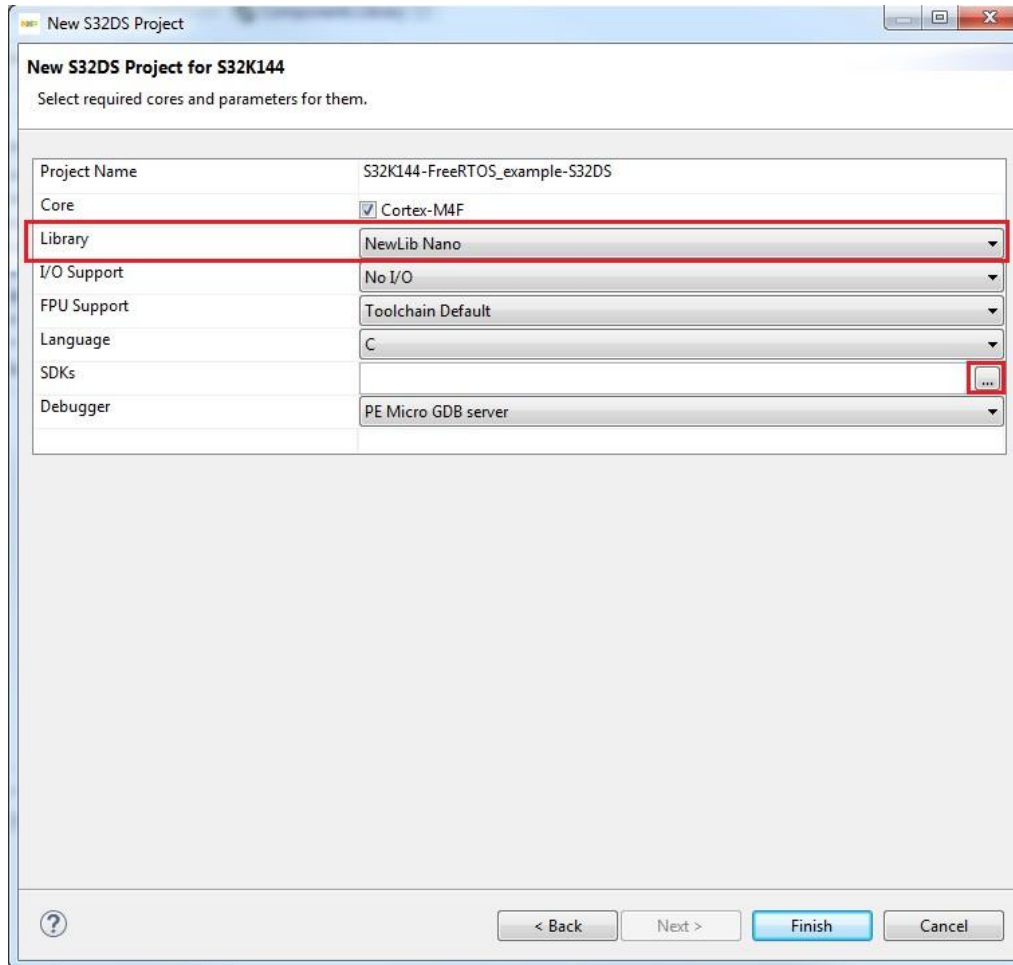
## HOWTO: Create FreeRTOS project in S32 Design Studio

1) Create new project. Choose S32K144 microcontroller. Click Next.

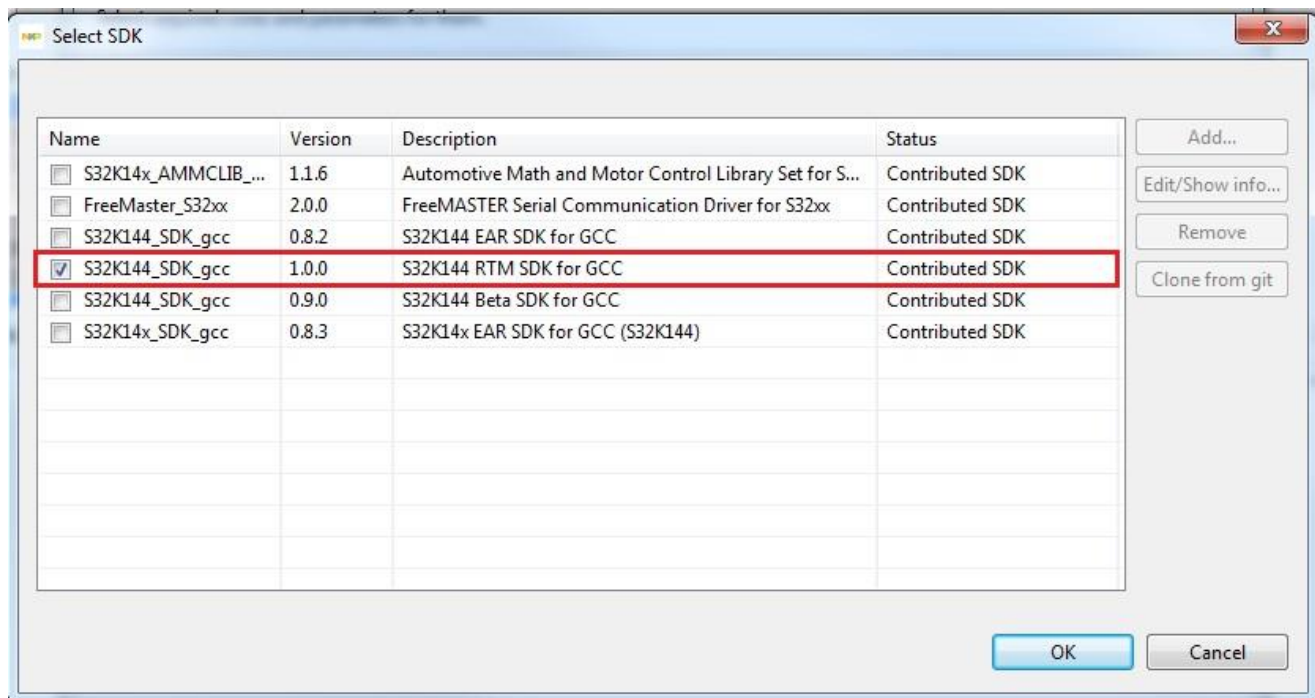


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2) Choose NewLib Nano Library, and choose S32K144\_SDK\_gcc RTM 1.0.0. Click Finish.



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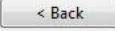

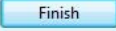

## HOWTO: Create FreeRTOS project in S32 Design Studio

New S32DS Project

**New S32DS Project for S32K144**

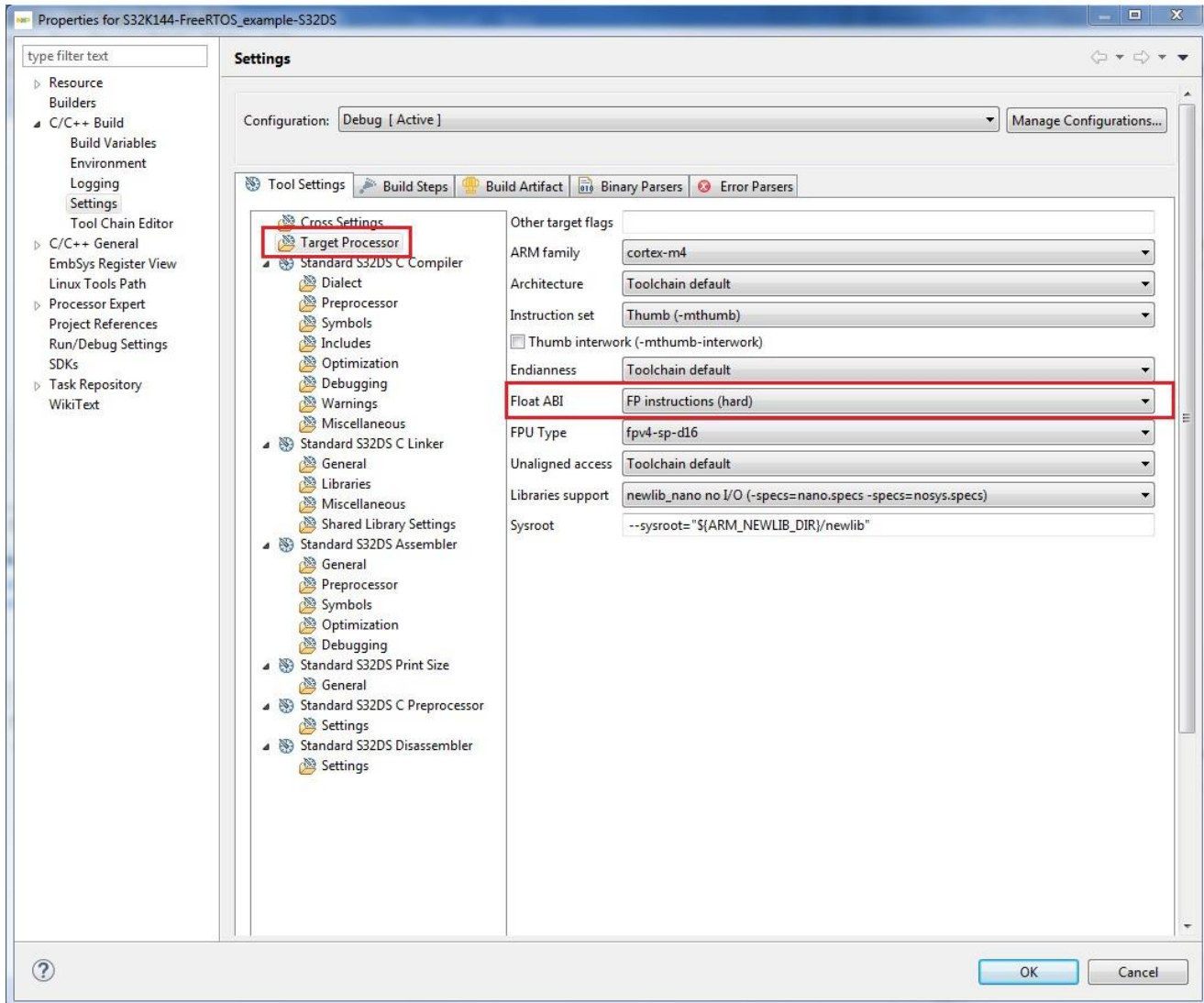
Select required cores and parameters for them.

Project Name	S32K144-FreeRTOS_example-S32DS
Core	<input checked="" type="checkbox"/> Cortex-M4F
Library	NewLib Nano
I/O Support	No I/O
FPU Support	Toolchain Default
Language	C
SDKs	S32K144_SDK_gcc
Debugger	PE Micro GDB server

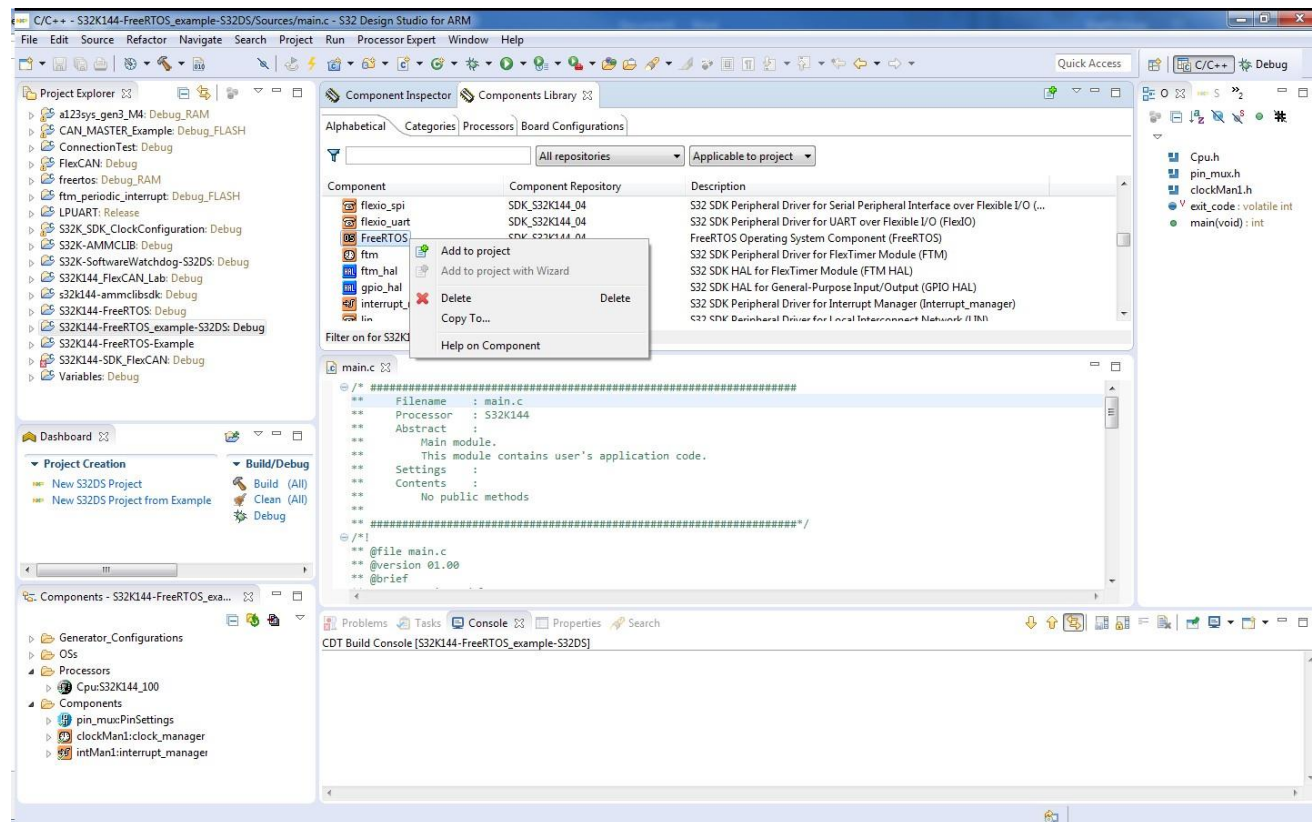
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3) Open project properties and click Target Processor tab. For Float ABI, choose FP instructions (hard).



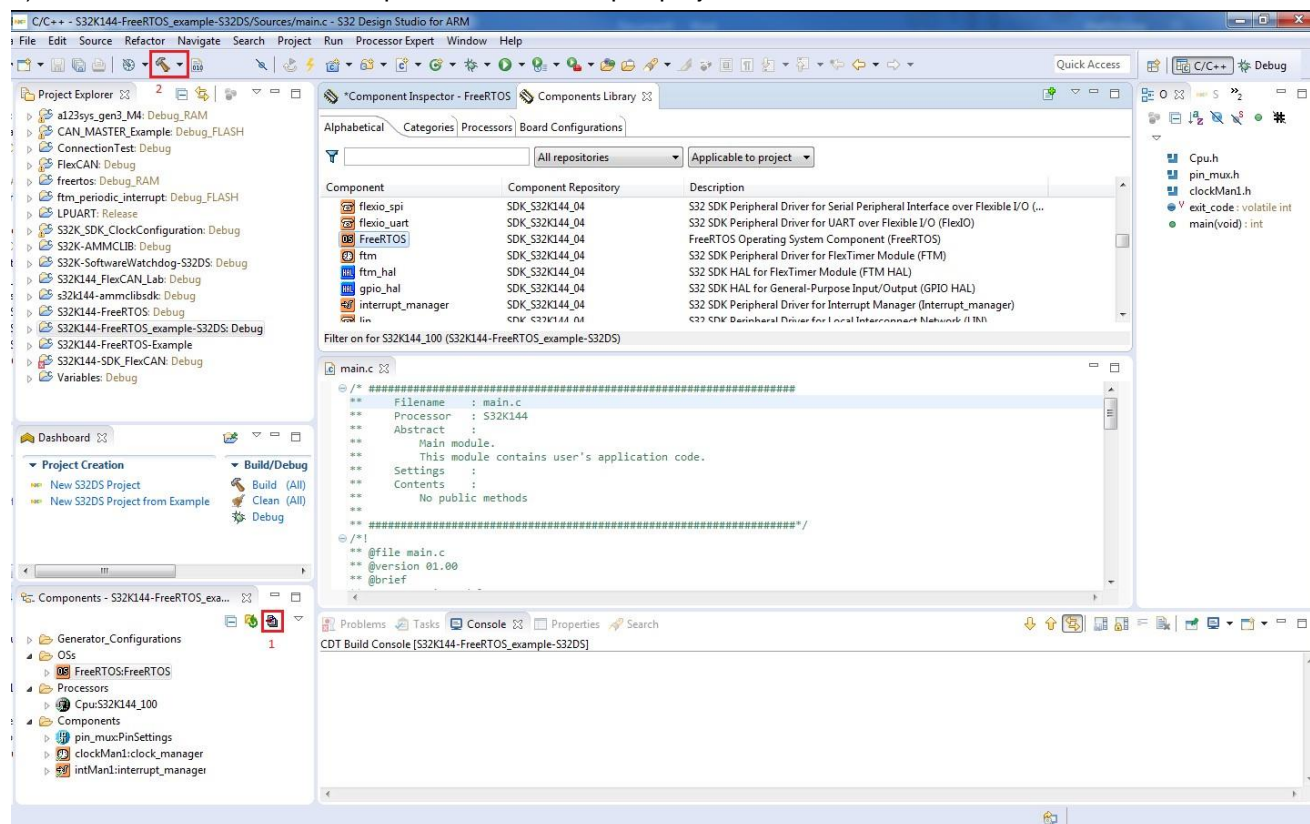
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4) Open Component Library, right click FreeRTOS component and add this component to project.



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### 5) Last, Generate Processor Expert Code and compile project.

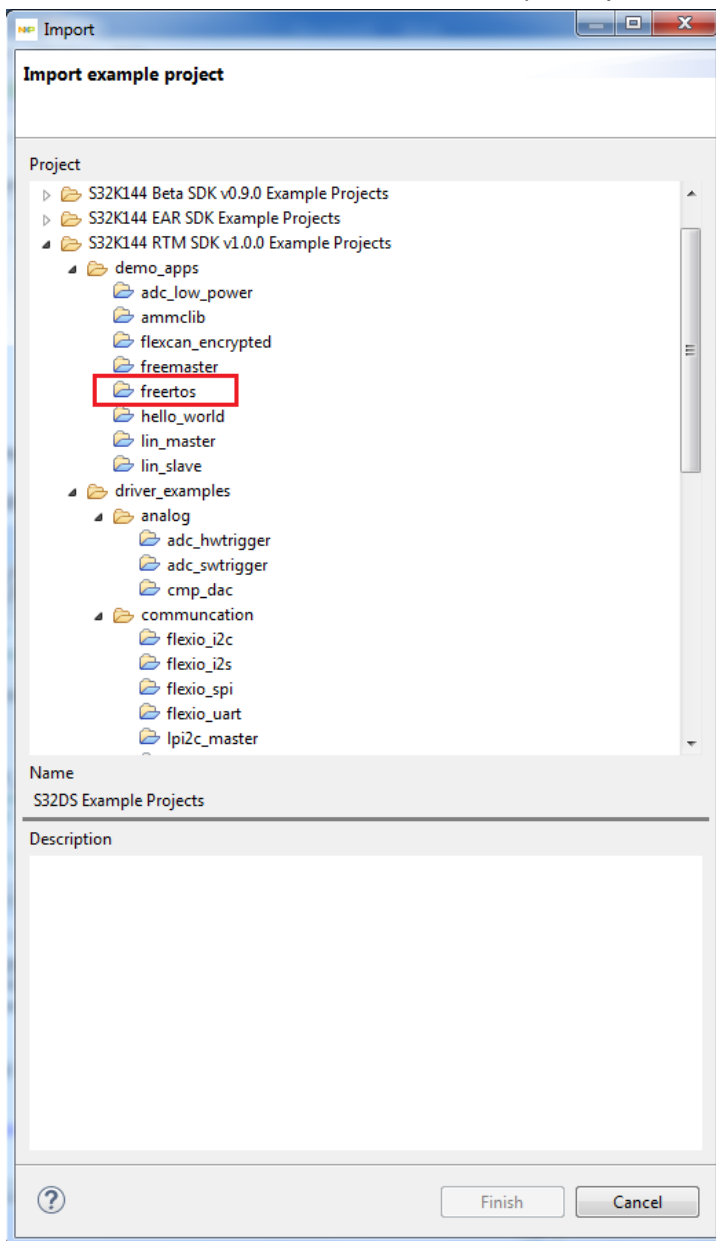


Now, you can use FreeRTOS component in your project.



## HOWTO: Create FreeRTOS project in S32 Design Studio

Another way is to create FreeRTOS project from example. Click New S32DS Project from Example. Choose freertos in S32K144 RTM SDK v1.0.0 Example Projects folder.



Original Attachment has been moved to: [S32K144-FreeRTOS\\_example-S32DS.zip](#)