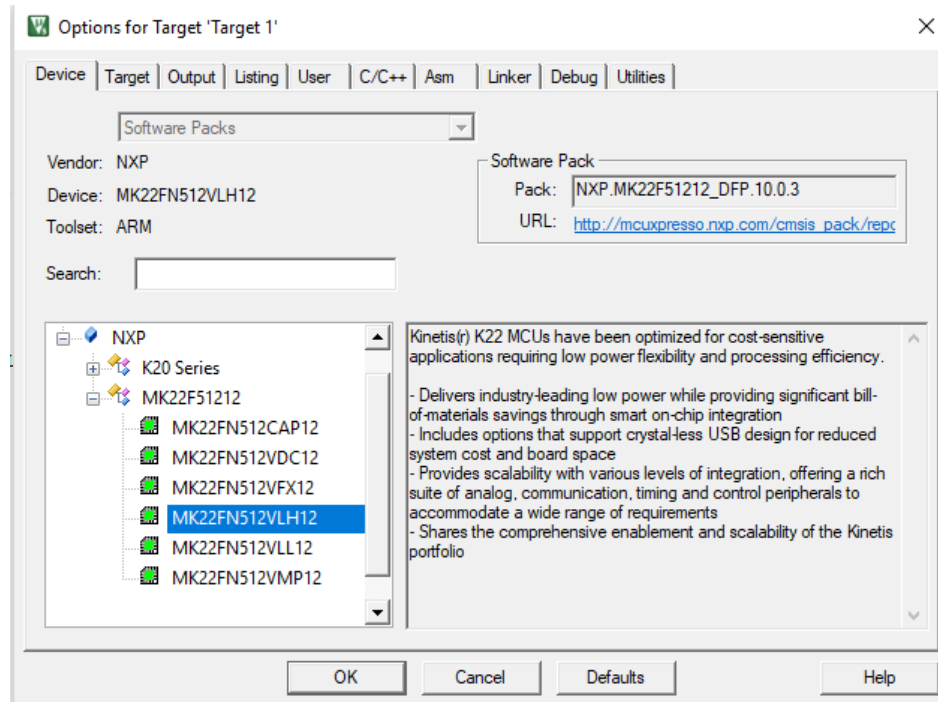
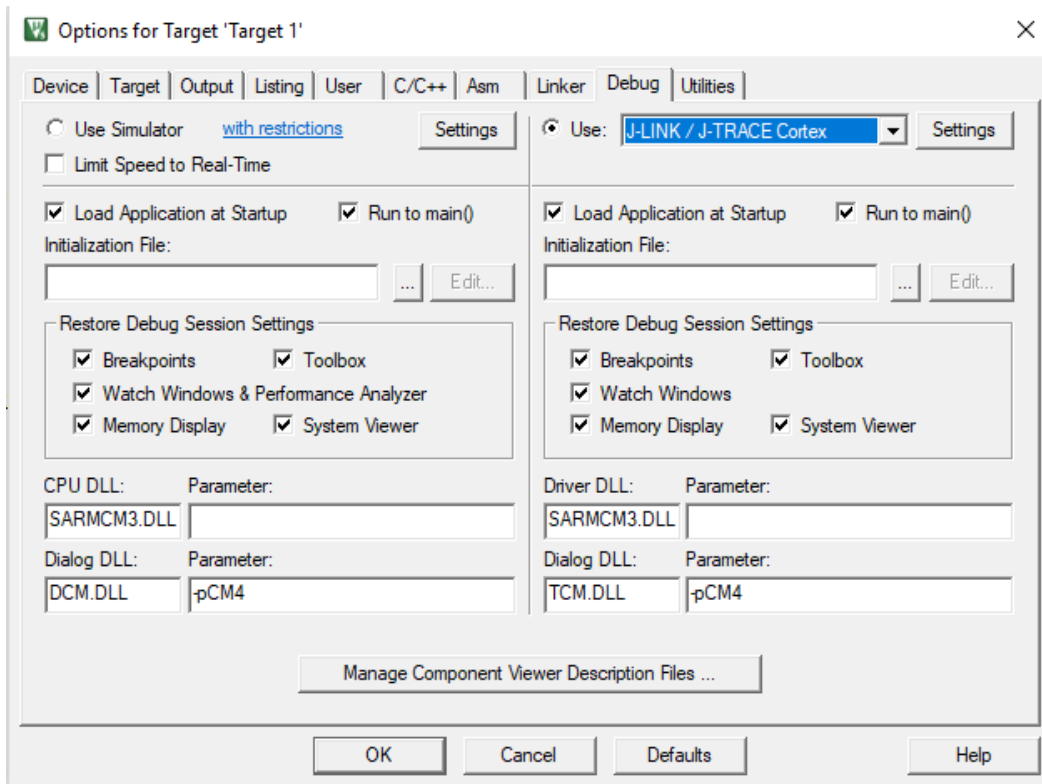


Getting Keil uVision 5 set up:

1. Download program
2. Save framework in a *Read/Write accessible folder* (make sure it is not in a “ProgramData” or “temp” subdirectory, you will get “unable to find/access file” errors).
3. Connect device via the corner microUSB. Make sure the FRDM-K22F has a solid green light adjacent to the USB. (A rapid blinking light means no data connection)
4. Start uVision 5, and go to Flash > Configure Flash Tools
5. Go to the “Device” tab and choose device shown: NXP > MK22F51212 > MK22FN512VLH12



6. Go to “Debug” tab and select J-Link in the upper right dropdown as shown (you may have to click settings afterwards then click “ok” on the settings window).



7. Click OK on the “Configure Flash Tools” window.
8. Go to Project > Manage > Pack Installer.... Or click button below.



9. Install/Update these packs as shown:
 - a. Packs that show up after device is chosen: FRDM-K22F_BSP; MK22F51212
 - b. Packs that show up always: ARM::CMSIS; ARM::CMSIS-Driver; Keil::ARM_Compiler; Keil::MDK-Middleware

Packs		Examples
Pack	Action	Description
[-] Device Specific	3 Packs	MK22FN512VLH12 selected
[-] NXP::FRDM-K22F_BSP	Up to date	Board Support Pack for FRDM-K22F
[-] NXP::MK22F51212_DFP	Up to date	Device Family Pack for MK22F51212
[-] NXP::TWR-K22F120M_...	Install	Board Support Pack for TWR-K22F120M
[-] Generic	33 Packs	
[-] ARM::AMP	Install	Software components for inter processor communication (Asymmetric Multi
[-] ARM::CMSIS	Up to date	CMSIS (Cortex Microcontroller Software Interface Standard)
[-] ARM::CMSIS-Driver	Up to date	CMSIS Drivers for external devices
[-] ARM::CMSIS-Driver_Val...	Install	CMSIS-Driver Validation
[-] ARM::CMSIS-FreeRTOS	Install	Bundle of FreeRTOS for Cortex-M and Cortex-A
[-] ARM::CMSIS-RTOS_Val...	Install	CMSIS-RTOS Validation
[-] ARM::mbedClient	Install	ARM mbed Client for Cortex-M devices
[-] ARM::mbedTLS	Install	ARM mbed Cryptographic and SSL/TLS library for Cortex-M devices
[-] ARM::minar	Install	mbed OS Scheduler for Cortex-M devices
[-] ARM::TFM	Install	Trusted Firmware-M (TF-M) is the reference implementation of Arm's Platfor
[-] Huawei::LiteOS	Install	Huawei LiteOS kernel Software Pack
[-] Keil::ARM_Compiler	Up to date	Keil ARM Compiler extensions for ARM Compiler 5 and ARM Compiler 6
[-] Keil::iMXRT105x_MWP	Install+	NXP i.MX RT 105x MDK-Middleware examples and CMSIS-Drivers
[-] Keil::Jansson	Install	Jansson is a C library for encoding, decoding and manipulating JSON data
[-] Keil::MDK-Middleware	Up to date	Middleware for Keil MDK-Professional and MDK-Plus
[-] lwIP::lwIP	Install	lwIP is a light-weight implementation of the TCP/IP protocol suite
[-] MDK-Packs::AWS_IoT_...	Install+	SDK for connecting to AWS IoT from a device using embedded C
[-] MDK-Packs::Azure_IoT	Install+	Microsoft Azure IoT SDKs and Libraries
[-] MDK-Packs::cJSON	Install	Ultralightweight JSON parser in ANSI C
[-] MDK-Packs::Google_Io...	Install+	Google Cloud IoT Device Connector
[-] MDK-Packs::IoT_Socket	Install	Simple IP Socket (BSD like)
[-] MDK-Packs::Paho_MQ...	Install+	Embedded MQTT C/C++ Client Libraries
[-] MDK-Packs::Watson_I...	Install+	Client libraries and samples for connecting to IBM Watson IoT using Embedd
[-] Micrium::RTOS	Install	Micrium software components

10. Press "OK" and load the project "K22_Project_Framework" through Project > Open Project...
 - a. Make sure to install anything prompted through pop up windows.
11. You're all set. Test by Flash > Download...