

Setting Up Toolchain for KW40

In the this document you can find instructions step by step on how to set up toolchain for compiling IAR bluetooth project for the Hexiwear.

Step 1:

- Install IAR Embedded Workbench for ARM
- Note: we used version 7.40.3.8938 for developing.

Step 2:

- Install KW40Z_Connectivity_Software. You will find "KW40Z_Connectivity_Software_1.0.1.exe" installation file at the following location: [HEXIWEAR\SW\KW40\SDK installation](#)
- Note: "[HEXIWEAR](#)" relates to path to cloned repository.

Step 3:

- In order to fulfill requirements for bluetooth firmware there is need to do some changes in KW40Z_Connectivity_Software_1.0.1 development kit.
- Please follow the instructions from README.txt files in each subfolder from "[HEXIWEAR\SW\KW40\SDK modifications](#)" in order to successfully modify SDK.

Step 4:

- Add following system variables whose paths would depend on the location of the KW40Z_Connectivity_Software:

[KSDK_1_3_0_PATH](#)

[...\Freescale\KW40Z_Connectivity_Software_1.0.1\KSDK_1.3.0\](#)

[KSDK_PATH](#)

[...\Freescale\KW40Z_Connectivity_Software_1.0.1\KSDK_1.3.0\](#)

[KSDK13_FWK524_PATH](#)

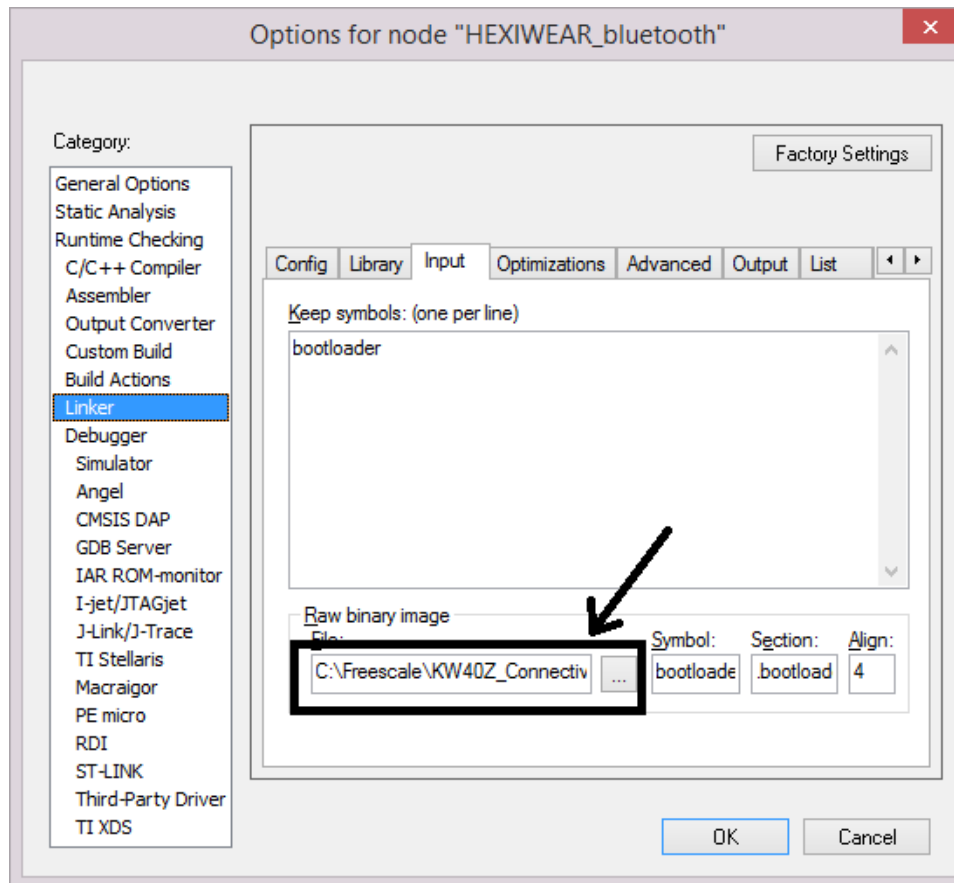
[...\Freescale\KW40Z_Connectivity_Software_1.0.1\KSDK_1.3.0\](#)

Step 5:

- Copy bluetooth firmware (folder [HEXIWEAR\SW\KW40\HEXIWEAR_bluetooth](#)) to the following location which would depend on the location of the KW40Z_Connectivity_Software:
[...\Freescale\KW40Z_Connectivity_Software_1.0.1\ConnSw\examples\bluetooth\](#)

Step 6:

- You need to check if the right raw binary image file path is set in the "HEXIWEAR_bluetooth" project. You will do that checking following settings (check picture): Options -> Linker -> Input -> Raw binary image File Path
- Set to location where BootloaderOTAP_KW40Z4.bin file is depending on the location of the KW40Z_Connectivity_Software:
[...\\Freescale\\KW40Z_Connectivity_Software_1.0.1\\ConnSw\\framework\\Bootloader\\Bootloader_OTAP_Serial\\BootloaderOTAP_KW40Z4\\Exe\\BootloaderOTAP_KW40Z4.bin](#)



Step 7:

- You can now compile HEXIWEAR_bluetooth project, and load it to the Hexiwear's KW40 MCU.