

Migrating an ANT nRF51 project to nRF52

ABSTRACT

This document describes the steps required to migrate a project created for the nRF51 series (such as those in the N5 Starter Kit SDK) to the nRF52.

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1 Introduction

The N5 Starter Kit is the development kit for the N5 ANT SoC module series, based on the Nordic Semiconductor nRF51422 system on chip solution. This development kit includes a set of code examples that showcase the usage of ANT for different scenarios. The examples included in the N5 Starter Kit can be converted for use with the nRF52 series.

This document focuses on changing the project settings to target the nRF52 series. Please review the release notes accompanying the Nordic SDK for additional changes that may be required when changing SDKs (e.g. changes in directory structure of the SDK will require adjustments to the paths in the project).

2 Relevant Documents

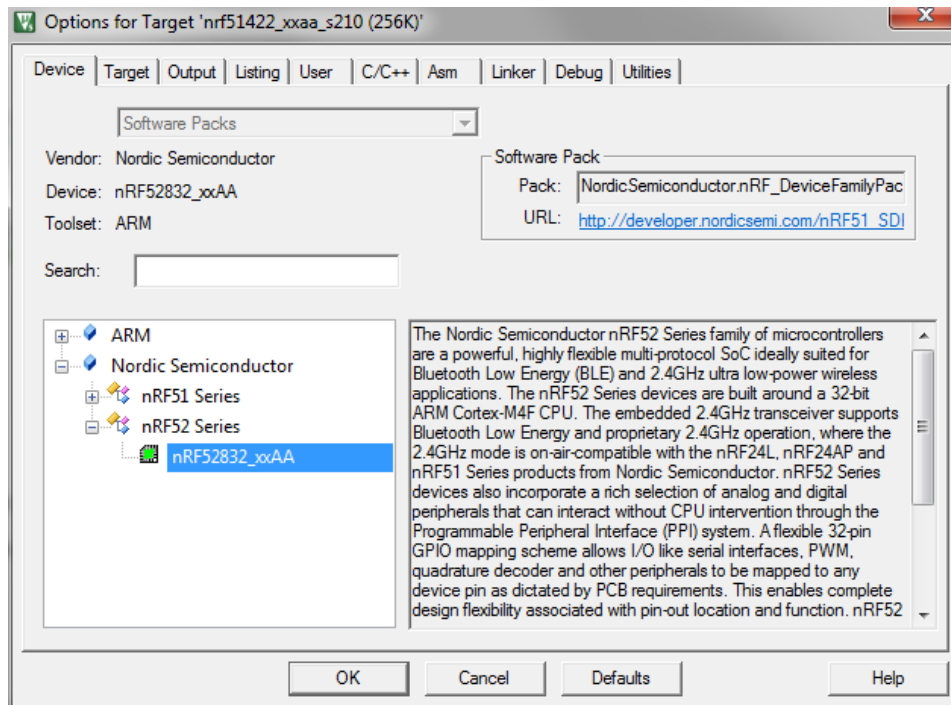
It is strongly recommended that the following documents be reviewed prior to using this application note:

- N5 Starter Kit User Manual

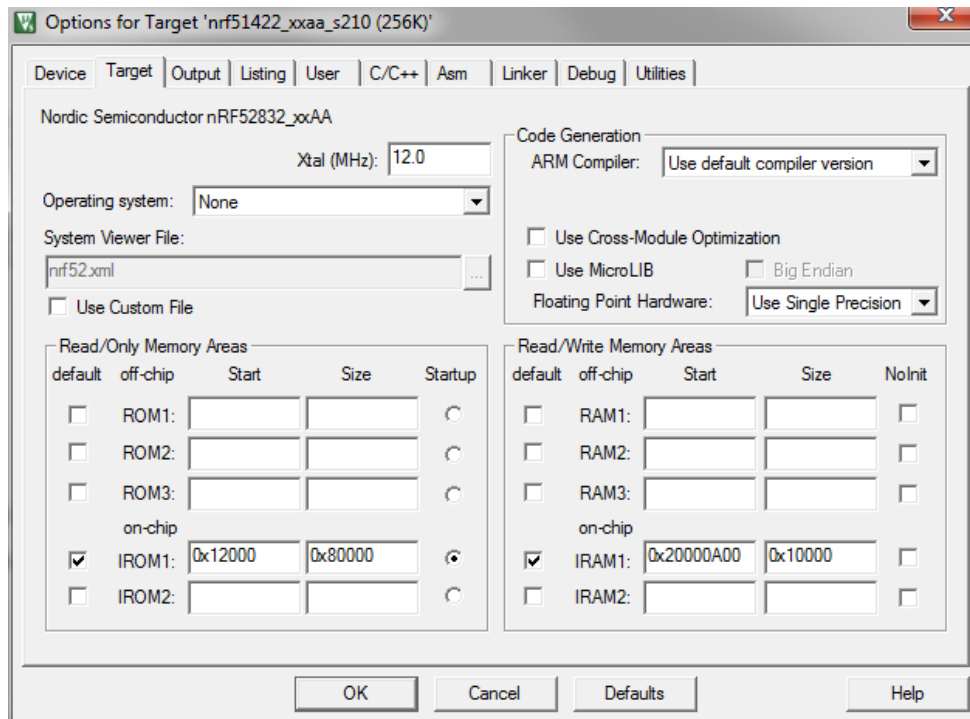
3 Project Migration Steps

In order to convert a Keil v5 project intended for nRF51 to nRF52, perform the following steps:

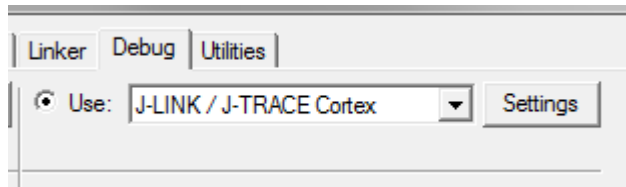
1. Make sure that the latest device family pack from Nordic Semiconductor is installed, following the steps outlined in the N5 Starter Kit Manual, section 2.4.
2. Download the [nRF52 SDK](#).
3. Unzip the contents of the nRF52 SDK in a directory of your choice.
4. Extract the entire contents of the [N5 Starter Kit SDK](#) in a temporary location of your choice.
5. Move the entire folder n5_series from the extracted N5 Starter Kit SDK into the examples directory of the extracted nRF52 SDK.
6. Open the project to be migrated.
7. Edit the target options by clicking on the  button.
8. Click on the "Device" tab, and select the appropriate device from the nRF52 series (e.g. nRF52823_xxAA).



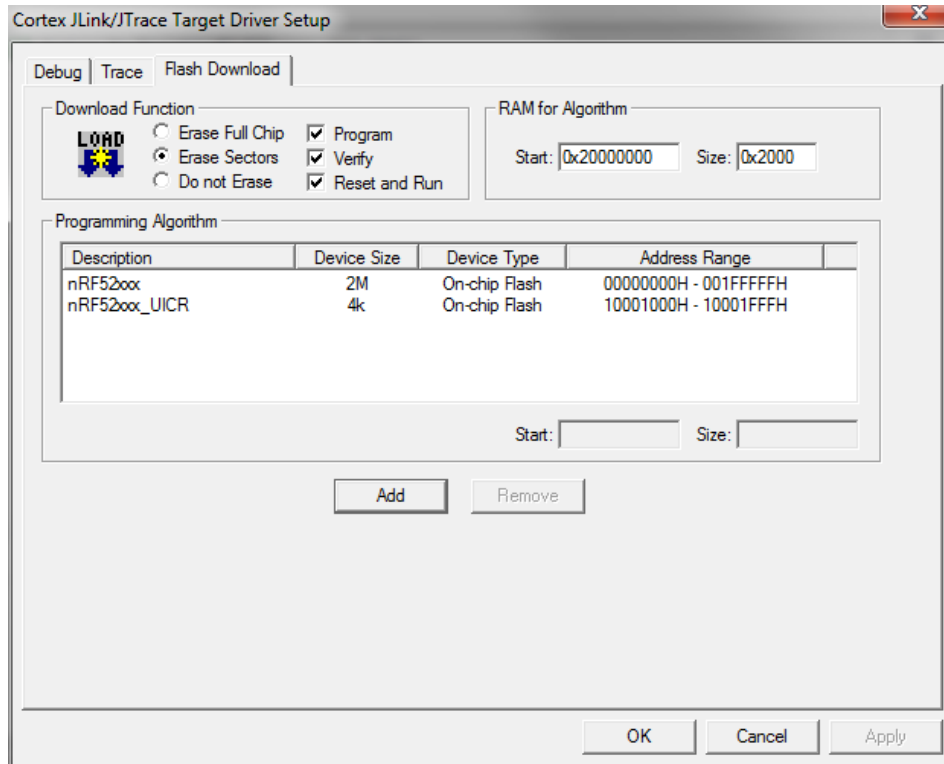
9. Click on the "Target" tab, and change the start and size for the ROM and RAM regions such that
 ROM start = 0x12000
 RAM start = 0x20000A00 (for S212 SoftDevice)



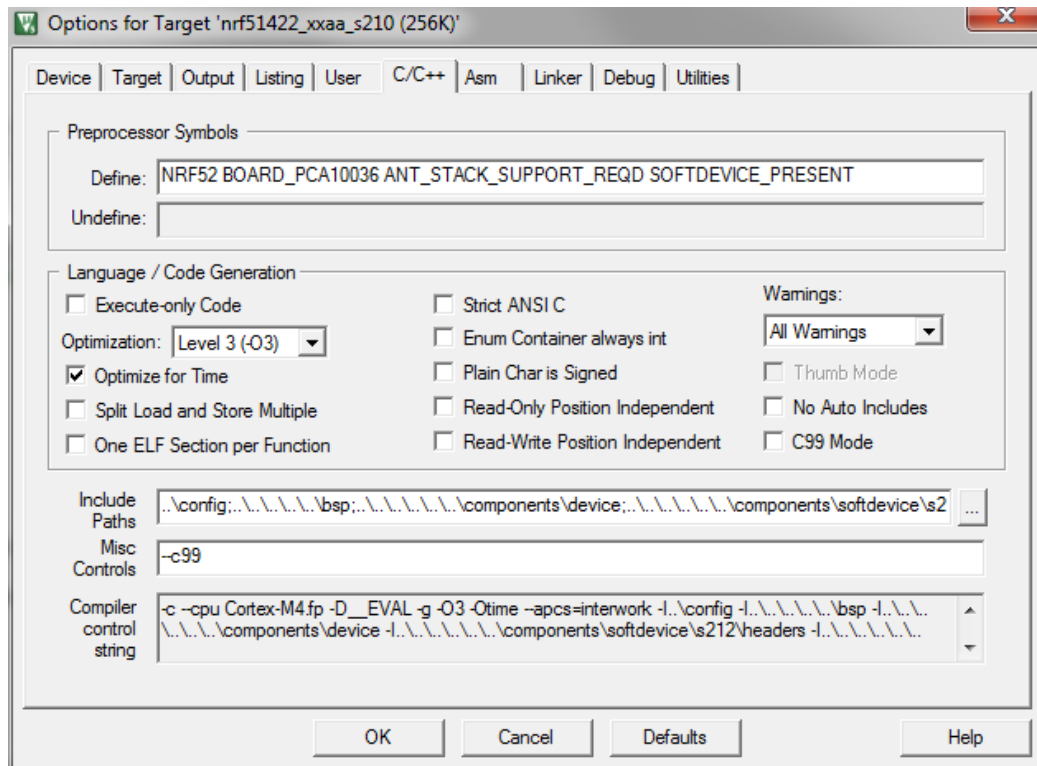
10. Click on the "Debug" tab, and then click the "Settings" button for the J-LINK/J-TRACE Cortex.



11. Click on the "Flash Download" tab and remove the existing nRF51 programming algorithms. Click on "Add" and add the nRF52xxx and nRF52xxx_UICR programming algorithms. Set the RAM for Algorithm start address to 0x20000000, with size 0x2000.



12. Press OK to return to the target options.
13. Click on the "C/C++" tab and replace the NRF51 define with NRF52. Replace the BOARD_N5DK1 define with BOARD_PCA10036 if using the nRF52 Evaluation Kit from Nordic Semiconductor.



14. Edit the include paths to replace the components\softdevice\s210\headers folder with the components\softdevice\s212\headers folder.

