

Migrating CodeWarrior Projects from Rev1 to Rev2 for B4860/B4420

1. Introduction

This application note explains the migration process of projects created for Rev1 to projects that can work on Rev2.

CodeWarrior for StarCore v10.6.4 is the last release that will support Rev1 targets for B4860/B4420. So, it is necessary to convert the projects that were made for Rev1 into Rev2 projects, in order to transition from Rev1 hardware to Rev2 hardware. After successfully completing the conversion, the converted project can be imported into CodeWarrior for StarCore v10.6.5 or later.

Contents

- 1. Introduction.....1
- 2. Migrating a project from Rev1 to Rev22

NOTE Screenshots used in this Application Note are based on the CodeWarrior for StarCore v10.6.4 release.

2. Migrating a project from Rev1 to Rev2

For migrating a project from Rev1 to Rev2, change the following:

- [Architecture](#)
- [Linker files](#)
- [Libraries](#)
- [Macros](#)
- [Remove old model](#)

2.1. Architecture

Follow these steps to change the architecture of the project, so that the compiler can generate the appropriate instruction set.

1. Open CodeWarrior IDE.
2. Select the project, then choose **Project > Properties**, to open the properties of the project.
3. From the **Properties** dialog, select **Settings**, under **C/C++ Build** menu.
4. Now, from the right pane select **StarCore Environment**.
5. In the right pane, change the **Architecture** to B4860 from B4860 rev1, as shown in [Figure 1](#).
6. After changing the architecture, choose an appropriate **Floating Point** - Hardware/Software, as shown in [Figure 2](#).

Figure 1. Project properties dialog - Architecture

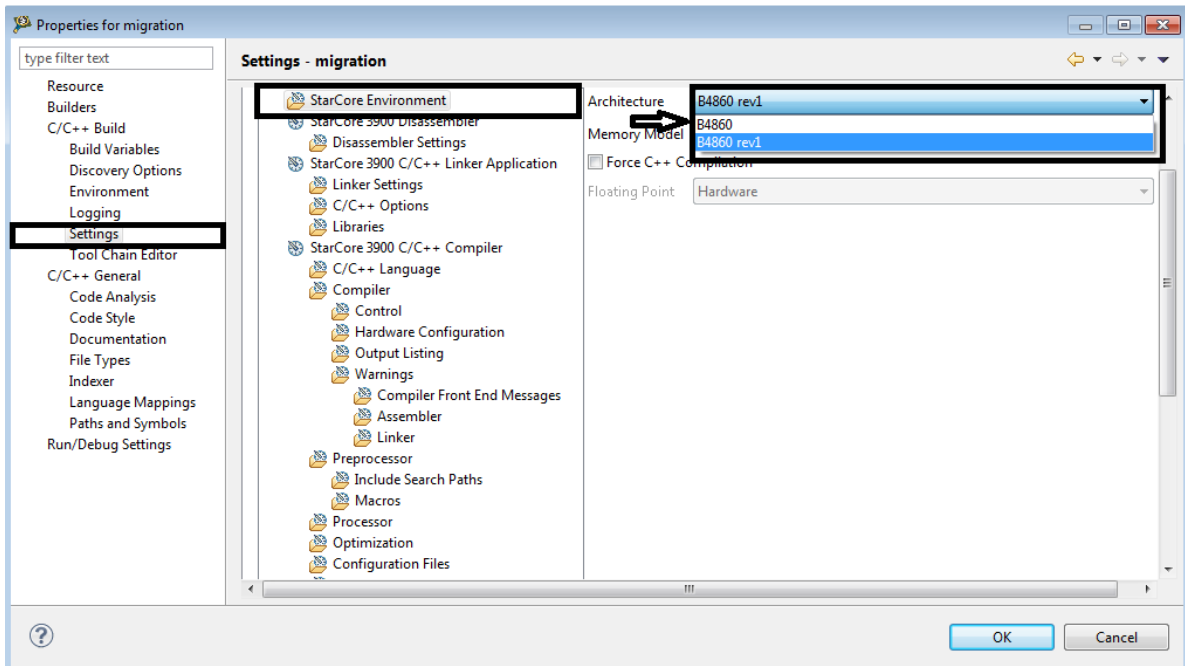
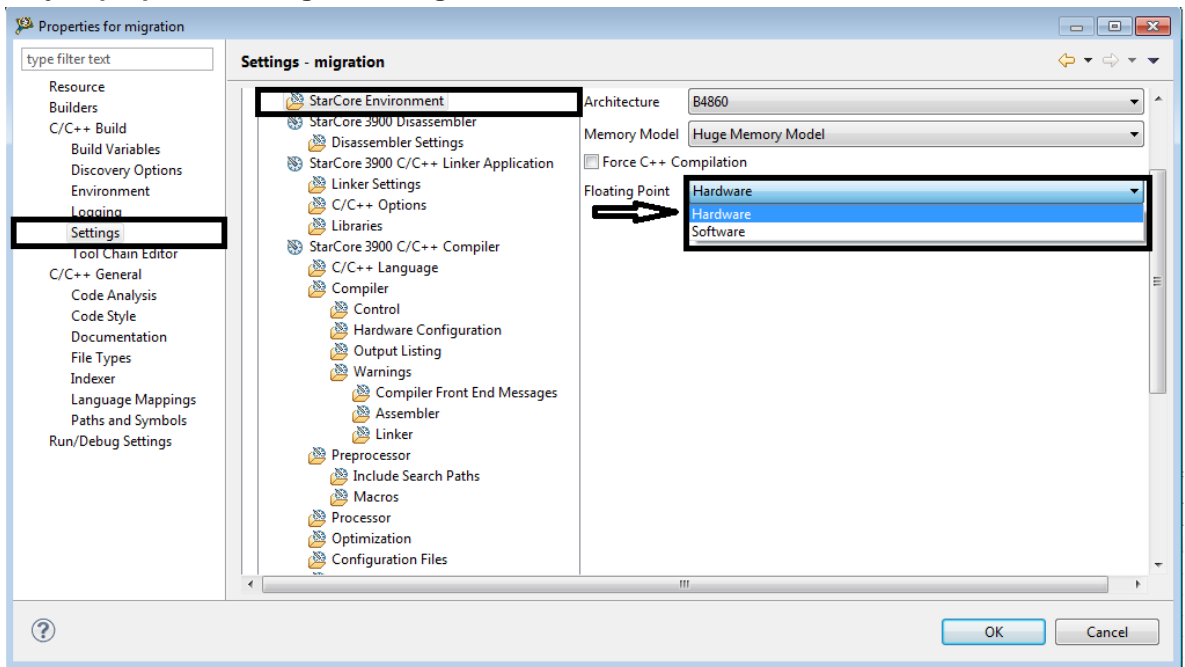


Figure 2. Project properties dialog – Floating Point



2.2. Linker files

Follow these steps to change the Linker Command File:

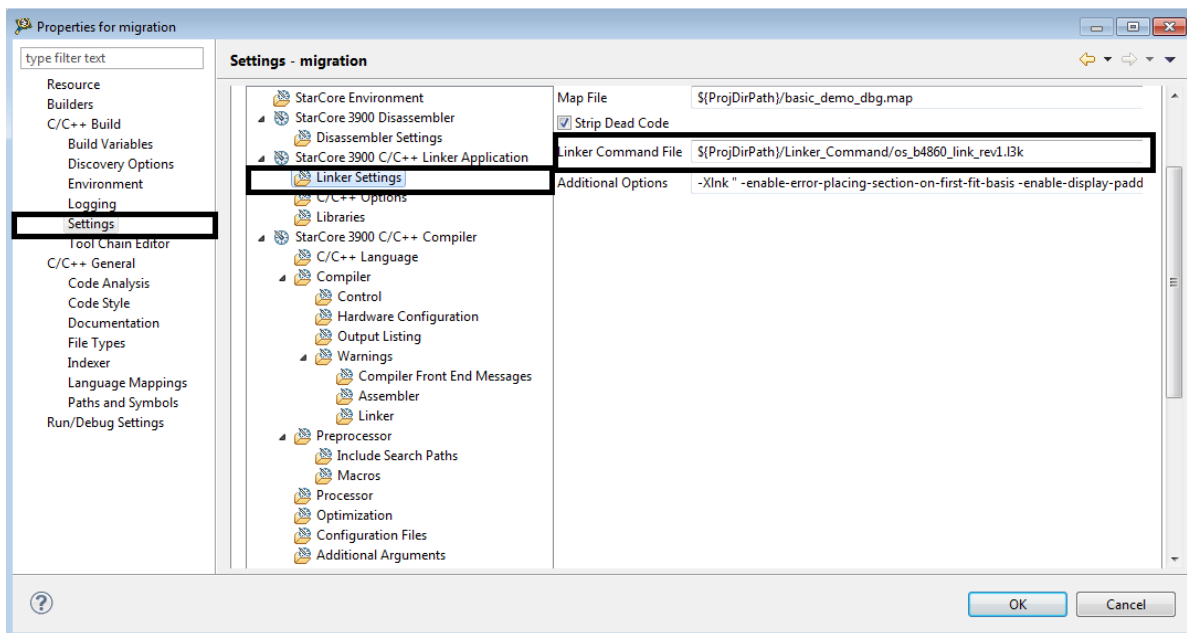
1. Open CodeWarrior IDE.

Migrating a project from Rev1 to Rev2

2. Select the project, then choose **Project > Properties**, to open the properties of the project.
3. From the **Properties** dialog, select **Settings**, under **C/C++ Build** menu.
4. Now, from the right pane select **Linker Settings**, under **StarCore 3900 C/C++ Linker Application** menu.
5. In the right pane, replace the default path specified in **Linker Command File** with
`<install_path>\CW_SC_v10.6.4\SC\StarCore_Support\SmartDSP\demos\starcore\b4860\basic_demo\linker_files\os_b4860_link.l3k`
as shown in [Figure 3](#).

NOTE The default .lcf (Linker Command File) file is for Rev1. So, this has to be replaced with an .lcf for Rev2. The `os_b4860_link.l3k` is an .lcf for Rev2 and can be used as a starting point.

Figure 3. Project properties dialog – Linker Settings



2.3. Libraries

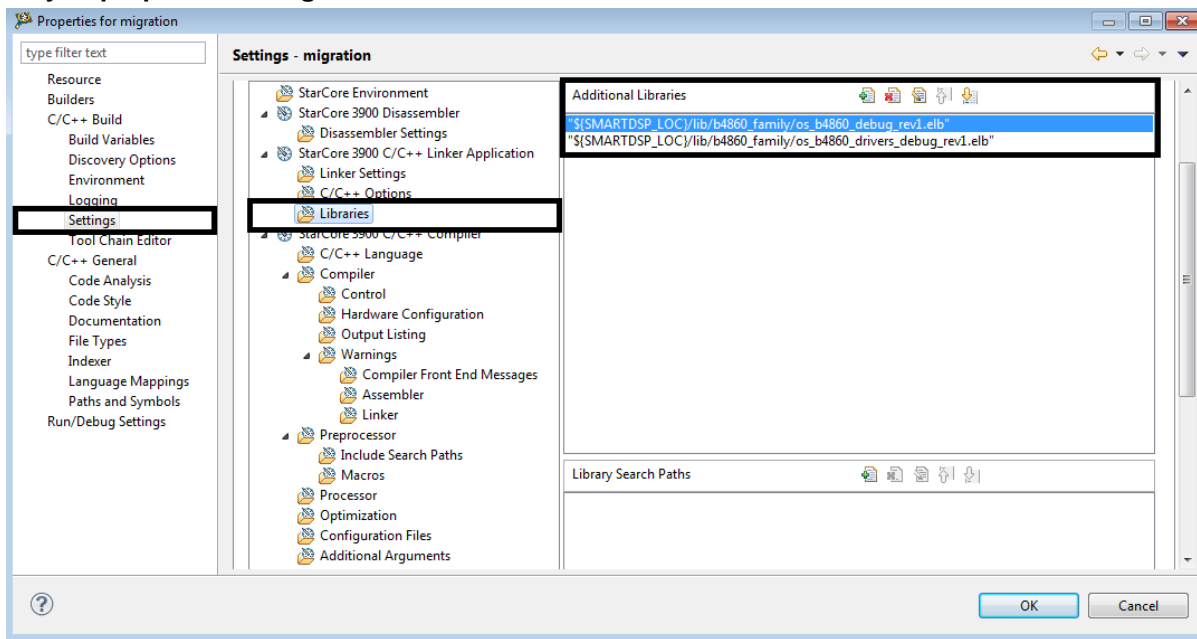
Follow these steps to specify Rev2 libraries:

1. Open CodeWarrior IDE.
2. Select the project, then choose **Project > Properties**, to open the properties of the project.
3. From the **Properties** dialog, select **Settings**, under **C/C++ Build** menu.
4. Now, from the right pane select **Libraries**, under **StarCore 3900 C/C++ Linker Application** menu.

- In the right pane, edit the library names and remove the suffix - rev1, from the names, as shown in [Figure 4](#).

NOTE The libraries for Rev2 are at:
`<install_path>\CW_SC_v10.6.4\SC\StarCore_Support\SmartDSP`
`\lib\b4860_family`

Figure 4. Project properties dialog - Libraries



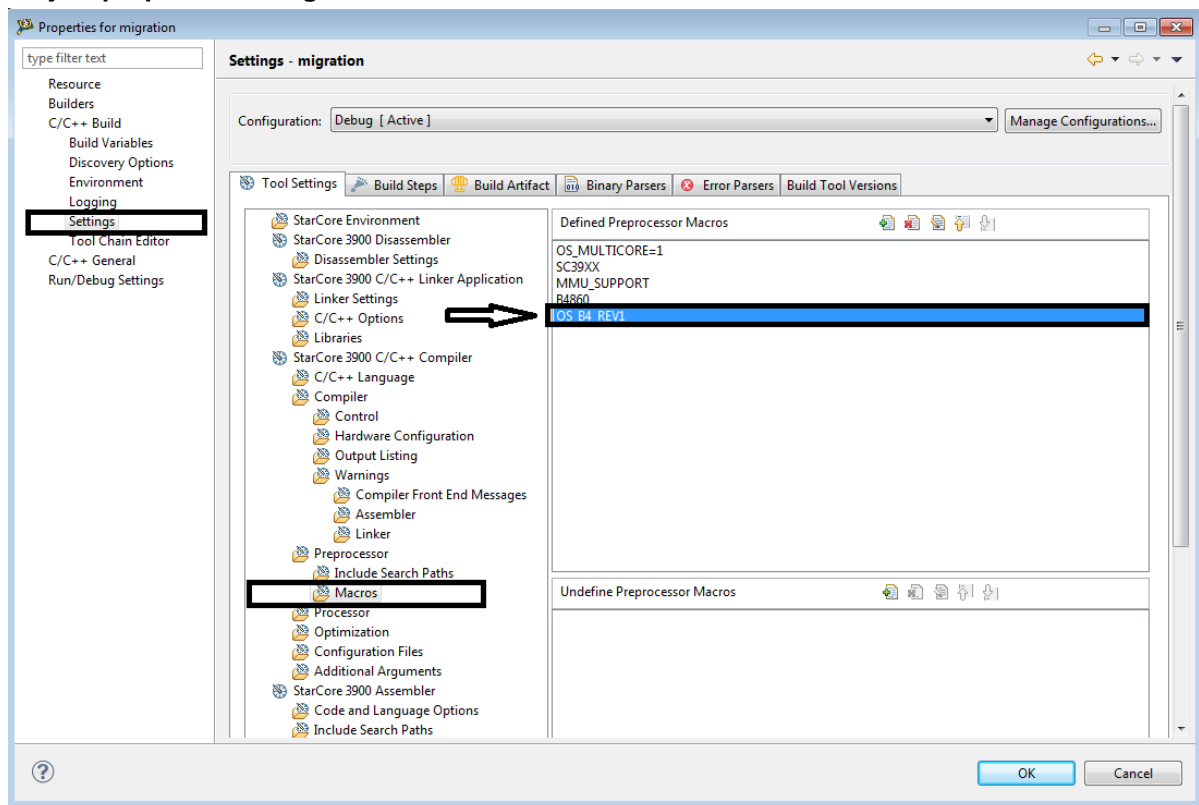
2.4. Macros

Follow these steps to edit the macros:

- Open CodeWarrior IDE.
- Select the project, then choose **Project > Properties**, to open the properties of the project.
- From the **Properties** dialog, select **Settings**, under **C/C++ Build** menu.
- Now, from the right pane select **Macros**, under **Preprocessor** menu.
- In the right pane, remove the macro named OS_B4_REV1, as shown in [Figure 5](#).

NOTE The OS_B4_REV1 macro is used to specify that the application runs on Rev1 of B4860/B4420, when CodeWarrior for StarCore v10.6.1 – v10.6.4 are used.

Figure 5. Project properties dialog - Macros



2.5. Remove old model

Follow these steps to remove the old model:

1. Open CodeWarrior IDE.
2. Select the project, then choose **Run > Debug Configurations**, to open the **Debug Configuration** dialog.
3. From the **Debug Configuration** dialog, select the resource you want to edit.
4. Now, from the right pane select **Edit**, under **Target settings** menu, to open **Hardware or Simulator Connection** dialog.
5. From the **Hardware or Simulator Connection** dialog, remove the `-imodel sc3900rev1` flag from the **CCS executable**, under **Connection** tab, as shown in [Figure 6](#).
6. Select **OK** to close the **Hardware or Simulator Connection** dialog.
7. Select **Debug** to start debugging the project.
8. Apply the changes to the project from **Remote Systems** view, as shown in [Figure 7](#).

Figure 6. Hardware or Simulator Connection dialog

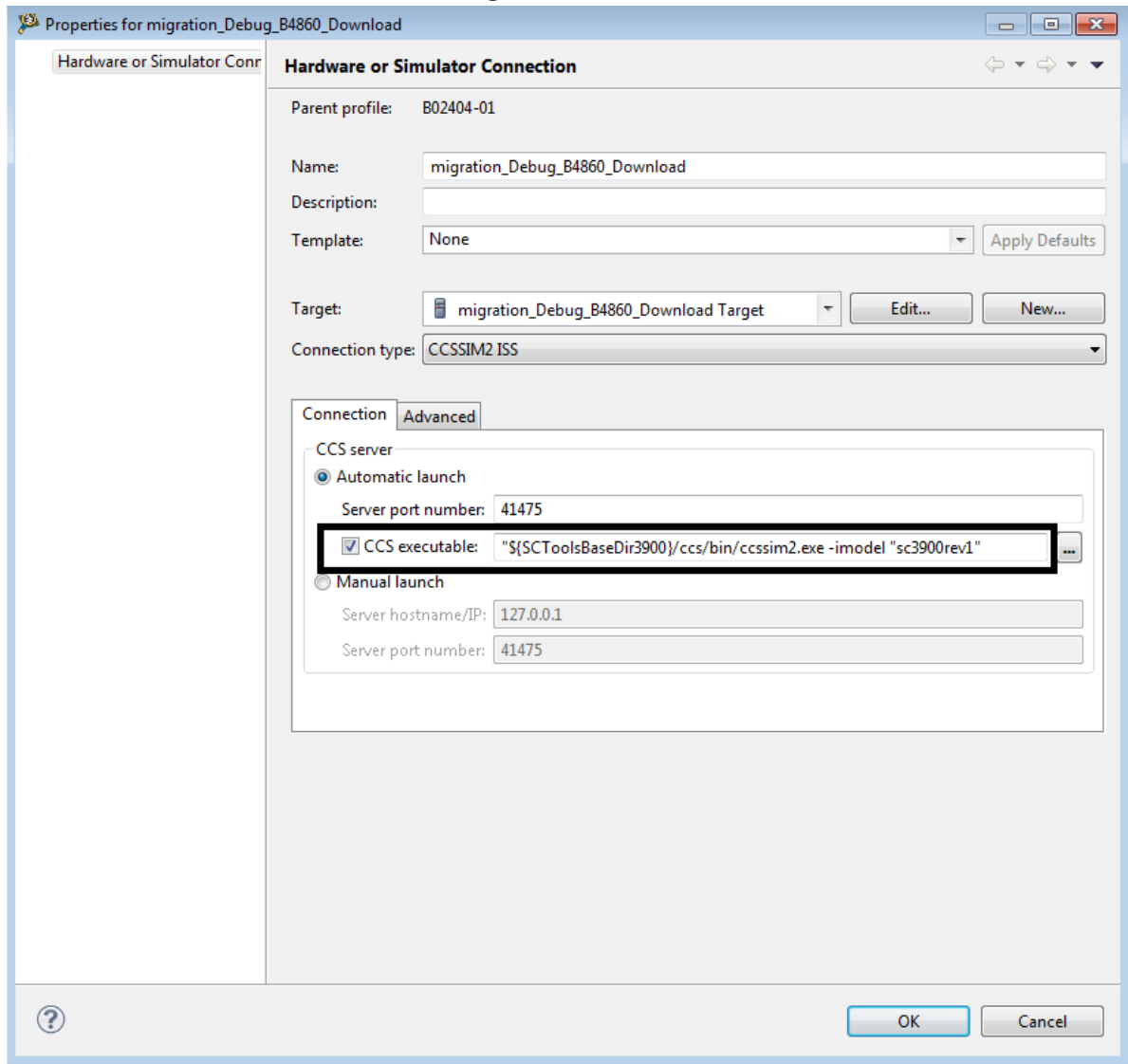
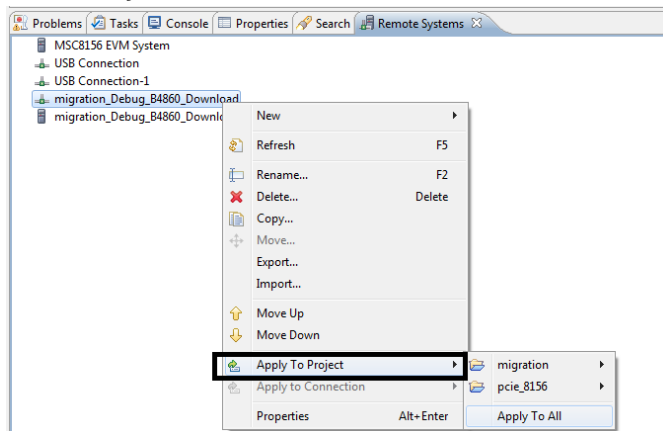


Figure 7. Remote Systems view



How to Reach Us:

Home Page:

www.freescale.com

E-mail:

support@freescale.com

Information in this document is provided solely to enable system and software implementers to use Freescale Semiconductor products. There are no express or implied copyright licenses granted hereunder to design or fabricate any integrated circuits or integrated circuits based on the information in this document.

Freescale reserves the right to make changes without further notice to any products herein. Freescale makes no warranty, representation, or guarantee regarding the suitability of its products for any particular purpose, nor does Freescale assume any liability arising out of the application or use of any product or circuit, and specifically disclaims any and all liability, including without limitation consequential or incidental damages. "Typical" parameters that may be provided in Freescale data sheets and/or specifications can and do vary in different applications, and actual performance may vary over time. All operating parameters, including "typicals," must be validated for each customer application by customer's technical experts. Freescale does not convey any license under its patent rights nor the rights of others. Freescale sells products pursuant to standard terms and conditions of sale, which can be found at the following address: freescale.com/SalesTermsandConditions.

Freescale, the Freescale logo, CodeWarrior, QorIQ, StarCore are trademarks of Freescale Semiconductor, Inc., Reg. U.S. Pat. & Tm. Off. QorIQ Qonverge is a trademark of Freescale Semiconductor, Inc. All other product or service names are the property of their respective owners. The Power Architecture and Power.org word marks and the Power and Power.org logos and related marks are trademarks and service marks licensed by Power.org.

© Freescale Semiconductor, Inc. 2014.