



Installation of the MMA955xL CodeWarrior Service Pack

Author: Fengyi Li
Application Engineer

1 Overview

The Freescale MMA955xL Xtrinsic family devices are high-precision, intelligent accelerometers built on the Freescale ColdFire v1 platform.

The MMA955xL family's microcontroller core is programmable and configurable with the Eclipse based CodeWarrior for Microcontrollers Development Studio software. CodeWarrior's highly visual and automated Integrated Design Environment (IDE), accelerates the development of custom algorithms and features for complex embedded applications.

This application note provides step-by-step instructions to install the MMA9550 Service Pack for CodeWarrior v10.1. This service pack supports all MMA955xL family devices. System requirements are specified and instructions are given for locating, downloading and installing the patch, and creating a blank MMA9550 project to verify successful installation.

For more information about the Eclipse IDE, read the Eclipse documentation at:

<http://www.eclipse.org/documentation/>

Contents

1	Overview	1
2	CodeWarrior IDE Requirements	2
3	Service Pack Version Naming	2
4	Installation	2
4.1	Online Mode Installation	2
4.2	Offline Mode Installation	5
5	Verification of the Installation	8
5.1	Commonly Asked Questions	12

2 CodeWarrior IDE Requirements

All CodeWarrior IDE products, Basic Suite, Standard Suite and Professional Suite, support MMA955xL devices. Users can also develop their applications on the free download version of CodeWarrior, Special Suite, subject to 1KB C++ code maximum limitation.

The MMA955xL service pack is compatible with CodeWarrior v10.1 and later. Please refer to <http://www.freescale.com/codewarrior> for system requirements using CodeWarrior IDE.

3 Service Pack Version Naming

The MMA955xL Service Pack naming convention illustrates that this service pack supports CodeWarrior v10.1, and is built for of the MMA955xL family of devices as shown below:

Example: com.freescale.mcu10_1.mma9550.win.v1_0_1.zip

4 Installation

The installation procedure below is to install the MMA9550 Service Pack. Users need to make sure that CodeWarrior v10.1 is already installed.

4.1 Online Mode Installation

Online mode installation is available using the integrated software installation tool instructions provided in CodeWarrior. Access to a reliable internet connection is required.

Steps for Online Installation:

1. Open CodeWarrior MCU IDE and go to Menu > Help > Install New Software.

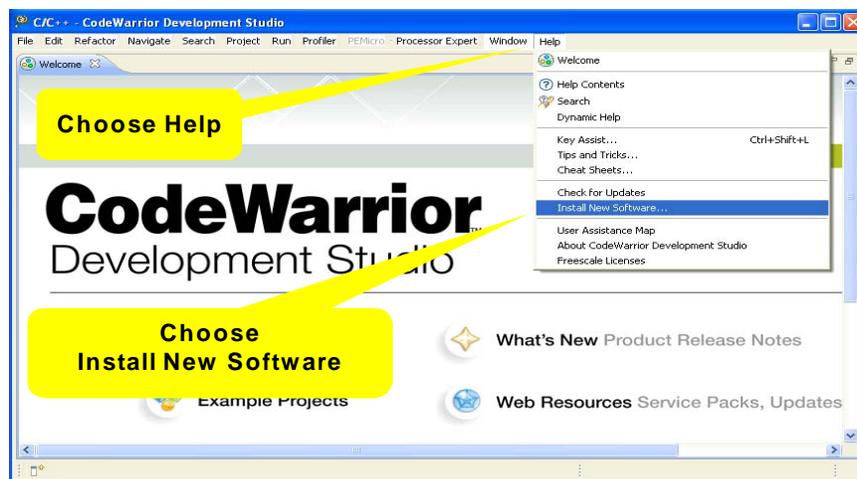


Figure 1. Begin online installation using the CodeWarrior integrated tool

Note: Installation dialogs may display differently depending on the CodeWarrior version being updated.

2. When the Available Software Sites Install dialog is displayed, choose “--All Available Sites--” in the “Work with” pulldown menu.
3. From the Available Software dialog, select the checkboxes labeled “CW MCU v10.1 Update”, “MCU”, “MCU v10.1 Service Pack for MMA9550” and all other preferred items. Leave default settings for boxes as is.
4. Click Next.

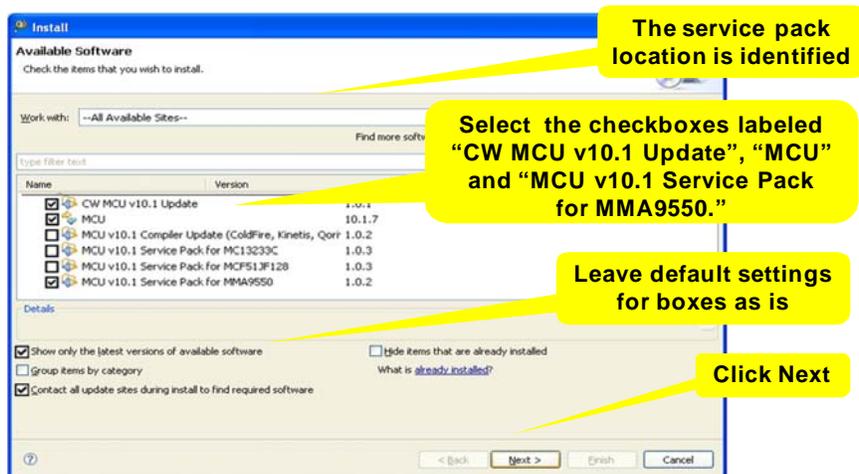


Figure 2. Available Software dialog

5. CodeWarrior identifies and displays the related data packages that need to be installed, including the MMA9550 service pack.
6. Click Next.

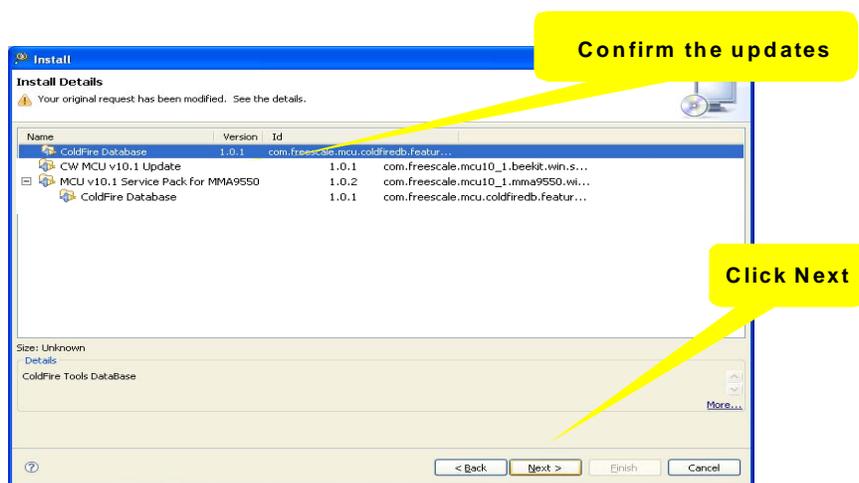


Figure 3. Install Details dialog

7. In the Review Licenses dialog, read through the Freescale licensing agreements. If you agree to the terms, click to select “I accept the terms of the license agreement.”

Installation of the MMA955xL CodeWarrior Service Pack, Rev. 0

8. Click Finish to begin the service pack installation.



Figure 4. Review Licenses dialog

9. During installation, the security warning message shown below may pop up. Click OK to continue installation.

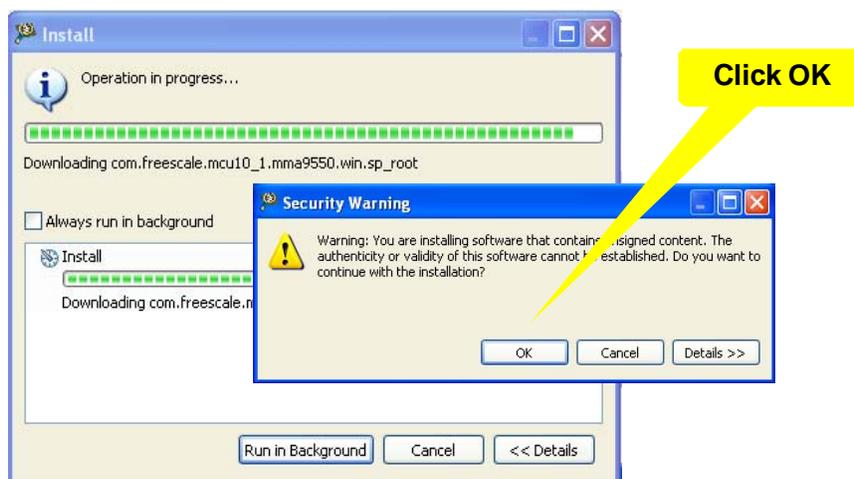


Figure 5. Security Warning dialog

10. At the Software Updates dialog, click Yes to restart CodeWarrior.

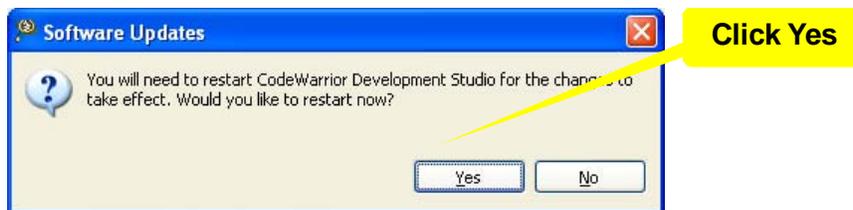


Figure 6. Software Updates restart dialog

4.2 Offline Mode Installation

Offline mode installation may be used if access to the Internet is limited or you prefer to download the patch for later installation.

The MMA9550 service pack can be found and downloaded from the Freescale website:
http://www.freescale.com/webapp/sps/site/overview.jsp?code=CW_UPDATES_MCU_10_1.

Steps for Offline Installation:

1. Download the CW MCU v10.1 MMA9550 Service Pack, Windows or Linux, to your local drive and note the location where the file is saved.
2. Open CodeWarrior Development Studio and choose Help > Install New Software.

Note: Installation dialogs may display differently depending on the CodeWarrior version being updated.

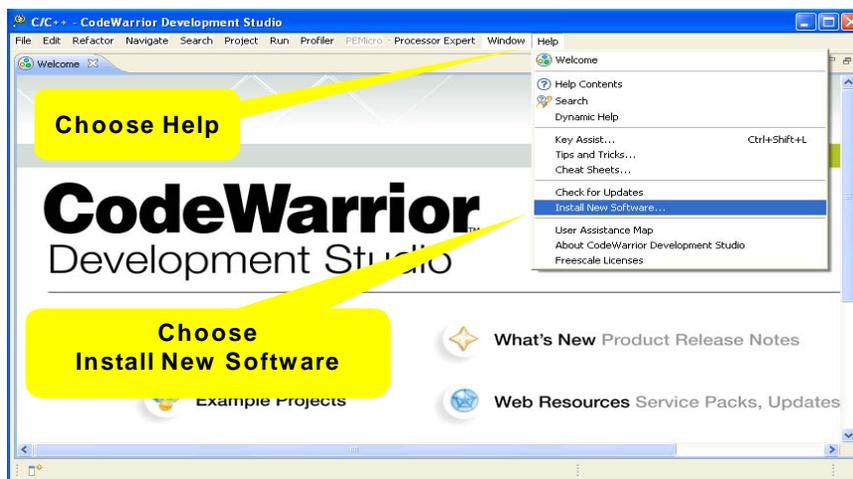


Figure 7. Begin offline installation using CodeWarrior integrated tool and local file

3. When the Install dialog is displayed, choose Add.
4. When the Add Site dialog is displayed, select the Archive button.

5. Browse to the location on your local drive where you saved “MCU 10.1 MMA9550 Service Pack for Windows.”
6. Select it and click Open. The file location will be displayed in the Add Site dialog.
7. Click OK.

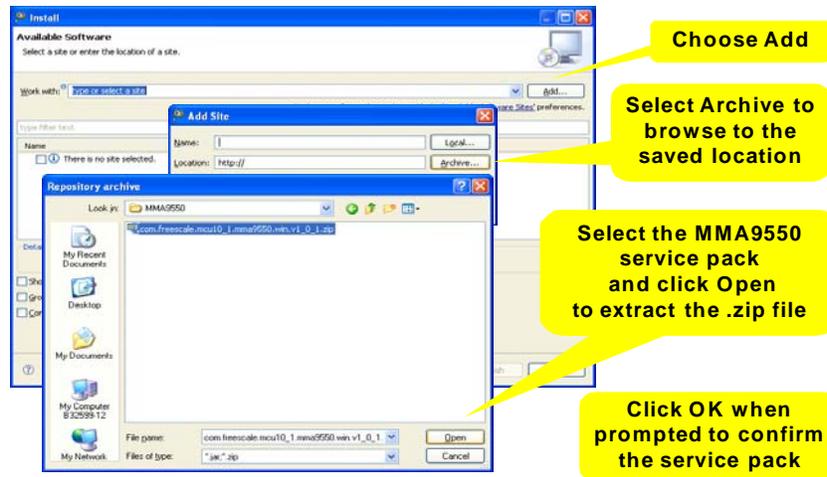


Figure 8. Repository archive dialog

8. From the Available Software dialog, select the checkboxes labeled “CW MCU v10.1 Update”, “MCU”, “MCU v10.1 Service Pack for MMA9550” and all other preferred items. Leave default settings for boxes as is.
9. Click Next.

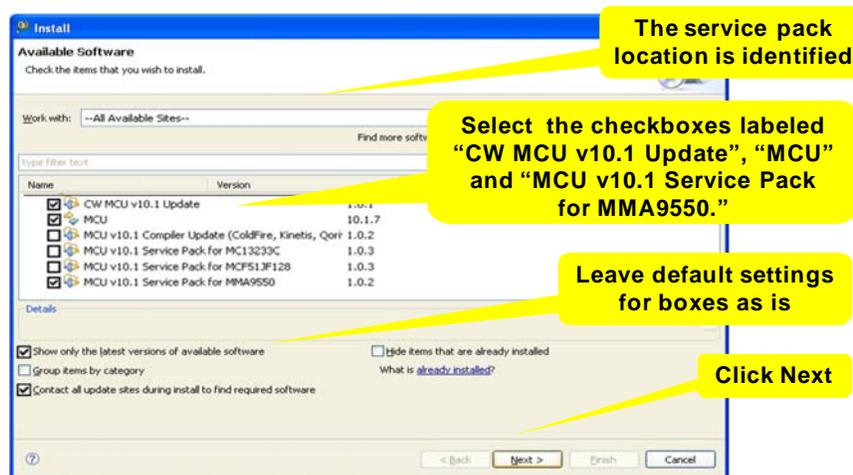


Figure 9. Available Software dialog

10. Wait for the Updater to open the archive and display the Install Details dialog.

Installation of the MMA955xL CodeWarrior Service Pack, Rev. 0

11. CodeWarrior identifies and displays the related data packages that need to be installed, including the MMA9550 service pack.
12. Click Next.

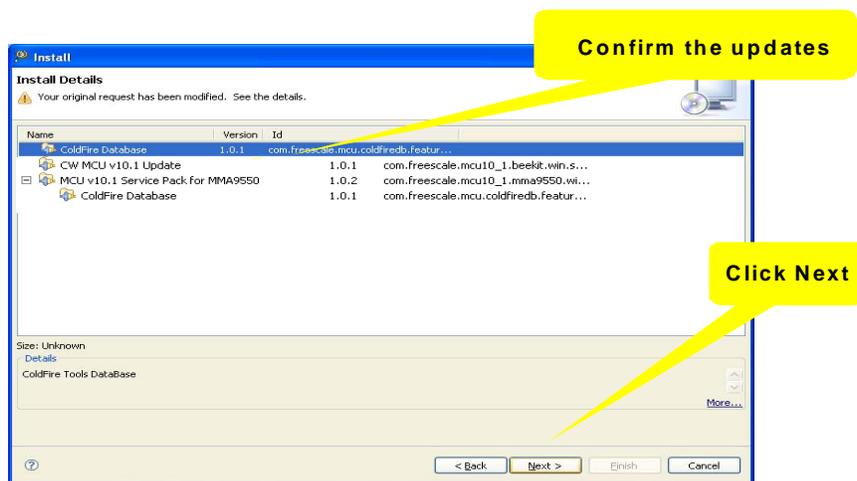


Figure 10. Install Details dialog

13. In the Review Licenses dialog, read through the Freescale licensing agreements. If you agree to the terms, click to select “I accept the terms of the license agreement.”
14. Click Finish.



Figure 11. Review Licenses dialog

15. During installation, the security warning message shown below may pop up. Click OK to continue installation.

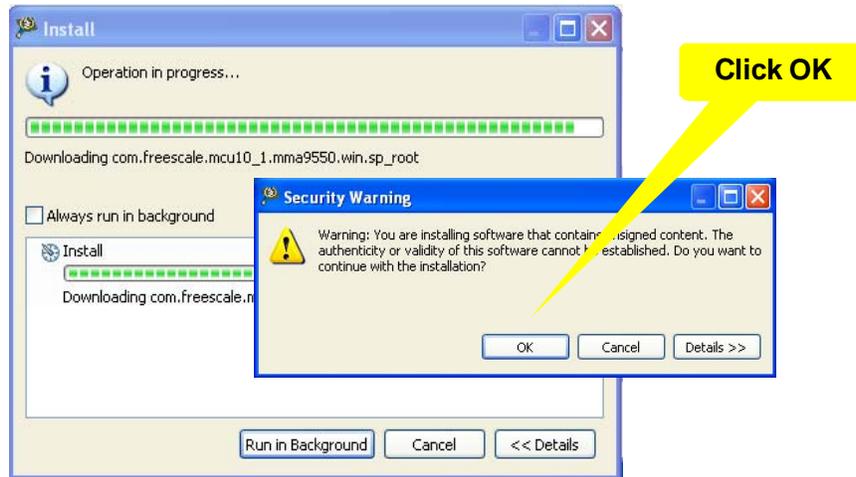


Figure 12. Security Warning dialog

16. At the Software Updates dialog, click Yes to restart CodeWarrior.

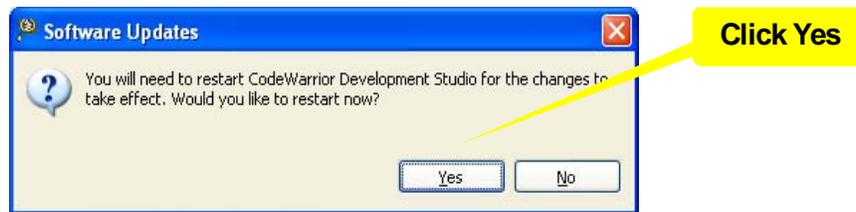


Figure 13. Software Updates restart dialog

5 Verification of the Installation

After completing the installation steps, we recommend customers verify the success of their installation by following these steps:

1. When prompted by the Workspace Launcher, browse to select or create a workspace directory and click OK.

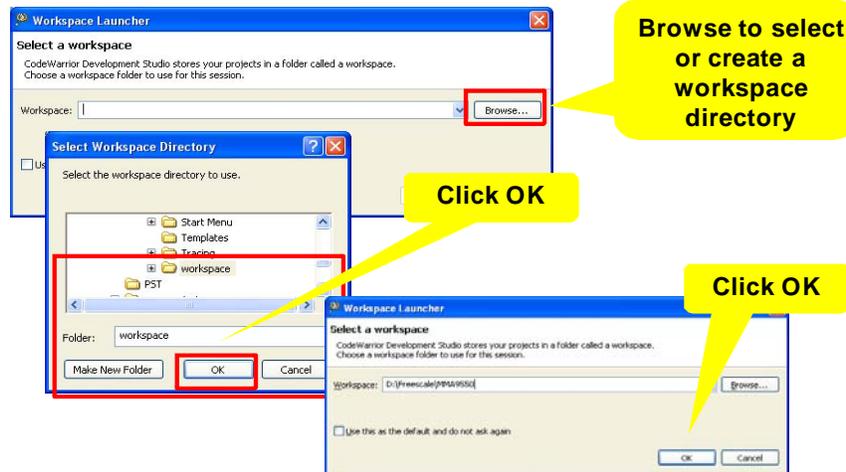


Figure 14. Workspace Launcher dialog

- From the main menu, choose File > New > Bareboard Project.

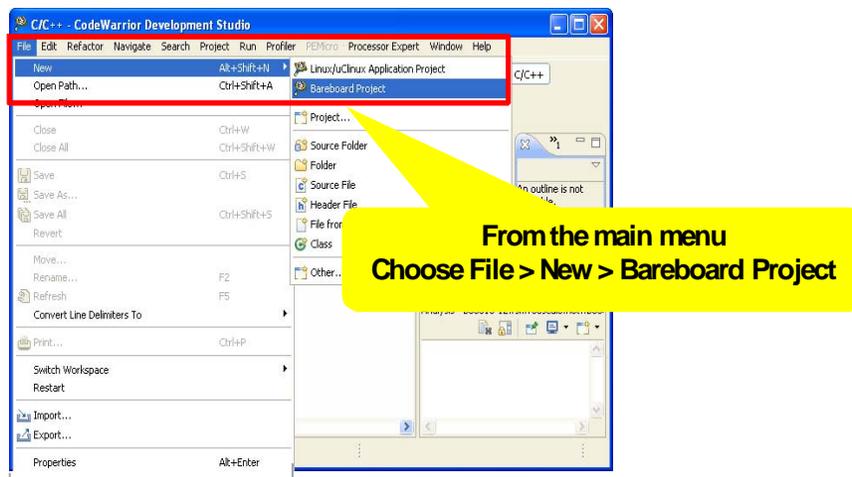


Figure 15. Begin a new Bareboard Project

- Type in the project name “Verification_of_sp_MMA9550.”
- Check the “Use default location” box.
- Click Next.

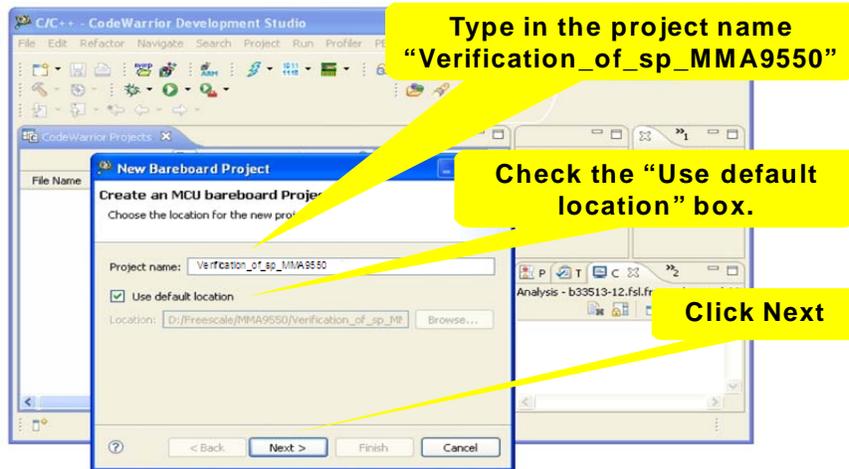


Figure 16. New Bareboard Project dialog

6. From the directory, choose Sensors > ColdFire v1 > MCF51MMA Family > MMA9550.
7. Click Finish.

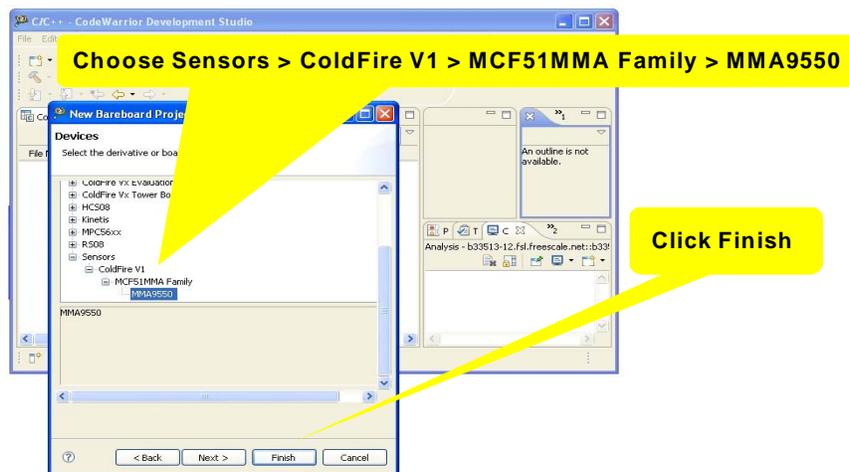


Figure 17. New Bareboard Project directory of devices

8. Now that a new project is created, confirm that C/C++ is the default perspective. From the main menu, choose Window > Open Perspective. If C/C++ perspective is not listed in the menu, choose Other.

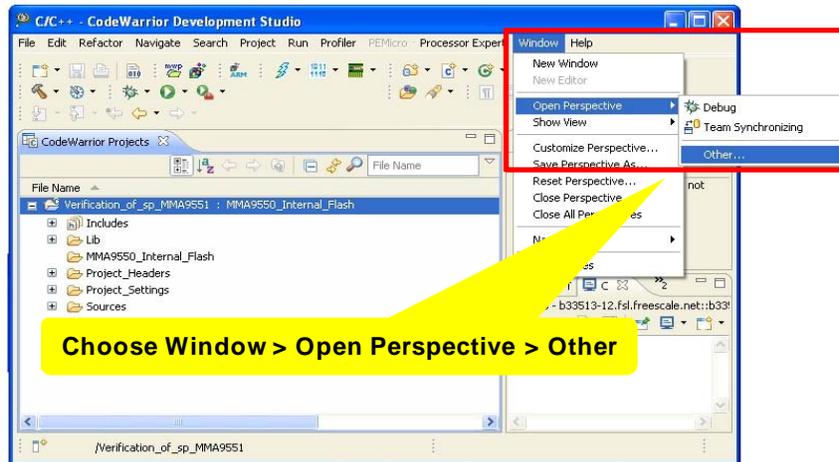


Figure 18. Determine the default perspective

9. Select C/C++ (default) from the Open Perspective dialog and click OK.

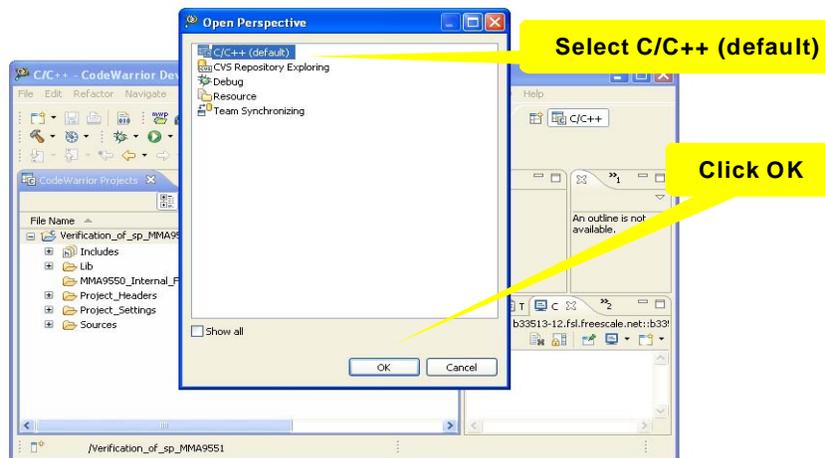


Figure 19. Open Perspective dialog

If the MMA9550 service pack installation has been successful, your verification project named “Verification_of_sp_MMA9550” should be created and listed as a new project in the CodeWarrior Projects navigation menu.

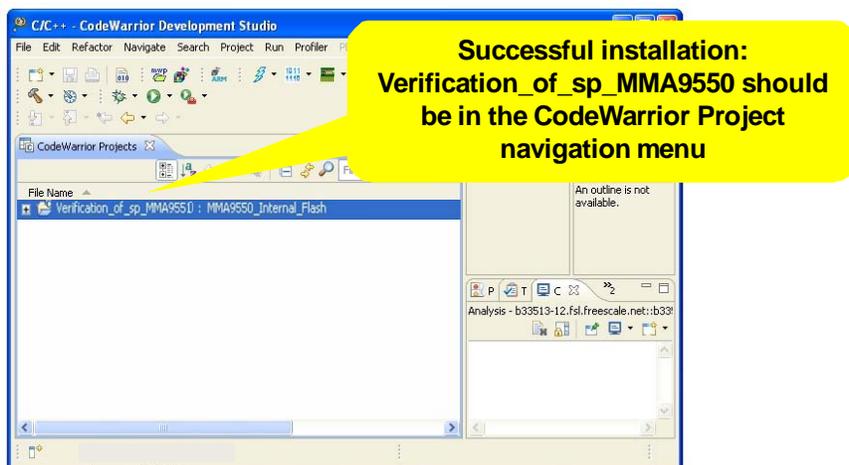


Figure 20. Confirming a successful installation

For more information on how to create projects and program MMA955xL family devices, as well as evaluation software downloads, board support packages, videos, developer training and community forums, go to <http://www.freescale.com/cwmcu10>.

5.1 Commonly Asked Questions

Q1: What happens if I reinstall the service pack?

A1: The support files for this device under CodeWarrior directory will be overwritten. If your installation comes from the same service pack, the files will remain the same. Reinstalling the service pack will not corrupt your project files.

Q2: I have an error message saying “duplicated location” when I try to reinstall the service pack. What do I do?

A2: This is because the installation tool logs all software installations. If you started reinstalling the service pack accidentally, cancel the installation. If the previous installation was corrupted, the easiest solution is to install the service pack from another location.

Q3: Do I need to install the service pack every time I use it?

A3: No, the service pack installation is required only once per CodeWarrior development environment. If you reinstall CodeWarrior, you will need to reinstall the service pack.

Q4: If I get the error message “missing dependency” during installation and can’t proceed, what do I do?

A4: Go back to section 4.1 step 3 for online installation, or section 4.2 step 8 for offline installation, and repeat the installation steps.

How to Reach Us:

Home Page:

www.freescale.com

Web Support:

<http://www.freescale.com/support>

USA/Europe or Locations Not Listed:

Freescale Semiconductor, Inc.
Technical Information Center, EL516
2100 East Elliot Road
Tempe, Arizona 85284
1-800-521-6274 or +1-480-768-2130
www.freescale.com/support

Europe, Middle East, and Africa:

Freescale Halbleiter Deutschland GmbH
Technical Information Center
Schatzbogen 7
81829 Muenchen, Germany
+44 1296 380 456 (English)
+46 8 52200080 (English)
+49 89 92103 559 (German)
+33 1 69 35 48 48 (French)
www.freescale.com/support

Japan:

Freescale Semiconductor Japan Ltd.
Headquarters
ARCO Tower 15F
1-8-1, Shimo-Meguro, Meguro-ku,
Tokyo 153-0064
Japan
0120 191014 or +81 3 5437 9125
support.japan@freescale.com

Asia/Pacific:

Freescale Semiconductor China Ltd.
Exchange Building 23F
No. 118 Jianguo Road
Chaoyang District
Beijing 100022
China
+86 10 5879 8000
support.asia@freescale.com

For Literature Requests Only:

Freescale Semiconductor Literature Distribution Center
1-800-441-2447 or +1-303-675-2140
Fax: +1-303-675-2150
LDCForFreescaleSemiconductor@hibbertgroup.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 Semiconductor reserves the right to make changes without further notice to any products herein. Freescale Semiconductor makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does Freescale Semiconductor 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 Semiconductor 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 Semiconductor does not convey any license under its patent rights nor the rights of others. Freescale Semiconductor products are not designed, intended, or authorized for use as components in systems intended for surgical implant into the body, or other applications intended to support or sustain life, or for any other application in which the failure of the Freescale Semiconductor product could create a situation where personal injury or death may occur. Should Buyer purchase or use Freescale Semiconductor products for any such unintended or unauthorized application, Buyer shall indemnify and hold Freescale Semiconductor and its officers, employees, subsidiaries, affiliates, and distributors harmless against all claims, costs, damages, and expenses, and reasonable attorney fees arising out of, directly or indirectly, any claim of personal injury or death associated with such unintended or unauthorized use, even if such claim alleges that Freescale Semiconductor was negligent regarding the design or manufacture of the part.

Freescale and the Freescale logo are trademarks of Freescale Semiconductor, Inc., Reg. U.S. Pat. & Tm. Off. Xtrinsic is a trademark of Freescale Semiconductor, Inc. All other product or service names are the property of their respective owners.

© Freescale Semiconductor, Inc. 2011. All rights reserved.