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# **Converting Earlier Versions of CodeWarrior for StarCore DSPs Projects to Version 10.1.8**

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This application note describes an important change in the behavior of the Eclipse-based CodeWarrior for StarCore DSPs development tools starting in release 10.1.8.

In earlier tool releases, the system information was stored in each launch configuration. This made development of multicore DSP applications tricky because separate launch configurations are used to manage each core. The redundant copies of system information in each configuration were difficult to manage and synchronize. With CodeWarrior v10.1.8, the system information is consolidated into a new Remote System Explorer (RSE) framework. This framework allows system information to be stored in a repository and applied across multiple configurations.

However, because of this change, projects made with the CodeWarrior tools prior v10.1.8 lack the RSE framework. These projects require special steps to convert them for use with the 10.1.8 version of the tools. This application note explains this conversion process.

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# 1 Overview

One useful feature of the CodeWarrior for StarCore DSPs IDE is its ability to store and manage much of the settings information associated with building and debugging a DSP application. This allows the developer to enter information once through the CodeWarrior GUI, and then focus on writing code while the IDE handles the settings and communications details for test and debug sessions. The IDE groups related settings into logical containers known as *configurations*. The IDE has the following configurations:

- Launch configuration—These settings specify how the IDE launches the application being developed. Such settings describe the execution target that the application runs on, which might be a hardware board, an emulator, or an instruction set simulator (ISS). Launch configurations, as their name implies, set up the runtime environment of the target before starting the application in either run mode or debug mode.
- System configuration—These settings describe how the IDE communicates with the execution target, such as through a hardware JTAG probe, or via a USB or Ethernet connection. It can also specify information about an execution target's hardware, such as its processor type and memory map.

#### NOTE

The configuration most apparent to the user is the launch configuration, since it is used to start the application, either as stand-alone or under debug control. The system configuration information did not appear as a user-selectable object until CodeWarrior version 10.1.8.

In earlier releases of CodeWarrior for StarCore DSPs, what is now known as system configuration settings were stored with the launch configuration settings and in other locations in the project. For single core applications this arrangement served the purpose. However, for complex multicore applications this scheme began to complicate matters. Specifically, the CodeWarrior tools manage a multicore application by assigning a launch configuration to each processor core. That is, a CodeWarrior project for the six-core MSC8156 processor has six launch configurations. Attaching a launch configuration to each core permits fine-grained control over the entire processor, and allows a sophisticated DSP application to be partitioned into virtual subsystems that use one or more processor cores. However, this arrangement requires the developer to duplicate and save identical system information into each launch configuration. If a change is made to the system configuration, synchronizing the information among all of the launch configurations was both tedious and error-prone.

With CodeWarrior for StarCore DSPs v10.1.8, the system configuration information has been separated from the launch configurations and consolidated into its own group (Figure 1). The RSE framework stores the system configuration data into a repository and manages it. The advantage to this scheme that the system settings are automatically shared among those multiple launch configurations that request the data. Furthermore, a change to the system configuration is conveyed to the affected launch





#### CodeWarrior Using Non-RSE Project





Figure 1. Differences in How System Configurations Are Stored in a Project.

configurations. This eliminates having to maintain duplicate copies of the system settings in those launch configurations that require it.

#### NOTE

To view the RSE system configuration for a particular project, choose **Window > Show View > Remote Systems**, right-click on the desired configuration, then choose **Properties**.

This new scheme improves the IDE's support of the development of multicore applications. However, this change also breaks compatibility with projects made with earlier versions of the CodeWarrior tools. Importing an older project that lacks the RSE framework into v10.1.8 causes problems because the system configuration data is not located in the repository. The rest of this application note covers the steps to follow to convert a non-RSE project to RSE-based project. This procedure is necessary when upgrading CodeWarrior for StarCore DSPs from v10.1.3 or v10.1.5 to v10.1.8. Those already using the CodeWarrior for StarCore DSPs v10.1.8 toolset do not need to perform these steps.

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# 2 Importing a Non-RSE Project

To import and convert a non-RSE CodeWarrior project into a RSE-compliant v10.1.8 project, proceed as follows:

1. From the menu, select **File > Import**.

The Import Window appears, and displays the Select page.

2. Expand the General item, and select Existing Projects into Workspace (Figure 2).

P Import	
<b>Select</b> Create new projects from an archive file or directory.	Ľ
Select an import source:	
General Carchive File Existing Projects into Workspace File System Preferences C/C++ CodeWarrior CVS Run/Debug Team	
⑦ < <u>B</u> ack <u>N</u> ext > Einish	Cancel

Figure 2. Choosing the Existing Projects Import Option.



#### 3. Click Next.

The Import Projects page appears (Figure 3).

Import	
Import Projects Select a directory to search for existing Eclipse p	projects.
Select root directory: Select archive file: Projects:	Browse
	Select All Deselect All Refresh
Copy projects into workspace	
⑦ < <u>Back</u> Next >	Einlsh Cancel

Figure 3. Selecting the Directory to Search.

4. For the Select Root Directory option, click Browse.

The Browse for Folder dialog appears.

5. In the Browse for Folder dialog, select the project existing project to import. Click OK.

The directory of the project being imported appears in the **Select Root Directory** option. The name of the project appears in the **Projects** option (Figure 4).

		_
<ul> <li>Select root directory:</li> </ul>	D:\Profiles\RAT912\workspace_sc_10_1_5_Build_131\rse_test_project	Browse
<ul> <li>Select archive file:</li> </ul>		Browse
Projects:		
─ ☑ rse_test_project	(D:\Profiles\RAT912\workspace_sc_10_1_5_Build_131\rse_test_project)	Select Al
<b>*</b>		Deselect A
This	s the project that is being imported	Refresh
Copy projects into w	orkspace	
E Zoby projects into it	anapace	

Figure 4. The Page Displaying the Project to Import.

6. Click Finish.

The Launch Configuration Migration to RSE Required alert appears (Figure 5). It notifies the user when a new set of launch configurations need to be migrated.

aunch Configuration Migration to RSE Required					
One or more Launch Configurations have been added that need to be updated to refer to an RSE Remote System Configuration.					
You can fix this in one of three ways: 1) by 'Smart Migration', 2) by Quick Fix from the Problems View, or 3) by directly editing the Launch Configuration. Smart Migration offers the simplest solution and should work in most cases, while Quick Fix and direct editing give greater control over the migration process. Click <u>here</u> for more information.					
Would you like CodeWarrior to perform a Smart Migration now? (If you say no, you can still request a Smart Migration later by closing and re-opening the project.)					
⊙ Yes, perform a Smart Migration now					
Re-use existing RSE system configurations if possible					
○ No, ignore the problem for now					
Do this every time; don't show this dialog again					
ОК					



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Table 1 summarizes the purpose for each of the dialog options. For this example, a Smart Migration is not performed and the Quick Fix feature is used instead to handle the migration. For more information on the other options and how to use them, consult the *Freescale Eclipse Extensions Guide*.

Option	Description
Yes, perform a Smart Migration now	Uses the Smart Migration logic to import a project with or without RSE information.
Re-use existing RSE system configurations if possible	Use any existing RSE information that might be available to construct the RSE information. Otherwise, extract the information from the launch configuration.
No, ignore the problem for now	Do not perform the migration for now. The user can manually start the migration by using Quick Fix feature from the Problem view.
Do this every time	Saves the choices to be used on all subsequent non-RSE project imports.

· · · · · · · · · · · · · · · · · · ·	lable	1. Options	for the Launch	Configuration	Migration to	<b>RSE</b> Required	Dialog
---------------------------------------	-------	------------	----------------	---------------	--------------	---------------------	--------

7. Click No. This allows the user to go directly to the **Problems View** window.

The new imported project appears under the **CodeWarrior Projects** view (Figure 6). Markers appear next to project folder, and as corresponding items in the **Problems** view.

CodeWarrior Projects 🔀		- 0
📰 🎝 🔶 🗟   🖻 💸 🔑 F	e Name	
File Name 🔺	Size	Type
🚊 🚔 rse_test_project : C_Debug_8156_HW		
🗉 🧽 Application_File		
🗄 🐝 Binaries		
🗄 😕 C_Debug_8156_HW		
🗉 🔊 Includes		
🖃 🗁 Debug_Settings		
rse_test_project_C_Debug_8156_HW_MSC8156 ADS Core 00.launch	15 KB	
rse_test_project_C_Debug_8156_HW_MSC8156 ADS Core 01.launch	14 KB	
rse_test_project_C_Debug_8156_HW_MSC8156 ADS Core 02.launch	14 KB	
rse_test_project_C_Debug_8156_HW_MSC8156 ADS Core 03.launch	14 KB	
rse_test_project_C_Debug_8156_HW_MSC8156 ADS Core 04.launch	14 KB	
rse_test_project_C_Debug_8156_HW_MSC8156 ADS Core 05.launch	14 KB	
🗉 🗁 LCF		
readme_MSC8156ADS.txt	1 KB	Text
🗄 🗁 Source		

Figure 6. The Imported Project Display.

8. In the **Problems** view, expand the **Warnings** item (Figure 7). Warning messages are displayed for each of the configurations that are migration candidates for a specific target board.

					×
🗄 Problems 🛛					
0 errors, 6 warnings, 0 others					
Description A	Resource	Path	Location	Туре	
🗉 🕚 Warnings (6 items)					
Launch configuration is a migration candidate	rse_project	rse_project/Debug_Settings	(shared)	Launch Con	
Launch configuration is a migration candidate	rse_project	rse_project/Debug_Settings	(shared)	Launch Con	
4 Launch configuration is a migration candidate	rse_project	rse_project/Debug_Settings	(shared)	Launch Con	
4 Launch configuration is a migration candidate	rse_project	rse_project/Debug_Settings	(shared)	Launch Con	
4 Launch configuration is a migration candidate	rse_project	rse_project/Debug_Settings	(shared)	Launch Con	
Launch configuration is a migration candidate	rse_project	rse_project/Debug_Settings	(shared)	Launch Con	

Figure 7. The Migration Candidates Displayed in the Problems View.

- 9. Right-click on a launch configuration in the **Problems** view.
- A context menu appears (Figure 8).

L Problems 33					800
errors, 6 warnings, 0 others					
Description -	Resource	Path		Location	Туре
Warnings (6 items)					
Launch configuration is a migration candidate     Staunch configuration is a migration candidate     Launch configuration is a migration candidate     Launch configuration is a migration candidate	Go to	Ctrl+C Delete	ebug_Settings ebug_Settings ebug_Settings ebug_Settings	(shared) (shared) (shared)	Launch Con Launch Con Launch Con
<ul> <li>Launch configuration is a migration candidate</li> <li>Launch configuration is a migration candidate</li> </ul>	Select All	Ctrl+A	ebug_Settings ebug_Settings	(shared) (shared)	Launch Con
	Show In	Alt+Shift+W	•		
	Quick Fix	Ctrl+1			
	Properties	Alt+Enter			

Figure 8. Applying a Quick Fix to the Chosen Launch Configuration.

10. From context menu, select **Quick Fix**. Selecting **Quick Fix** for any candidate starts the migration process.



A Quick Fix dialog appears (Figure 9) and displays all of the possible migration candidates.

ck <b>Fix</b> elect the fix for 'Launch configuration is a migration can	didate'.	9
elect a fix:		
pdate launch configuration(s) in the same project to us ipdate launch configuration(s) to use a shared RSE syst ligrate the launch configuration to be compatible with c	e a shared RSE sys em configuration urrent tooling	item configuration
oblems:		
Resource	Location (shared)	Select All
a rse_project_C_Debug_8156_HW_MSC8156 ADS	(shared)	Deselect Al
I to rse_project C_Debug_8156_HW_MSC8156_ADS I to rse_project C_Debug_8156_HW_MSC8156_ADS I to rse_project C_Debug_8156_HW_MSC8156_ADS	(shared) (shared) (shared)	
s - ne_projec_c_bebag_8130_nm_r/3c8130 Ab3	(silared)	
frse_project_C_Debug_8156_HW_MSC8156 ADS     frse_project_C_Debug_8156_HW_MSC8156 ADS     frse_project_C_Debug_8156_HW_MSC8156 ADS	(shared) . (shared) . (shared)	

Figure 9. The Quick Fix dialog.

By selecting the fix method, the user can control the scope of the migration process. Put another way, the choice of fix method filters for relevant configurations that are then displayed for repair in the **Problems** list. Table 2 summarizes how these choices filter for connection type, processor and project.

Option	Description
Update launch configuration(s) in the same project to use a shared RSE system configuration	Performs the migration on a subset of launch configurations having the same connection type, processor and project.
Update launch configuration(s) to use a shared RSE system configuration	Performs the migration on a subset of launch configurations having the same connection type and processor.
Migrate the launch configuration to be compatible with current tooling	Performs the migration all selected launch configurations regardless the connection type, processor or project.

Table 2.	Quick	Fix	Migration	Options.
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11. Choose the migration method in Select a Fix option. Click Finish.

The Migrate Launch Configuration for RSE dialog appears (Figure 10).



Figure 10. The Migrate Launch Configuration Dialog.

Since the project being imported does not have any system information in a RSE format, the **Create new RSE system named** option is selected.

#### 12. Click OK.

The importer converts the system data into a RSE-compliant system configuration and the warnings disappear.



13. Choose Debug **As > Debug Configurations**. The **Debug Configurations** window appears (Figure 11). It displays the converted launch configurations.

Debug Configurations	
Create, manage, and run configurations Download an application to a target, then debug or run the application.	Ť.
Province Attach      CodeWarrior Attach      CodeWarrior Connect      CodeWarrior Connect      CodeWarrior Download      res_test_project_C_Debug_8156_HW_MSC8156 ADS Core 00      res_test_project_C_Debug_8156_HW_MSC8156 ADS Core 01      res_test_project_C_Debug_8156_HW_MSC8156 ADS Core 03      res_test_project_C_Debug_8156_HW_MSC8156 ADS Core 03      res_test_project_C_Debug_8156_HW_MSC8156 ADS Core 05      Launch Group      8156_Jaunch_group	Name:       rse_test_project_C_Debug_8156_HW_MSC8156 ADS Core 00         Main       Main       Main       Main       Trace and Profile         C/C++ application       Trace and Profile       C/C++ application:       Browse         Project:       rse_test_project       Browse       Browse         Application:       C_Debug_8156_HW/rse_test_project.eld       Search Project       Browse         Connect process input output to a terminal.       Browse       Variables         Renote system       Inse_test_project_C_Debug_8156_HW_MSC8156 ADS       Edt       New         System:       Inse_test_project_C_Debug_8156_HW_MSC8156 ADS       Edt       New         MSC8156-0       MSC8156-1       MSC8156-3       MSC8156-3       MSC8156-3         MSC8156-1       MSC8156-3       MSC8156-3       MSC8156-5       MSC8156-5
Filter matched 11 of 11 items	
0	Debug

Figure 11. The Debug Configuration Window, Displaying the Converted Launch Configurations.

14. If the code for one core is being debugged, select its debug configuration from under the **CodeWarrior Download** list.

#### 15. Click Debug.

The debugger perspective appears.

16. Click **Resume** to execute the application under debugger control.



### 2.1 Importing Launch Groups

One thing to be aware of when importing and exporting projects is that the launch groups are not imported unless they have been shared in the original project. To work around this potential issue, the launch groups should be save into the workspace so that the IDE stores the launch configuration file and it can be committed into the repository. If these settings are not shared, then they must be added manually to these launch groups after the project is imported. In order to create a launch group and share these settings, follow the steps below:

- 1. Right-click on a project name, and context menu appears.
- 2. From context menu, select **Debug As > Debug Configurations**.
- 3. Select Launch Group.
- 4. From the toolbar, select New Launch Configuration.

Under Launch Group, New configuration appears.

5. Under the Launches tab, select Add.

The Add Launch Configuration window appears.

- 6. Expand the CodeWarrior Download item.
- 7. Click on the first configuration.
- 8. Hold down the Shift key.
- 9. Click on the last configuration. All of the configuration should be selected (highlighted).
- 10. Click OK.

All the core launch configurations appear in the Launches tab.

#### NOTE

For more information on how to create launch groups and share their configurations, consult the *Freescale Eclipse Extensions Guide*.

## 3 System Settings Differences Between Non-RSE Projects and RSE-based Projects

Because the RSE framework has factored out the system settings from the launch configurations, it is to be expected that this restructuring also affects the layout of the IDE's settings. This section documents some of these changes.

### 3.1 Target Processor

In a non-RSE project, the selection of the target hardware is from the **Target Processor** option (Figure 12). Under the RSE scheme, the target hardware is specified under **System Type** (Figure 13). The System Type settings are located under the **Main** tab of **Debug Configurations** window.



ebugger: CodeWarrior Debug	ger for StarCore DSP
E Stop on startup at: O Program entry point O User specified   main Netwooer Octions	Advanced
StarCore Download Connect	Ion Other Executables Symbolics OS Awareness View Refresh OCE Reservations
Target Processor MSC815 Simulator/Emulator MSC815 System Type MSC815 P/Execute Reset MSC825 Cone MSC825 Cone MSC825 Cone MSC825 MSC8156 - core MSC825 MSC8156 - core 3 MSC8156 - core 3	Homogeneous Multicore Core Index [0] This is that target hardware that will debug the binary file.
I Initialize target	
Target initialization file [\${5	CToolsBaseDir)/StarCore_Support/Initialization_Files/RegisterConfigFiles/MSC81: [Workspace] File System] (Variables]
Suse memory configuration	file
Memory Configuration File	\$(SCToolsBaseDir)/StarCore_Support/Initialization_Files/MemoryConfigFiles/MSC
	Workenara   Els Sustem   Variabler

Figure 12. Non-RSE CodeWarrior Project, Hardware Target Setting.

e Oler text	System	
System	RSE system type: Hardware or Simulator Parent profile: 802031-11	
	Connection name: rse_test_project_C_Debug_8156_HW_MSC815	56 ADS
	Description: Generated from pre-RSE Launch Configuration	
	System type: MSC8156	Bdt
	Connection type: MSC8151 MSC8152 MSC8154	~ ~
	Connection Jant MSC8156 MSC8157 TAP settings USB setial nu MSC8151	6
	JTAG dadi apeter yang waxa	× ×
	CCS server Automatic launch	
	Server port number: 41475	
	CCS executable:	
	O Manual launch	
	Server hashsame/UP: [327.8.00.1	
	Serier part number REATS	
	Connect server to TAP.	

Figure 13. RSE-based CodeWarrior Project, Hardware Target Setting.

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### 3.2 Instruction Set Simulator (ISS)

In a non-RSE CodeWarrior project, to connect to a simulator, choose CCSSIM2 ISS under the **Simulator/Emulator** option (Figure 14). For the RSE-based project, the **Connection Type** option displays the simulator choices (Figure 15).

ugger: CodeWarri	or Debugger	for StarCore DSP				~
Stop on startup at: Program entry poir User specified ma	ıt in	Advanced				
bugger Options						
arCore Download	Connection	Other Executables	Symbolics	OS Awareness	View Refresh	OCE Reservations
arget Processor	MSC8156	~				
imulator/Emulator	None		Hon	nogeneous Mult	icore	
	None		Con	e Index 0		
ystem Type	CCSSIM2 15	Site	¥.			
Execute Reset	Palladium					
Core	Ru	n Out of Reset				
MSC8156 - core	0	a crue or respec				
MSC8156 - core	1					
MSC8156 - core	2 🗆					
MSC8156 - core	3 🗆					
MSC8156 - rore	4					
Initialize target –						
Target initialization	file \${SCTo	olsBaseDir}/StarCo	re_Support/I	Initialization_File	es/RegisterCon .] File System	figFiles/MSC81: Variables
Use memory con	figuration file					
Memory Configural	tion File \${S	CToolsBaseDir}/Sta	rCore_Supp	ort/Initialization	Files/Memory	ConfigFiles/MSC
	1.6	the second s			Contraction of the second second	The second se

Figure 14. Non-RSE CodeWarrior Project, ISS Setting.



teorf	System			
System	RSE system type: Parent profile:	Hardware or Simulator RAT912-11		
	Connection name:	non_rse_project_C_Debug_8156_HW_MSC8156_A/	DS	
	Description:	Generated from pre-RSE Launch Configuration		
	System type:	MSC8156	Edit	
	Connection type:	CCSSIM2 ISS		¥
	Connection Initia	Ethernet TAP USB TAP		-
	CCS server			
	Automatic lau     Secure cost n	mber 41475		1
2	CCS execut	able:		i
	O Manual launch			
	Server hostra	me/IP 177.0.0.1		1
	Server port n	mber 41475		

Figure 15. RSE-based CodeWarrior Project, ISS Settings.

#### 3.3 Emulator

In a non-RSE CodeWarrior project, to connect to a hardware emulator choose Palladium under the Simulator/Emulator option (Figure 16). For a RSE-compliant project, the emulator choice appears in the Connection Type option (Figure 17). In order to access the Connection Type option in the RSE-based project, the emulator connection must be specified first. For example, when connecting to the target via USB TAP, first choose select USB TAP under the Connection Type option. Once the connection type has been selected, the emulation option can be chosen by checking the System is emulated by Palladium option.



Stop on startup at: Program entry point	100				
user spectied main	Advanced				
ebugger Options					
StarCore Download Con	nection Other Execut	tables Symbo	olics OS Awareness	View Refresh	OCE Reserv
Target Processor MSC Simulator/Emulator Palla System Type (Aut	8156 Slove	-	Homogeneous Multie Core Index 0	core	
Execute Reset					
Core MSC8156 - core 0 MSC8156 - core 1 MSC8156 - core 2 MSC8156 - core 3 MSCR156 - core 4	Run Out of Reset		Non-RSE setting if th using an emulator.	ie user is	
🗆 Initialize target					
Target initialization life					
			Workspece	Tile System.	] Verlable
Use memory configura	don file				
Manery Conferentian F	a f				

Figure 16. Non-RSE CodeWarrior Project, Emulator Setting.

Lorett -	System		Make sure to select the connection				
System	RSE system type: Parent profile:	Hardware or Simulator RAT912-11	type first. Once this has been selected select "Sysystem is emulated by Palladjum" to connect to larget hardware.				
	Connection name: non_rse_project_C_Debug_8156_WW_MSC8156 ADS						
	Description:	Generated from pre-RSE L	aury Configuration				
	System type:	MSC8156	Edit				
	Connection type:	USB TAP					
	Connection Inite	Ethernet TAP					
	LI USB serial nur	nber:					
	ILAG dock spee	d (RHZ): 12500					
	El System is emu	ilated by Pailadium					
	CCS server						
	Automatic lau	ndi					
	Server port n	umber: 41475					
	CCS execut	able:					
	Manual launch	6 - <u>-</u>					
	Sininfeete	Cold 127.0.0.1					
	Sever cott (under [434/5]						
	Sconnert se	Ner to TAP					

Figure 17. RSE-based CodeWarrior Project, Emulator Setting.



#### 3.4 System Type

In a non-RSE CodeWarrior project, when connecting to a multicore system choose **System Type** under the **System Type** option (Figure 18). By default this option is set to (Auto Detect), which detects the presence of a multicore system using the following criteria:

- 1. Checks the connection preference to see if a particular JTAG configuration file was specified.
- 2. If a JTAG file exists, checks to see if the system type was previously created using the JTAG file.
- 3. If an imported system type was found, use its system type. Otherwise, create the system type and set it using the system information imported from the JTAG config file.
- 4. If the JTAG setting or system cannot be determined for the specified JTAG, as a last resort the IDE consults an internal list of predefined values to specify the system type.

If the JTAG file must specify a custom system, this is accomplished through the **Edit Multicore System Types** option.

For a RSE-based CodeWarrior project, the system type can be chosen from **System** option, which stores a list of supported configurations on the debugged target (Figure 19).

ebugger: CodeWarri	or Debugger fo	r StarCore DSP	
Stop on startup at: Program entry poir User specified ma	it [	Advanced]	
Xebugger Options			
StarCore Download	Connection C	ther Executables	Symbolics OS Awareness View Refresh OCE Reservations
Target Processor Simulator/Emulator System Type Execute Reset Core	MSC8156 Palladium (AutoDetect) (AutoDetect) MSC8156 Edit Multicore	system Types	Homogeneous Multicore Core Index 0
MSC8156 - core MSC8156 - core MSC8156 - core MSC8156 - core MSC8156 - core	0 D 1 D 2 D 3 D 4 D		
Target mitalization	010		
Use memory con	louration file		Workspace (File System) Variables)
Memory Carligues	ion Film		
			Washington   Ittle Sorters   Washing

Figure 18. Non-RSE CodeWarrior Project, System Setting.



Figure 19. RSE-based CodeWarrior Project, System Setting.

#### 3.5 Core Index

In a non-RSE CodeWarrior project, the core index value designates which core the debugger uses to execute the program. It is specified in the **Core Index** option (Figure 20). For a RSE-based project, the core index is located on the **Main** tab as an option under the **Remote system** group (Figure 21). For a non-RSE project if the core index was 0, then in the RSE-based system this value is MSC8156-0.



Main 🔤 Arguments	Environme	ent 🌣 Debugger	§ Source	🖾 Common 💣 Tr	ace and Profile	
Debugger: CodeWarrie	or Debugger	for StarCore DSP	5			9
<ul> <li>Stop on startup at:</li> <li>Program entry poin</li> <li>User specified mail</li> </ul>	t In	Advanced				
Debugger Options						
StarCore Download	Connection	Other Executable	s Symbolic	OS Awareness	View Refresh	OCE Reservations
Target Processor	MSC8156	U)	Ho	mogeneous Multic	ore	
Simulator/Emulator	Palladium	*	Co	re Index 0		
System Type	MSC8156		4			
Execute Reset						
Core MSC8156 - core MSC8156 - core MSC8156 - core MSC8156 - core MSC8156 - core	Rur 0    1    2    3    4	n Out of Reset	*			
D Initialize target						
Target initialization	fae (					
				Workspace	File System	Variables
Use memory confi	iguration file					
Memory Configurat	on File					
				Workspace	File System	Variables

Figure 20. Non-RSE CodeWarrior Project, Core Index Setting.

Name: rse_tes	st_project_C_Debug_8156_HW_MSC8156 ADS Core 00
Main (×	ः Arguments 🔅 Debugger) 🤯 Source 👼 Environment 🛅 Common 💣 Trace and Profile
C/C++ appli	ication
Project:	rse_test_project Browse
Application:	C_Debug_8156_HW/rse_test_project.eld Search Project Browse Variables
Remote syst	tem
This is a mult	ticore system. Please select a core:
System	
E MSC	C8156
	MSC8156-0 MSC8156-1 MSC8156-3 MSC8156-4 MSC8156-5

Figure 21. RSE-based CodeWarrior Project, Core Index Setting.

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#### 3.6 Execute Reset

In a non-RSE project, the execute reset option has the debugger reset the processor before downloading code to it (Figure 22). If a multicore processor is being debugged, this reset operation resets the specified core. In the RSE-based CodeWarrior project, execute reset is now part of the system configuration (Figure 23). Select **Execute reset (applies to initial target only)** to reset a specific core. If this option is not selected, then the debugger downloads the application to the target without first resetting the target. When doing multicore debugging, this option should typically be set to reset the first core launched, core 0.

Stop on startup at: Program entry poir User specified ma	it.	Advanced				
ebugger Options						
StarCore Download	Connection	Other Executables	Symbolics	OS Awareness	View Refresh	OCE Reservations
Target Processor	MSC8156	*		-		
Simulator/Emulator	Palladium	1	Hor	nogeneous Multi	care	
System Type	MSC8156		~	e muex o	ł	
E Execute Reset						
Core MSC8156 - core MSC8156 - core MSC8156 - core MSC8156 - core MSC8156 - core	Rui 0 1 2 0 3 0 4 0	n Out of Reset				
🗆 Initialize target						
Target initialization	filo					-
				Workspace	File System.	Variables
Use memory con	figuration file					
Minory Confid rat	ICO FIRE					

Figure 22. Non-RSE CodeWarrior Project, Execute Reset Setting.



e liiter test	System						
System	RSE system type: Parent profile:	Hardwa RAT912	re or Simulator 2-11				
	Connection name:	emulat	tor_project_C_Debu	g_8156_HW_MSC	8156 ADS		
	Description:	Genera	ated from pre-RSE L	aunch Configuratio	20		
	System type:	MSC81	5C8156 Edit.				
	Connection type:	Connection type: US8 TAP					
	Connection Initia	alization	System I/O Mode	Advanced			
	E Execute system	n reset (a	applies to initial laur	ich only)			
	System		Run out of reset	Initialize target	Initialize target script		
	B MSC8156		0				
	M5C8156-	0	0	2	\${SCTools8aseDir}/Star		
	M5C8150-	1		-			
	MGC8156	2		1			
	MSC8156-	4	in the second se	0			
	MSC8156-	5					

Figure 23. RSE-based CodeWarrior Project, Reset Memory Setting.

#### 3.7 Run Out of Reset

In a non-RSE CodeWarrior project, check the **Run Out of Reset** option if the corresponding core in the core list should begin running after the IDE resets the core. If the **Run Out of Reset** option is unchecked, the corresponding core in the core list goes into debug mode after the IDE resets it (Figure 24). This option is located under the **StarCore** settings tab. In an RSE-based project, this setting is located under the **Initialization** tab for the system configuration (Figure 25). Here, the **Run Out of Reset** checkbox adjacent to the specified core determines whether it is simply reset or goes into debug mode after a processor reset.



Main PP Arguments	S Environme	ent Debugger	🗄 Source 🖾 Common 💣 Ti	race and Profile	0
ebugger: CodeWarri	or Debugger	for StarCore DSP			~
Stop on startup at: O Program entry poir O User spedfied ma	it én	Advanced			
Debugger Options					
StarCore Download	Connection	Other Executables	Symbolics OS Awareness	View Refresh	OCE Reservations
Target Processor	MSC8156	9	Homogeneous Multi	core	
Surtem Type	MCCOLCE		Core Index 0		
Execute Reset	M3C0130		51		
Core MSC8156 - core MSC8156 - core MSC8156 - core MSC8156 - core MSC8156 - core	0 Ru 1 2 3 4 0	n Out of Reset			
Initialize target					
Target initialization	file		1	1	
			AADOORSTREEK.	India System.	Variables]
UUse memory con	iguration file				
Memory Configurat	sons Pille				
			Workspace	File System,	

Figure 24. Non-RSE CodeWarrior Project, Run Out of Reset Setting.

pe litter text	System							
System	RSE system type: + Parent profile: - R	Hardware or Simulator VAT912-11						
	Connection name: emulator_project_C_Debug_8156_HW_MSCB156 ADS							
	Description:	iption: Generated from pre-RSE Launch Configuration						
	System type:	MSC8156						
	Connection type:	USB TAP				10		
	Connection type:	USB TAP Ization System I/O Mode reset (applies to initial law	e Advanced		2	100		
	Connection type:	US8 TAP ization System I/O Mode reset (applies to initial lau Run out of reset	I Advanced nch only)	Initialize target	script	1		
	Connection type: Connection Initial Execute system System = MSC8156	USB TAP Ization System I/O Mode reset (applies to initial law Run out of reset	el Advanced nch only) Initialize target	Initialize target	script	1		
	Connection type: Connection Initial Execute system System MSC8156 MSC8156-0	USB TAP Ization System I/O Mode reset (applies to initial lau Ran out of reset	el Advanced nch only) Initialize target	Initialize target \$(SCT ools8aseD	script hr}/Star			
	Connection type: Connection Initial E Execute system System = MSC8156 MSC8156-0 MSC8156-1	US8 TAP Ization System I/O Mode reset (applies to initial law Ran out of reset	el Advanced Initialize target	Initialize target \$(SCTools8aseD	script Nr}/Star			
	Connection type: Connection Initial EExecute system System = MSC8156 MSC8156-0 MSC8156-1 MSC8156-2	US8 TAP	el Advanced Initialize target	Initialize target \${SCT ools8aseD	script Nr)/Star			
	Connection type: Connection Initial Execute system System = MSCB156 MSCB156-0 MSCB156-1 MSCB156-2 MSCB156-3	US8 TAP	N Advanced Initialize target	Initialize target \$(SCT ools8aseD	script Nr}/Star			
	Connection type: Connection Initial Execute system MSC8156 MSC8156-1 MSC8156-1 MSC8156-3 MSC8156-4	USB TAP	H Advanced Initialize target	Initialize target \$(SCT ools8aseC	script Nr}/Star			

Figure 25. RSE-Based CodeWarrior Project, Run Out of Reset Setting.



### 3.8 Target Initialization File

For a non-RSE CodeWarrior project, the **Initialize Target** setting specifies the target initialization file the debugger reads when it initializes the processor. This file is read at the start of each debugging session. This option is located under the **StarCore** tab (Figure 26). In a RSE system, the setting is located under the **Initialization** tab. To use the setting, check the **Initialize Target** checkbox adjacent to the core to be initialized (Figure 27). The default initialization file name is Initialize <target script>. Only the first core has an initialization file specified. To specify a different initialization file name, click on the ellipsis button (...) and navigate to the new file. By default, the IDE uses the script file located in the tools initialization directory.

bugger: CodeWarn	or Debugger	for StarCore DSP		
Stop on startup at: Program entry pole User specified ma	vî Lin	Advanced		
ebugger Options				
starCore Download	Connection	Other Executables Sy	mbolics OS Awareness View Refresh OCE Reservat	lons
Target Processor	MSC8156	-	765 766	
Simulator/Emulator	None	*	Homogeneous Mulboore	
System Type	(AutoDetect		Core more u	
El Execute Reset				
Care MSC8156 - care MSC8156 - care MSC8156 - care MSC8156 - care MSC8156 - care	Ru 0 0 1 0 3 0 4 0	n Out of Reset		
🕑 Initialize target				
Target initialization	file \${SCTo	olsBaseDir}/StarCore_	Support/Initialization_Files/RegisterConfigFiles/MSC81	
10		A	Workspace File System Variables	
Use memory con	Iguration file			
Memory Configurat	tion File \${5	CToolsBaseDir}/StarCo	re_Support/Initialization_Files/MemoryConfigFiles/MSG	
			Worksmace File System Variables	1

Figure 26. Non-RSE CodeWarrior Project, Target Initialization File Setting.



Figure 27. RSE-based CodeWarrior Project, Target Initialization File Setting.

#### 3.9 Memory Configuration File

For a non-RSE CodeWarrior project, the **Use Memory File** setting specifies the memory configuration file the debugger reads when it initializes the processor. This file is read at the start of each debugging session and configures the target's memory space as to the amount of memory and the memory type. This option is located under the **StarCore** tab (Figure 28). In a RSE system, the setting is located under the **System** tab. To use the setting, check the **Memory Configuration** checkbox adjacent to the desired core (Figure 29). Only the first core has a memory configuration file specified. To specify a different configuration file name, click on the ellipsis button (...) and navigate to the new file. By default, the IDE uses the memory configuration file located in the tools initialization directory.



bugger: CodeWard	or Debugger I	for StarCore DSP			
Stop on startup at: Program entry poin User specified ma	nt iin	Advanced			
ibugger Options					
tarCore Download	Connection	Other Executables	Symbolics OS Awareness	View Refresh	OCE Reservations
Target Processor	MSC8156				
Simulator/Emulator	None	1	Homogeneous Multi	core	
System Type	(AutoDetect)		Core Index O	£	
Execute Reset					
Core MSC8156 - core MSC8156 - core MSC8156 - core MSC8156 - core MSC8156 - core	Rur 1 0 2 0 3 0 4 0	) Out of Reset			
Initialize target					
Target initialization	file \${5CTo	olsBaseOir)/StarCo	ore_Support/Initialization_File Workspace	s/RegisterCon ] [File System	figFiles/MSC811

Figure 28. Non-RSE CodeWarrior Project, Memory Configuration File Setting.

Illuir hist	System				
System	RSE system type: Parent profile:	Hardwa RAT912	re or Simulator 2-11		
	Connection name:	000_05	e_projed_C_Debug_815	5_HW_MSC8156 ADS	
	Description:	Genera	ited from pre-RSE Launch	Configuration	
	System type:	MSC81	56		Edit
	Connection type:	USB TA	₽.		
a is the	Connection Initi	alization	System 1/O Model Adv	anced	
figuration	a MSCC 56		Memory configuration	Memory configuration file	
d.	MSC8156	0	B	\${SCToolsBaseDir}/StarCore	
	MSC8156-	2	0		
	MSC8156-	3			
	MSC8156-	4	0		
	13(2130	9			
	1				

Figure 29. RSE-compliant CodeWarrior Project, Memory Configuration File Setting.

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# 4 Connection Settings Differences Between Non-RSE Projects and RSE-based Projects

Because the RSE framework has factored out the connection settings from the launch configurations, this restructuring affects the layout of the IDE's settings regarding these settings. This section documents some of these changes.

### 4.1 Connection Protocol

In a non-RSE CodeWarrior project, the **Connection Protocol** option located under the **Connection** tab specifies the communications protocol used to interact with the target (Figure 30). The communications protocol is often managed by a CodeWarrior Connection Server (CCS), which provides flexibility in accessing a target board. For example, through a TCP/IP connection, the CCS allows each instance of the CodeWarrior debugger to access the target boards connected to any local or remote computer that is running a CCS instance. Each time a debugging session begins, it uses a local CCS connection; the CodeWarrior IDE automatically starts CCS if it is not running already. In a RSE-based project, the user no longer has to specify the connection protocol, just the connection type (Figure 31). This is because for CodeWarrior for StarCore the only available connection protocol is CCS, so the redundant setting was removed.

Constraints of the second s	er for StarCore DSP		M
Stop on startup at: O Program entry point O User spedfied main	Advanced		
Debugger Options			
StarCore Download Connection	on Other Executables	Symbolics OS Awareness	View Refresh OCE Reservations
Enable Logging Advan	nced		
Connection: USB TAP	nex)		

Figure 30. Non-RSE CodeWarrior Project, Connection Type Setting.

N		

rpe fillin bast	System	
System	RSE system type: Parent profile:	Hardware or Simulator RAT912-11
	Connection name:	non_rse_project_C_Debug_8156_HW_MSC8156 ADS
	Description:	Generated from pre-RSE Launch Configuration
	System type:	MSC8156 Edit
	Connection type:	USB TAP
		CCSSIM2 ISS Ethernet TAB
	Connection Initia	USB TAP
	TAP settings	
	USB serial nur	mber:
	JTAG dock spee	(d (kHz); 12500
	Li bystern is enn	nated by Panadion
	Automatic lau	nch
	Server port n	umber: 41475
	CCS execut	table:
	O Manual launch	1
	Server hostro	me/IP: [127.0.0.1
	Senembertio	under: 41475
	E Connect se	rver to TAP

Figure 31. RSE-based CodeWarrior Project, Connection Type Setting.

### 4.2 Enable Logging

In a non-RSE CodeWarrior project, when the **Enable Logging** option is enabled, the debugger outputs connection protocol activity to a console in a **Console** view. This option is located under the **Connection** tab (Figure 32). For a RSE-based project, the **Enable Logging** option was moved to the **Advanced** tab (Figure 33).



eungger. Codewarrior ber	bugger for Sta	Core DSP				*
Stop on startup at:						
Program entry point	Advi	anced				
OUser specified main						
ebugger Options						
StarCore Download Conn	ection Other	Executables	Symbolics	OS Awarene	ss View Refresh (	OCE Reservations
Connection Protocol: CCS	*					
Enable Logging	Advanced]					
Physical connection						Y
Connection: USB TAP	*					
USB TAP Serial Nun	nber (hex)					
-						
1.0						
Note: For correct Multicor	re Groups oper	ration, the CO	CS settings i	n this panel a	nd in	
the Advanced dialo	g must be set	identically fo	r each Laun	ch Configurat	ion in	
the second and the second second second second	ore including	settings that	are otherwise	se disabled.		

Figure 32. Non-RSE CodeWarrior Project, Enable Logging Setting.

pé liitér text	System			
System	RSE system type: Parent profile:	Hardware or Simulator RAT912-11		
	Connection name:	non_rse_project_C_Debug_8156_HW_MSC8156 ADS		
	Description:	Generated from pre-RSE Launch Configuration		
	System type:	MSC8156	Edit	1
	Connection type:	USB TAP		
	⊙ Terminate the	debug session	1	
	<ul> <li>Ask me</li> </ul>	and series.		
	None			
	Advanced TAP s	ettings wnload 🖾 Disable fast download		
	Advanced CCS s	ettings		
	E Enable logging	i ou		

Figure 33. RSE-based CodeWarrior Project, Enable Logging Setting.



#### 4.3 Physical Connection

In a non-RSE CodeWarrior project, the **Connection** tab is where the user specifies the interface that communicates with the hardware. Support is available for USB TAP, Ethernet TAP, and generic interfaces. The choice of connection is set through the **Physical Connections** option (Figure 34). For a RSE-based project, the settings are now part of the **System** properties window and under the **Connection Type** option (Figure 35). After the physical connection type is chosen, further configuration of the connection can be done through the options that appear in the **Connection** tab.

ebugger: CodeWarrior Debugger for StarCore DSP							2
Stop on startup at: Program entry poin User specified ma	t	Advanced					
ebugger Options							
StarCore Download	Connection	Other Executables	Symbolics	OS Awareness	View Refresh	OCE Reservations	
Physical connection Connection: USB T	Advance AP ~ c AP P et TAP	ed					
Ethern		-					

Figure 34. Non-RSE CodeWarrior Project, Physical Connection Setting.



pe filler bast	System			
System	RSE system type: Parent profile: Connection name:	lardware or Simulator RAT912-11 non_rse_project, C_Deb	ug_8156_HW_MSC8156 AD5	
	Description:	Generated from pre-RSE	Launch Configuration	
	System type:	MSC8156		Edit
	Connection type:	USB TAP CCSSIM2 ISS		2
	Connection Init	Ethernet TAP USBITAP		
	JTAG clock spe System is em	i (kHz): 12500 lated by Palladium		Y
	CCS server (© Automatic law	di		
	Server port n	mber: 41475 ible:		
	O Manual laund	ne/1P: 127.0.0.1		
	Server port o	ntein: 41475 ver to TAP		

Figure 35. RSE-Based CodeWarrior Project, Physical Connection Setting.

#### 4.4 Use CCS Remote Server

In a non-RSE CodeWarrior project, this option specifies the remote CCS instance with which the debugger communicates. This option describes CCS remote server's IP address, hostname, and IP port (Figure 36). For the RSE-based project, these settings are now part of the **Connection** tab. The **Manual** Launch option is where the IP address, hostname and port are entered (Figure 37).



Use Remote	CCS Server	Port #
Ploatname/IP A	ddrees: 127.0.0	41475
Specify CCS	Executable	
CCS Executable	File	
Workspace	File System	Variables
Specify JTAG	G Configuration F	ile
JTAG Configura	ation File	
Workspace	File System	Variables
JTAG Clock Sp	eeds (kHz)	CCS TIM
Chain Default	12500	60
This Core		
1000		
Disable Fast D	ownload	

Figure 36. Non-RSE CodeWarrior Project, Use CCS Remote Server Setting.

ype filter inst	System				
System	RSE system type: Parent profile:	Hardware or Sin RAT912-11	nulator		
	Connection name:	non_rse_projec	t_C_Debug_8156_HW_	MSC8156 ADS	
	Description:	Generated from	n pre-RSE Launch Config	uration	
	System type:	MSC8156			Edit
	Connection type:	USB TAP			~
	USB serial nu USB serial nu ITAG dock spee System is emi CCS server	nber: d (kHz): 12500 ilated by Palladiu		]	×
	Server port n	umber: 41475			
	CCS execut	able:			
	○ Manual laund				
	Server bootte	midP. [127.0.0	.1		
	E Connect se	wer to TAP			

Figure 37. RSE-based CodeWarrior Project, Use CCS Remote Settings.

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#### 4.5 Specify CCS Executable

In a non-RSE project, when checked, this option specifies the path to the CCS executable file (other than the default) that the debugger launches if no CCS service is running when a debugging session starts. The full path the debugger uses is entered into the **CCS Executable File** option (Figure 38). Or, click **Browse** to open a dialog box and navigate to the desired executable file. In a RSE-based project, this setting has been moved into the **Automatic Launch** option (Figure 39). The full path is entered into the **CCS Executable** option, or click on the ellipsis button to display a dialog that is used to navigate to the file.

Hostname/IP Address 127.0.0	Port # 41475
Specify CCS Executable	
CCS Executible File	
Workspace File System	Variables
Specify JTAG Configuration F	ile
JTAG Configuration File	
Workspace	Variables
JTAG Clock Speeds (kHz)	CCS Tin
Chain Default 12500	60
This Core	
1000	
Disable Fast Download	

Figure 38. Non-RSE CodeWarrior Project, Specify CCS Executable Setting.

|--|

pe filter text	System		
System	RSE system type: Parent profile:	Hardware or Simulator RAT912-11 page the project C. Debug 8156 HW MSC8156 ADS	
	Description:	Generated from pre-RSE Launch Configuration	,
	System type:	MSC8156	Edit
	Connection type:	USB TAP	
	Conservation 1 a.m.		
	TAP settings	iber: d (kHz): 12500 fated by Palladium	
	CCS server		
	Server port n	imber: 41475	
	CCS execut	able:	
	Manual launch		
	Server hostra	me/IP: 127.0.0.1	
	Server port.o.	mort (494/2	
	in the provide set	THE DECEMBER OF THE DECEMBER O	

Figure 39. RSE-Based CodeWarrior Project, Specify CCS Executable Setting.

### 4.6 Specify JTAG Connection File

In a non-RSE project, this setting specifies the path that the debugger uses to locate the file that is read to configure the JTAG device chain. To have the debugger use a different file, check the **Specify JTAG Configuration File** option (Figure 40). The path to the file is entered into the **JTAG Configuration File** option. In a RSE-based project, this information is part of the system configuration. The setting is changed by choosing **Edit > Import** and selecting the appropriate file. If the JTAG configuration file was imported correctly, then this information appears in the **Advanced** tab, under the **JTAG config file** option (Figure 41).



Use Remote CCS Server	Port #
-lostname/IP Address: 127.0.	0. 41475
Specify CCS Executable	
CCS Executable File	1
Workspace File System	Variables
Specify JTAG Configuration I	File
ITAG Configuration File	
Workspace	Variables
JTAG Clock Speeds (kHz)	CCS Tim
Chain Default 12500	60 9
This Core	
1000	
Disable Fast Download	

Figure 40. Non-RSE CodeWarrior Project, Specify JTAG Connection File Setting.

	System	
System	RSE system type: Hardware or Simulator Parent profile: RAT912-11	
	Connection name: non_rse_project_C_Debug_8156_HW_MSC8156 AD5	
	Description: Generated from pre-RSE Launch Configuration	
	System type: MSC8156	
	Connection type: USB TAP	
	C Terminate (seconds). [20] O Terminate the debug session © Ask me	
	O Terminate the debug session © Ask me	
	1TAG config file None	
	Force shell download      Disable fast download	
	Advanced CCS settings	
	CCS timeout (seconds): 60	

Figure 41. RSE-Based CodeWarrior Project, Specify JTAG Connection File Setting.

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### 4.7 JTAG Clock Speed

In a non-RSE project, this setting managed the maximum clock speed for the JTAG interface in kHz. The speed is specified in the **Chain Default** option (Figure 42). For a RSE-based project, this setting is now only visible if it is used for configuring the selected connection. The clock speed is chosen from the **JTAG clock speed (kHz)** option (Figure 43).

CCS Advanced Setting	s 🔀
Use Remote CCS Server	Port # 41475
Specify CCS Executable	
CCS Executable File	
Workspace   File System   N	/ariables
Specify JTAG Configuration File     TTAG Configuration File	,
Workspace   File System   V	ariables
JTAG Clock Speeds (kHz) Chain Default 12500	CCS Time 60 s
1000	
Disable Fast Download	
ОК	Cancel

Figure 42. Non-RSE CodeWarrior Project, JTAG Clock Speed Setting.



ope Pitter had	Nystein	
System	RSE system type: Parent profile:	Hardware or Simulator RAT912-11
	Connection name:	non_rse_projed_C_Debug_B156_HW_MSCB156_ADS
	Description:	Generated from pre-RSE Launch Configuration
	System type:	MSC3156
	Connection type:	USB TAP
	TAP settings	imber:
	LT USB sertal mil	ITOS:
	The box spe	indexed for publicities of
	CCS server	unch number; 41473 stable:

Figure 43. RSE\_based CodeWarrior Project, JTAG Clock Speed Setting.

#### 4.8 CCS Timeout

In a non-RSE project, this setting specifies the timeout for CCS communications in seconds. The value is entered into the **CCS Timeout** option (Figure 44). For a RSE-based project this setting was moved to the **Advanced** tab (Figure 45).



Specify CC	S Executable	0. 4147.
CCS Executal	le File	
Workspace.	File System	Variables
Specify JT/	AG Configuration I	File
JTAG Config	aration File	1
Workspace.	] [File System]	Variables
JTAG Clock S	Speeds (kHz)	CCS Time
Chain Defau	lt 12500	60 s
This Core		L
1000		
Disable Fast	Download	
	Download	

Figure 44. Non-RSE CodeWarrior Project, CCS Timeout Setting.

or filler text	System		
System	RSE system type: Parent profile:	Hardware or Simulator RAT912-11	
	Connection name:	non_rse_project_C_Debug_8156_HW_MSC8156 ADS	
	Description:	Generated from pre-RSE Launch Configuration	
	System type:	MSC8156	
	Connection type:	USB TAP	
	When a connect O Try to recome O Timeout (n O Terminate the © Ask me	ion to this system is lost, do the following: ed animolo: [20] debug session	
	ITAG config file		
	Advanced TAP s	settings wnload 🗆 Disable fast, download	
	Advanced CCS (	ottings	
	CCS timeout (se	conds): 60	
	El Enable loggin	a.	

Figure 45. RSE-Based CodeWarrior Project, CCS Timeout Setting.

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#### 4.9 This Core

In a non-RSE project, this setting was used if a certain processor core required a different clock speed from the main core (Figure 46). In RSE-based projects, this setting has been removed.

🖗 CCS Advanced Settings 🛛 🔀
Use Remote CCS Server
Hostname/IP Address: 127.0.0. 41475
Specify CCS Executable
CCS Executable File
Workspace File System Variables
Specify JTAG Configuration File
JTAG Configuration File
Workspace File System Variables
CCS Time
Chain Default 12500 60 s
This Core
1000
Disable Fast Download
OK Cancel

Figure 46. Non-RSE CodeWarrior Project, This Core Setting.

#### 4.10 Disable Fast Download

In a non-RSE project, this setting specifies if the generated .elf binary file should be downloaded to the target using a fast download protocol. A slower yet more reliable download protocol is used if the **Disable Fast Download** option is checked (Figure 47). In a RSE-based project, this setting has been moved to the **Advanced** tab (Figure 48).



CCS Advanced Settin	igs 🔀
Use Remote CCS Server	Port #
Postrome/IP-Address 1222.0.0	41475
El Specify CCS Executable	
Com Resourced (198	
Workspace   File System	Variables
ESpecify ITAG Configuration F	ile
attract contribution ( ) in [	
Workspace	Variables a
JTAG Clock Speeds (kHz)	CCS Time
Chain Default 12500	60 3
This Core	
1000	
Disable Fast Download	
C OK I D	Cancel
	5.50116.501

Figure 47. Non-RSE CodeWarrior Project, Disable Fast Download Setting.

RSE system type: Parent profile: Connection name:	Hardware or Simulator RAT912-11	
Connection name:	non ern project C Debug 9156 UNI MCC9156 ADC	
	Holl_rse_broleor_c_bebuil_o120_HM_H2C0120_MD2	
Description:	Generated from pre-RSE Launch Configuration	
System type:	MSC8156	Edit
Connection type:	USB TAP	
Ask me     JTAG config file	neoniti sessini	
JTAG config file		
Advanced TAP s	iettings. wnload □Disable fast download	
Advanced CCS s CCS timeout (se	ettings conds): 60	
Li Enable loggini	9	
	System type: Connection type: Connection Initia Target connection When a connection O Try to recommo C Timeout (w O Terminate the O Ask me TAG config file None Advanced TAP s Force shell do Advanced CCS s CCS timeout (se Enable loggin	System type:       MSC8156         Connection type:       USB TAP         Connection Initialization System I/O Model Advanced         Target connection lost settings         When a connection lost settings         When a connection lost settings         O Try to reconnect         Interset (seconds):         O Terminate the debug session         Ø Ask me         JTAG config file         None         Advanced TAP settings         Force shell download         Disable fast download         Advanced CCS settings         CCS timeout (seconds):         60         Enable logging

Figure 48. RSE-Based CodeWarrior Project, Disable Fast Download Setting.



# 5 Revision History

Table 3 provides a revision history for this application note.

Table 3. Revision History

Rev. Number	Date	Substantive Change
0	12/16/10	Initial creation.
1	01/19/11	Corrected information on specific options, modified description of launch configuration.



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