



Release Note

CodeWarrior Development Studio for StarCore DSP v3.2.3

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1 About This Release

1.1 Version Information

This release note provides important information for users of CodeWarrior Development Studio for StarCore DSP v3.2.3. You are encouraged to read this release note in its entirety to become familiar with the supported targets, new features, issues with workarounds and other useful information

1.2 Installation and Licensing

For installation and licensing information, look in the Quick Start for StarCore which is included within the CodeWarrior layout. Users should install this release in a separate directory from other CodeWarrior installations.

1.3 New for this release

CodeWarrior Development Studio for StarCore v3.2.3

- adds support for running on hosts with 32-bit, Microsoft Windows 7
- includes an updated SmartDSP OS
- includes an updated compiler v22.16.0.2, which
 - implements new prototype functions (variants of Insert & Extract)
 - addresses errata
 - “Compiler produces wrong result for computation when loop-unrolling is activated” (MTWX40215)
 - Icode crash (MTWX40216)

For more details, see component sections below.

See [Appendix A](#) for list of defects fixed in this release.

See [Appendix B](#) for list of known issues and workarounds.

1.4 SmartDSP OS Support

SmartDSP OS continues to be supported in this release and future releases, but will not be actively maintained.

1.5 System Requirements

Recommended Configuration:

- 1.4GHz Intel® Pentium®-class processor or better
- Microsoft® Windows Vista Business (32-bit), XP, 2000, or Windows 7, 32-bit
- 1GB RAM
- 1GB disk space

Note: 500MB free space is required on the OS drive, regardless of the destination drive free space.

1.6 Who Should Use It

- Existing users of CodeWarrior Developer Studio 3.2 and all previous versions.
- New users developing for StarCore MSC8144/E/EC, MSC8122/26, MSC113/12, MSC8101/3, and MSC711x DSPs.



1.7 Who Should NOT Use It

- MSC8156 users; MSC8156 is supported in CW for SC10 alpha and subsequent releases

Appendix A: Defects Fixed

The following defects have been resolved in this release:

Issue	Abstract
Build Tools	
MTWX40215	Compiler produces wrong result for computation when loop-unrolling is activated
MTWX40216	Icode crash

Appendix B: Issues and Workarounds

Below is a list of issues with available workarounds. For further information on how to resolve any of these issues, please contact your Customer Support representative.

Issue	Abstract
MTWX24846	<p>Known issue (MTWX29791): On occasion, when using concurrent compilation, the IDE doesn't report the processing of assembly files to have been completed, even though the StarCore assembler has successfully finished. This causes the IDE to hang, forcing the user to kill it using the Task Manager.</p> <p>Workaround: go to the Project Properties panel and select "File Mappings". In the list-box click the line containing the extension of the assembly files (".ASM"). In the "Compiler" dialog-box (on the bottom right) replace "Enterprise Assembler" with "Enterprise Compiler". Then, click the "Change" button. Any special options used for the assembler should then be added in the "StarCore Compiler->Passthrough Hardware" panel, in the "To Assembler" text field.</p>
MTWX24341	<p>Local block scope variables are allocated function scope stack space.</p> <p>Workaround: None.</p>
MTWX31268	<p>Icode crashing during customer code compilation</p> <p>Workaround: Change to source code can work around this issue, see compiler release notes inside the product for details.</p>
MTWX22635	<p>Compilation takes too much time when using <code>printf("%d",arr[i]=i);</code></p> <p>Workaround: split data declaration from functions</p>
MTWX29791	<p>On occasion, when using concurrent compilation, the IDE doesn't report the processing of assembly files to have been completed, even though the StarCore assembler has successfully finished. This causes the IDE to hang, forcing the user to kill it using the Task Manager.</p> <p>Workaround: go to the Project Properties panel and select "File Mappings". In the list-box click the line containing the extension of the assembly files (".ASM"). In the "Compiler" dialog-box (on the bottom right) replace "Enterprise Assembler" with "Enterprise Compiler". Then, click the "Change" button. Any special options used for the assembler should then be added in the "StarCore Compiler->Passthrough Hardware" panel, in the "To Assembler" text field.</p>

MTWX29791	Crash on performing debug-kill-attach-restart-kill. Workaround: Turn Cache Symbolics ON -or- Open Symbolics Window prior to Attach
MTWX29669	Debugger does not display value for local variable correctly when there are more than 32K of local variable in a function, and the executable is compiled on -O3 Workaround: Define gaxwAntDataTemp as global variable or build with -O0.
MTWX31385	the Jtag Clock Speed is not set for the second debug session (if you have 2 boards connected to 2 USBTaps) Workaround: manually set the Jtag speed for the second connection from the ccs console
MTWX31301	Elf file with unaligned sections not written correctly to flash Workaround: use 'binary' format when programming instead of 'elf' file format
MTWX31466	CodeWarrior for StarCore 3.1 and CodeWarrior for StarCore 3.2.1 MAY clash due to the incompatibility of their respective remote connections. This occurs only when SC3.2.1 is installed before SC3.1. (unlikely) Workaround: Remove the Metrowerks folder from "Documents and settings/<USER>/Local Settings/Application Data while switching between the 2 products.
MTWX29213	Breakpoint under some conditions are not hit in some C++ projects. Workaround: None; fixed in next version of the simulator.
USB and Ethernet TAP	
28391	When using USB TAP and debugging for multiple hours, the connection can be lost. Workaround: Use Ethernet TAP
	When a ribbon cable is connected to the JTAG header on an 8144AMC target, it may be more sensitive to EMI. Workaround: - manually shielding the ribbon cable - installing the AMC cards into a chassis - ensuring solid grounding of the MSC8144AMC-S card