Introduction

Since EWARM version 6.2, the compiler adds new intrinsics for the CMSIS library that improve the compiler performance in terms of optimization. These intrinsics may break CMSIS header files included in STM32 firmware packages built with older EWARM versions.

To be in line with this change, this technical note describes the steps required to use EWARM 6.2x with projects built with EWARM 6.1 and previous versions.
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1 Opening previous EWARM projects with EWARM 6.2

When using EWARM 6.2x to open projects built with EWARM 6.1 and previous, the following compilation errors are generated due to double CMSIS definitions:

Error[Pe147]: declaration is incompatible with "__interwork __softfp unsigned long __get_PSP(void)" (declared at line 52 of "C:\Program Files\IAR C:\Libraries\CMSIS\CM3\CoreSupport\core_cm3.h"

To overcome this issue:
1. Check the "Use CMSIS" option from Project options > General Options > Library Configuration:

Figure 1. Use CMSIS option

2. Remove all CMSIS header files from your project by removing: "$PROJ_DIR\.\..\Libraries\CMSIS\CM3\CoreSupport" from [Project>Options>C/C++ Compiler>Preprocessor]
Figure 2. Remove all CMSIS header files from your project

![Preprocessor settings](image)

- Ignore standard include directories
- Additional include directories (one per line):
  - $PROJ_DIR/.
  - $PROJ_DIR/.
  - $PROJ_DIR/.
- Preinclude files:
- Defined symbols (one per line):
  - USE_STDFP18_XXX

[Preprocessor settings interface]
2 Revision history

Table 1. Document revision history

<table>
<thead>
<tr>
<th>Date</th>
<th>Revision</th>
<th>Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-Oct-2011</td>
<td>1</td>
<td>Initial release.</td>
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</tbody>
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