RENESAS Tool News

Notes on Using the Compiler Package
--M3T-ICC740 V.1.01 Release 01--
for the 740 MCU Family

Please take note of the following problems in using the compiler package-- M3T-ICC740 V.1.01 Release 01--for the 740 MCU family together with the High-performance Embedded Workshop:

- With the number of files to be linked in a project folder
- With registration of the dependencies of source files on a header (include) file

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1. **Problem With the Number of Files to Be Linked**

   1.1 **Description**

   If the number of files to be linked in a project folder is increased, the High-performance Embedded Workshop may abnormally be terminated.

   1.2 **Condition**

   This problem occurs if the number of characters in the command line exceeds 1024 when the linker is managed by the High-performance Embedded Workshop.

   Here, the number of characters in the command line is the sum of the numbers of characters (including spaces) contained in the names of the commands, linker options, and files to be linked.
   Note that the full path of the project folder in which files to be linked are saved is added to their filenames. (So, increasing the number of these files causes the problem.)

   To check for the number of characters in the command line in your compiler, see information on the command line saved on your map file.

   Example:

   Full path of the project folder:

C:¥WorkSpace¥folder1¥folder2¥develop¥develop
Files to be linked:
  cstartup.r31, main.r31, file1.r31, file2.r31, file3.r31, file4.r31,
  file5.r31, file6.r31, file7.r31, file8.r31, file9.r31, file10.r31,
  and file11.r31

In the above case, the entry into the command line is as follows:

C:¥Program Files¥IAR Systems¥ew23¥740¥bin¥xlink.exe
  -f C:¥WorkSpace¥folder1¥folder2¥develop¥develop¥lnk740.xcl
  -l C:¥WorkSpace¥folder1¥folder2¥develop¥develop¥Debug¥develop.map
  -x -Fieee695 -ylmba -o
C:¥WorkSpace¥folder1¥folder2¥develop¥develop¥Debug¥develop.695
C:¥WorkSpace¥folder1¥folder2¥develop¥develop¥Debug¥cstartup.r31
C:¥WorkSpace¥folder1¥folder2¥develop¥develop¥Debug¥main.r31
C:¥WorkSpace¥folder1¥folder2¥develop¥develop¥Debug¥file1.r31
C:¥WorkSpace¥folder1¥folder2¥develop¥develop¥Debug¥file2.r31
C:¥WorkSpace¥folder1¥folder2¥develop¥develop¥Debug¥file3.r31
C:¥WorkSpace¥folder1¥folder2¥develop¥develop¥Debug¥file4.r31
C:¥WorkSpace¥folder1¥folder2¥develop¥develop¥Debug¥file5.r31
C:¥WorkSpace¥folder1¥folder2¥develop¥develop¥Debug¥file6.r31
C:¥WorkSpace¥folder1¥folder2¥develop¥develop¥Debug¥file7.r31
C:¥WorkSpace¥folder1¥folder2¥develop¥develop¥Debug¥file8.r31
C:¥WorkSpace¥folder1¥folder2¥develop¥develop¥Debug¥file9.r31
C:¥WorkSpace¥folder1¥folder2¥develop¥develop¥Debug¥file10.r31
C:¥WorkSpace¥folder1¥folder2¥develop¥develop¥Debug¥file11.r31

1.3 Workaround
This problem can be avoided by either of the following ways:

(1) Use a shorter name for a project folder and decrease the depth of the
     directory structure.
     Example: C:¥WorkSpace¥D1¥D1

(2) Decrease the number of files to be linked.

1.4 Schedule of Fixing the Problem
We plan to fix this problem in the next release of the product.

2. Problem with Registration of the Dependencies of Source Files on a Header (include) File

2.1   Description

Even though the dependencies of source files on a header (include) file have been registered in the High-performance Embedded Workshop, the list of the registration does not appear in the Build Options dialog box. * Consequently the list cannot be examined nor modified, and if the registration is duplicated, dependency errors arise.

* To open this dialog box, click "Build" and "IAR ICC740 Toolchain" in the High-performance Embedded Workshop.

2.2   Workaround

Register no dependencies in the version concerned. If you rebuild a project by changing the header file only, execute the Build All command.

2.3   Schedule of Fixing the Problem

We plan to fix this problem in the next release of the product.