RENESAS Tool News

Note on Using High-performance Embedded Workshop

When using High-performance Embedded Workshop, take note of the following problem:

- With selecting build options

High-performance Embedded Workshop is included with the compilers, emulator debuggers, and other software products that it manages.

1. Products and Versions Concerned

High-performance Embedded Workshop V.4.09.00 and later

2. Product and Version Involved

If the High-performance Embedded Workshop is used with the following compiler package, they are involved in this problem.
C/C++ compiler package for SuperH family V.9.04 Release 01

3. Description

Even if you have changed the default selections of build options by performing the following procedure, the changes are ineffective when builds are executed:
(1) Create a project on High-performance Embedded Workshop.
(2) On the Build menu, click SuperH RISC engine Standard Toolchain to open the SuperH RISC engine Standard Toolchain dialog box.
(3) Select Other from the Categories list of the Compiler tab.
(4) Change the default selections of check boxes in the Miscellaneous options area to change the selections of their corresponding build options.

4. Build Options

The names of the check boxes in the Miscellaneous options area and the corresponding build options are listed below.
(1) Check boxes cleared by default; build options deselected by default and to be selected if check boxes selected

Check box	Build option
Check against EC++ language specification	-ECpp
Check against DSP-C language specification	-DSpc
Allow comment nest	-COMment=Nest
Expand return value to 4 byte	-RTnext
Approximate a floating-point constant division	-APproxdiv
Avoid illegal SH7055 instructions	-PAtch=7055
Change FPSCR register if double data used	-FPScr=Safe
Treats loop condition as volatile qualified	-Volatile_loop
enum size is made the smallest	-AUto_enum
Floating-point constant is handled as a fixed-point constant	-FIXED_Const
treats 1.0 as maximum number of fixed type	-FIXED_Max
delete type conversion after fixed multiple	-FIXED_Noround
DSP repeat loop is used	-REPeat
Enable register declaration	-ENAble_register
Obey ansi specifications more strictly	-STRIct_ansi
Change integer division into floating-point	-FDIv
Not check the range in conversion between floating point number and integer	-SIMple_float_conv
Suppress DIVS and DIVU instruction generation	-NOUSE_DIV_INST
Change operation order for floating-point expression aggressively	-FLOAT_ORDER

(2) Check boxes selected by default; build options selected by default
    and to be deselected if check boxes cleared

Check box   Build option

Callee saves/restores MACH and MACL registers if used   -Macsave

Saves/restores SSR and SPC registers   -SAve_cont_reg

5. Workaround

We are supplying the patch file for fixing this problem and will inform
you of the time of starting the supply on RENESAS TOOL NEWS up to the
end of this year.

Until you receive the patch file, do not change the selections of any
check boxes in the Miscellaneous options area.

If you want to change the selections of any build options, follow these steps:
(1) In the SuperH RISC engine Standard Toolchain dialog box, select
    Other from the Categories list of the Compiler tab.
(2) Type an option name directly into the User defined options text box
    or delete the already-typed option name.