Outline

When using the CS+ integrated development environment, note the following point.

1. Note on building after changing built tool options (CC-RX family)

1. Note on Building after Changing Built Tool Options (CC-RX Family)

1.1 Applicable Products

CS+ for CC V8.07.00 and earlier

(The conditions vary depending on the product version. Refer to 1.4 Conditions.)

1.2 Applicable Devices

RX family MCUs that support the CS+ for CC

1.3 Details

If you change the options that affect operations of the CC-RX build tool’s library generator and then build, the library generator may not be re-executed.

As a result, the changes in the options are not applied to the load module created by building.

1.4 Conditions

The problem occurs if [Generation mode of the standard library] property in Project tree > [CC-RX (Build Tool)] node > [Library Generate Options] tab > [Mode] category is "Build a library file (option changed)", any of the following is done, and then building is started.

- Using CS+ for CC V8.01.00 or later with CC-RX V3.01.00 or later
  Change the setting for [Uses double-precision floating-point operation instructions] property in Project tree > [CC-RX (Build Tool)] node > [Common Options] tab > [CPU] category.

- Using CS+ for CC V2.02.00 or later with CC-RX V2.01.00 or later
  Change the setting for [Uses single-precision floating-point operation instructions] property in Project tree > [CC-RX (Build Tool)] node > [Common Options] tab > [CPU] category.

- Using CS+ for CC V3.02.00 or later with CC-RX (any version)
  Either of the following.
  
  - Condition 1
    Change [Use same optimization-related settings as Compile Options tab] property in Project tree > [CC-RX (Build Tool)] node > [Library Generate Options] tab > [Optimization] category to "Yes", and then change any of the following properties in [Compile Options] tab > [Optimization] category.
    
    - [Optimization level]
    - [Outputs additional information for inter-module optimization]
    - [Optimization type]
    - [Loop expansion]
    - [Expansion maximum number]
    - [Performs inline expansion automatically]
[Maximum increasing rate of function size]
[Files for inter-file inline expansion]
[Expansion method of the switch statement]
[Handles external variables as if they are volatile qualified]
[Accesses to volatile qualified variables with the sizes of the variable types]
[Performs the constant propagation of const qualified external variables]
[Conversion method of the divisions and residues of integer constants]
[Execution method of library function that can be expanded to RX instructions]
[Divides the optimizing ranges into many sections before compilation]
[Schedules the instruction taking into consideration pipeline processing]
[Converts floating-point constant division into multiplication]
[Allocates preferentially the variables with register storage class specification to registers]
[Omits a check of the range for conversion between the floating type and unsigned integer type]
[Optimizes modification of the operation order of a floating-point expression]

• Condition 2

Change [Use same object-related settings as Compile Options tab] property in Project tree > [CC-RX (Build Tool)] node > [Library Generate Options] tab > [Object] category to "Yes", and then change any of the following properties in [Compile Options] tab > [Object] category.

[Section name of program area]
[Section name of constant area]
[Section name of initialized data area]
[Section name of uninitialized data area]
[Section name of literal area]
[Section name of switch statement branch table area]
[Allocates uninitialized variables to 4-byte boundary alignment sections]
[Allocates initialized variables to 4-byte boundary alignment sections]
[Allocates const qualified variables to 4-byte boundary alignment sections]
[Allocates switch statement branch tables to 4-byte boundary alignment sections]
[Adjustment for instruction in branch]
[Align fetch address of string manipulation instructions]
[Generates divisions and residues with DIV, DIVU, and the FDIV instruction]

1.5 Workaround

If any of the above conditions are met, run [Clean Project] in [Build] before building.

1.6 Schedule for Fixing the Problem

This problem will be fixed in CS+ for CC V8.08.00. (Scheduled to be released in July 2022.)
Revision History

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