[Upgrade to revision]

C Compiler Package for RL78 Family V1.05.00

Outline

We will be revising the CC-RL compiler from V1.04.00 to V1.05.00.

1.　Product and Versions to Be Updated

CC-RL V1.00.00 to V1.04.00

2.　Items Revised

The major revision points are as follows. Note that the features which are only available to users holding a registered license for the Professional edition are indicated as [Professional edition]. For details, refer to the Release Notes at the URL below.

This document will be released on July 20.

CS+ RL78 Compiler CC-RL V1.05.00 Release Note
https://www.renesas.com/search/keyword-search.html#genre=document&q=r20ut4085

RL78 Compiler CC-RL V1.05.00 Release Note
https://www.renesas.com/search/keyword-search.html#genre=document&q=r20ut4086

2.1　Improved Optimization

We have improved the performance in the generation of code.

2.2　Improvements to the Feature for Checking Source Code against MISRA-C: 2012 Rules [Professional edition]

The number of MISRA-C: 2012 rules against which source code can be checked has been increased from 103 to 111.

2.3　Improvement of the Method of Authenticating Licenses

The license authentication method has been improved to shorten the build time.

2.4　Change of the Output Format of Initial Value Data of Array Types

The format of initial value data of array types being output in the assembly source has been changed so that they are output in one line. This change reduces the analysis time during building for the shorter build time.

2.5　End Record Specification of Motorola S-type Files

Linker option -end_record (which specifies the end record of Motorola S-type files) has been added. In versions earlier than V1.05.00, an end record was output in accordance with the entry point address. It is now possible to create Motorola S-type files with the specified end record.

2.6　Change of the Link Map File Specification

In the Mapping List in link map files, the ATTRIBUTE field of the reallocation attribute has been added.
If -show=relocation_attribute is specified, the reallocation attribute corresponding to the section is displayed.

2.7　Change of Link Error Message

The file name is now output in link error message "F0563102".

2.8　Addition of the Local Label and nop Instruction Insertion Option

The -insert_nop_with_label option that uses the current consumption measurement solution function of CS+ and e^2 studio has been added.

This option is used on CS+ and e^2 studio.

2.9 Functional Expansion of the -vfinfo Option

The attribute (output attribute) has been added to the -vfinfo option.

The near function can now be specified in addition to the callt function. Also, sections specified for the ROM option or far area can now be excluded from the target of function information output.

2.10 Functional Expansion of the -binary Option

Items that can be specified for the attribute (section attribute) of the -binary option have been expanded.

2.11 Addition of #pragma near/far

The near/far attribute of functions can now be specified by using the #pragma directive.

The near/far attribute can be specified at the same time for multiple functions.

2.12 Addition of #pragma pack/unpack

Whether to provide packing of the structure can now be specified by using the #pragma directive.

Whether to provide packing of the structure can be specified for some C sources.

2.13 Functional Expansion of #pragma address

A section allocation address can now be specified for the const variable by using #pragma address.

2.14 Permission of Duplicate Description of #pragma When Porting of Programs Is Specified

When porting of programs is specified, duplicate description of some #pragma directives such as #pragma nop is not assumed as an error.

2.15 Adding Numbers for Messages Being Output When Evaluation Edition Is Used

For messages output when building with an evaluation edition, No. W0561016 is appended to messages indicating remaining days of the evaluation edition, and No. W0561017 is appended to messages indicating expiry. This allows you to control these messages by -change_message. For example, you can treat them as errors when using an evaluation edition.

2.16 Problem Fixed

The problems regarding the points below have been fixed.

- RENESAS TOOL NEWS, Document No. 150616tn2

1. Assembly statements not in accord with the specification (CCRL#001)

For details about the problem, refer to the URL below.
https://www.renesas.com/search/keyword-search.html#genre=document&q=150616tn2

2.17 Other Modifications

(1) Improvement of float arithmetic operations runtime library

Performance of the runtime library functions regarding addition, subtraction, multiplication, and division of float has been improved.

(2) Correction of a compilation error

A problem which led to compilation error "F0530800" when the -merge_files option was specified has been corrected.

(3) Correction of an internal error

A problem which led to an internal error in the compiler when building has been fixed.

2.18   Support for Windows

With the expiration of support for Windows Vista, this version does not support Windows Vista.

3.   Updating Your Product

3.1   Online Updating

On the Start menu, select Programs and then Renesas Electronics CS+ to start the Update Manager. This service will be available from July 20.

Note that if you update the product by the above procedure, V2.01.00 of License Manager is also installed.

When you use floating licenses, you also need to download V2.01.00 of Floating License Management Software from the URL below to install the program.
https://www.renesas.com/rl78-c-download

3.2   Download the installer of the product from our Web site.

Download the installer from the following URL and install the product. The installer will be available from July 20.
https://www.renesas.com/rl78_c_download

Also download V2.01.00 of License Manager from the URL above to install the program.

When you use floating licenses, you also need to download V2.01.00 of Floating License Management Software from the above URL to install the program.

4.   How to Purchase the New Software

For product ordering, contact your local Renesas Electronics marketing office or distributor with the product name and orderable part name.

For product pricing, make inquiries in the same manner.

You can check for product names and orderable part names at the URL below.

https://www.renesas.com/rl78_c

Revision History

Rev.	Date	Description	
		Page	Summary
1.00	Jul. 16, 2017	-	First edition issued
1.01	Jan.16, 2021	2	The error in "Problem Fixed" is corrected.

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■Inquiry

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