[Upgrade to revision]

C/C++ Compiler Package for RX Family V3.03.00

Overview

The C/C++ Compiler Package for RX Family CC-RX has been revised from V3.02.00 to V3.03.00.

Note that to use V3.00.00 or later version of the product, you will need a V3 license. The V3 license is not the same as the V1 and V2 license for V1.00.00 to V1.02.01 and V2.00.00 to V2.08.01.

1. Version to Be Updated

CC-RX V3.00.00, V3.01.00, V3.02.00

2. Items Revised

The major revision points are as follows. Refer to the release note for details.

(This information will be released on January 20.)

https://www.renesas.com/software-tool/cc-compiler-package-rx-family#documents

RX Compiler CC-RX V3.03.00 Release Note

2.1 Addition of the -branch_chaining, -nobranch_chaining Options

The -branch_chaining option has been added for optimization to reduce the code size of branch instructions.

When this option is specified, a branch instruction may not directly branch to the final destination; but branch to another branch instruction with the same destination by using a smaller branch instruction. This slows down the execution speed, but reduces the code size.

Specifying the -nobranch_chaining option can suppress this optimization.

2.2 Addition of the -VERBOSE Option

The -VERBOSE option has been added to display detailed information during linking.

By specifying crc as a parameter, the results of CRC calculations and the output position addresses are displayed.

2.3 Generation of MULHI, MACHI, MULLH, and MACLH Instructions

The compiler now uses DSP instructions MULHI, MACHI, MULLH, MACLH for optimization.

2.4 Improved Precision of Alias Analysis

The precision of alias analysis has been improved to make it easier to apply optimizations such as moving memory access instructions across intrinsic function calls or aggregate copies.

2.5 Description of Modification

The problems regarding the points below have been fixed.

● RENESAS TOOL NEWS Document No. R20TS0649EJ0100

1. Using rmpab, rmpaw, rmpal or memchr intrinsic functions (No.55)
2. Performing the tail call optimization (No.56)
3. Using the -ip_optimize option (No.57)
4. Using multi-dimensional array (No.58)

For details about the problems, refer to the following URL.

(This information will be released on January 20.)

https://www.renesas.com/software-tool/cc-compiler-package-rx-family#documents

[Note] C/C++ Compiler Package for RX Family (No.55-58)

3.　How to Update

3.1　Updating Online

Start the update manager from [Renesas Electronics CS+] in the Windows start menu and update the program.

(This service will be available from January 20.)

If you are using a floating license, also download and install Software for floating license management V2.04.00 from the following URL.

https://www.renesas.com/software-tool/cc-compiler-package-rx-family#documents

Software for Floating License Management V2.04.00

3.2　Download the Installer from the Web

Download the installer from the following URL. (The installer will be available from January 20.)

https://www.renesas.com/software-tool/cc-compiler-package-rx-family#documents

RX Compiler CC-RX V3.03.00

Also download and install License Manager V2.04.00 from the above URL.

If you are using a floating license, also download and install Software for floating license management V2.04.00 from the above URL.

4.　How to Purchase the New Software

When ordering, contact your local Renesas Electronics marketing office or distributor.

For product pricing, make inquiries in the same manner.

For details on purchasing the latest CC-RX, refer to the product page at the following URL:

https://www.renesas.com/software-tool/cc-compiler-package-rx-family#additional_details

Revision History

Rev.	Date	Description	
		Page	Summary
1.00	Jan.16.21	-	First edition issued

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