[Upgrade to Revision]

# C Compiler Package for RH850 Family V2.04.00

## Outline

The C Compiler Package for RH850 Family CC-RH has been updated from V2.03.00 to V2.04.00.

V2.04.00 includes feature enhancements such as the addition of the *-misalign* option and the improvement of the messages.

## 1. Products to Be Updated

CC-RH V2.00.00 to V2.03.00

The license for V2 is required for CC-RH V2.04.00.

## 2. Description of Update

The main changes are as follows. Refer to the release note in the link below for details.

(The note will be uploaded on January 20th, 2022.)

https://www.renesas.com/software-tool/c-compiler-package-rh850-family#documents

CS+ RH850 Compiler CC-RH V2.04.00 Release Note

### 2.1 Addition of the *-misalign* Option

The *-misalign* option has been added for the generation of code that applies the hardware function of misaligned access to memory by the MCU.

When using this option, refer to the description of the function for misaligned access to memory in the hardware manual of the target MCU.

### 2.2 Addition of the *-Xpatch=br* Option

The parameter *"br"* has been added for the *-Xpatch* option. When this option is not specified, *br disp9* instructions are not generated under certain conditions. To have the compiler generate *br disp9* instructions in the same way as in the earlier versions, either of the following conditions must be satisfied.
 - This option *-Xpatch=br* is specified.
 - A parameter other than *"g3m"* is specified in the *-Xcpu* option.

### 2.3 Addition of the *.dbl_size* Directive

The *.dbl_size* directive has been added to allow locating the information regarding the setting by the *-Xdbl_size* option of the compiler in the object code. When this directive is used, an error will occur if the setting of the *-Xdbl_size* option for one module to be linked differs from that in another module to be linked.

### 2.4 Addition of a Character That Can Be Specified in Symbol Names

The character '$' can now be specified in symbol names. Note, however, that a symbol name must not begin with '$'.

### 2.5 Improvement of Messages Regarding the Compiler License

The target type of license and the required actions have been added to messages regarding the compiler license.

### 2.6 Improved Optimization

The function for improving the efficiency of reference to variables defined with the storage class specifier "*static*" has been enhanced.

## 2.7 Issues Fixed

The following five issues have been fixed.

RENESAS TOOL NEWS: R20TS0792EJ0100

1. Use of struct/union type arguments (No.34)
2. Cast from pointer type to other type (No.35)
3. Use of an anonymous struct/union (No.36)
4. Use of an address read from memory after writing the address to the memory (No.37)
5. Reference to global/static variables (No.38)

Refer to the tool news in the link below for the details of the problems. (The news will be uploaded on January 20th, 2022.)

https://www.renesas.com/software-tool/c-compiler-package-rh850-family#documents

[Notes] C Compiler Package for RH850 Family (No.34-38)

## 3. Change in the C/C++ Compiler Package

The C/C++ Compiler Package no longer includes the installation medium (CD/DVD) from January 2022. It is offered as the common compiler package for the integrated development environments (CS+ and e$^2$ studio) and the orderable part numbers have been consolidated to reflect this change. Refer to the product web page in the link in section 5 for the part number.

The installers of the integrated development environments and the compiler packages are available on the Renesas website to download.

## 4. Updating the Product

### 4.1 Online Update

On the Windows Start menu, select [Renesas Electronics CS+] and start the [Update Manager]. (The service will be available from January 20th, 2022.)

If you are using a floating license, Software for floating license management V2.04.00 is required. Download it from the link below and install it.

https://www.renesas.com/rh850-c-download

### 4.2 Downloading the Installer

Download RH850 Compiler CC-RH V2.04.00 from the link below. (The installer will be uploaded on January 20th, 2022.)

https://www.renesas.com/rh850-c-download

Note that License Manager V2.04.00 is required. Download it from the link above and install it.

If you are using a floating license, Software for floating license management V2.04.00 is also required. Download it from the link above and install it.

## 5. Purchasing the Product

Contact your local Renesas Electronics sales office or distributor and inform them of the product information. Regarding the price of the product, contact the sales office or distributor.

Refer to the link below for the product name and orderable part number.

https://www.renesas.com/rh850_c

## Revision History

| Rev. | Date | Description | |
|------|------|------|------|
| | | Page | Summary |
| 1.00 | Jan.16.22 | - | First edition issued |
| | | | |

Renesas Electronics has used reasonable care in preparing the information included in this document, but Renesas Electronics does not warrant that such information is error free. Renesas Electronics assumes no liability whatsoever for any damages incurred by you resulting from errors in or omissions from the information included herein.

The past news contents have been based on information at the time of publication. Now changed or invalid information may be included.

The URLs in the Tool News also may be subject to change or become invalid without prior notice.

## Corporate Headquarters

TOYOSU FORESIA, 3-2-24 Toyosu,

Koto-ku, Tokyo 135-0061, Japan

www.renesas.com

## Trademarks

Renesas and the Renesas logo are trademarks of Renesas Electronics Corporation. All trademarks and registered trademarks are the property of their respective owners.

## Contact Information

For further information on a product, technology, the most up-to-date version of a document, or your nearest sales office, please visit:

www.renesas.com/contact/