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## Chapter 1. User's Manuals

Please read the following user's manuals along with this document.

Name	Document Number
CC-RH Compiler User's Manual	R20UT3516EJ0109
CS+ Integrated Development Environment User's Manual: CC-RH Build Tool Operation	R20UT3283EJ0110

## Chapter 2. Changes

This chapter describes changes to the CC-RH compiler from V2.04.00 to V2.04.01.

### 2.1 Addition of the `-Xpatch=br_jr` option

The parameter "br\_jr" has been added for the compiler option `-Xpatch`.

Specifying this parameter inhibits generation of the `br disp9`, `jr disp22`, and `jr disp32` instructions.

This parameter is ignored if `-Xcpu=g3kh` is not specified.

In the CS+ integrated development environment, the `-Xpatch` option can be specified in the following field in the Property panel.

Build Tool → [Compile Options] → [Others] → [Other additional options]

In the e<sup>2</sup> studio integrated development environment, the `-Xpatch` option can be specified in the following field in the Properties window of a project.

[C/C++ Build] → [Settings] → [Compiler] → [User] → [User-defined options]\*

\* This option can be added before or after all specified options.

### 2.2 Addition of the `-RESERVE_PREFETCH_AREA` option

The `-RESERVE_PREFETCH_AREA` option has been added as a link option.

`-reserve_prefetch_area[=section name]`

When this option is specified with a section name, the 16-byte area from the end of the specified section is filled with zeros. When a section name is not specified, the 16-byte areas from the ends of each of the executable program sections, such as the `.text` section, are filled with zeros.

In the CS+ integrated development environment, the `-RESERVE_PREFETCH_AREA` option can be specified in the following field in the Property panel.

Build Tool → [Link Options] → [Others] → [Other additional options]

In the e<sup>2</sup> studio integrated development environment, the `-RESERVE_PREFETCH_AREA` option can be specified in the following field in the Properties window of a project.

[C/C++ Build] → [Settings] → [Linker] → [User] → [User-defined options]\*

\* This option can be added before or after all specified options.

## 2.3 Other changes and improvements

(a) Rectification of an error that occurred when using a library

In the case of CC-RH V2.04.00, an E0562436 error would occur if a standard library function or mathematical library function was used with the data size of the double and long double types specified as 4 bytes by a compiler option (-Xdbl\_size=4). This problem has been solved in V2.04.01.

Reference:

<https://en-support.renesas.com/knowledgeBase/20471720>

**Revision History**

Rev.	Date	Description	
		Page	Summary
Rev1.00	Aug 01, 2022		First Edition issued

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