[Upgrade to Revision]

CS+ Integrated Development Environment V8.10.00

Outline

The CS+ integrated development environment has been updated from V8.09.00 to V8.10.00.

1. Products to Be Updated

➢ CubeSuite+ Common Program:

V1.00.00 to V1.03.00, V2.00.00 to V2.02.00

➢ CS+ Common Program:

V3.00.00 to V3.03.00, V4.00.00 to V4.03.00, V5.00.00, V6.00.00 to V6.01.00, V7.00.00, V8.00.01, V8.01.00 to V8.09.00

For how to check the version number, refer to the link below.

https://www.renesas.com/cs+_ver

2. CS+ for CC: Improved Functionality and Changes

2.1 Enhanced Support for Renesas Compilers [RL78]

The following compiler package is now supported.

・ C Compiler Package for RL78 Family [CC-RL] V1.12.01

For updates and notes on the compiler package, see the release note at the link below.

https://www.renesas.com/software-tool/c-compiler-package-rl78-family#documents

2.2 Displaying Languages Different from OS Language

The /lang startup option has been added to display information in languages different from the OS's display language.

If you want to display English on a Japanese OS, specify the /lang en-US startup option.

If you want to display Japanese on a non-Japanese OS, specify the /lang ja-JP startup option.

To use the /lang startup option, also see 5.1.16 /lang Startup Option in the following release note.

https://www.renesas.com/cs+_document

2.3 Displaying List of Build Options in Command Line

The /bol startup option has been added to CubeSuite+.exe so that a list of build options can be displayed in a command line.

2.4 Enhanced Support for GHS Compilers [RH850]

The following version of the RH850 compiler from GHS is now supported.

・ 2023.1.4

2.5　Enhanced Project Name Check When Creating Projects

The [Create Project] dialog box can now be used to check whether a project name contains a character that causes a build error, such as a parenthesis (or) or semicolon (;). The applicable compilers are CC-RL, CC-RH, and CC-RX.

2.6　Improved Project Tree Display

The features of the debug tools and analysis tools works for currently active project. To clarify this point, the nodes in not active projects are grayed out and the icons are also dimmed.

3.　Other Tools: Improved Functionality and Changes

3.1　CS+ Common Program (Build, Debug, Analytical Features etc.)

- ・ Common Program of CS+ for CC (for RX, RH850 and RL78 Family) has been updated from V8.09.00 to V8.10.00.
- ・ The components of CS+ for CA, CX (for 78K, RL78 and V850 Family) V4.08.00 have been updated.

CS+ for CC V8.10.00 includes the following updates.

(1)　CS+ for CC (for RX, RH850 and RL78 Family)

CS+ for CC has been updated from V8.09.00 to V8.10.00.

The following sections cover the main enhancements. For details, see the release note at the link below. (The note is applicable as of July 20.)

https://www.renesas.com/cs+_document

CS+ for CC V8.10.00 Release Note

(a)　Improved the build tool

- The following version of the RH850 compiler from Green Hills Software LLC is now supported. (RH850 Family)
  - ・ 2023.1.4

  For information about GHS compilers, contact Advanced Data Controls Corp.
    https://www.adac.co.jp/eng/
- Improved the linker -CRc option property (RX, RH850 and RL78 Family)

  Multiple -CRc options can now be set for the linker -CRc option property.

  Multiple -CRc options can be set when one of the following compilers is specified:
  - ・ CC-RL V1.12.00
  - ・ CC-RH V2.05.00
  - ・ CC-RX V3.05.00
- Added a property that specifies an optimum library for the device with the G3KH core (RH850 Family)

  The [Use best Standard/Mathematical library file for -Xcpu=g3kh] property has been added to Build Tool properties. If [Yes] is specified for this property, the optimum standard math library for the device with the G3KH core is automatically linked.

(b)　Improved the debug tool

- Support for the RH850 compiler from Green Hills Software LLC (RH850 Family)

  The following version is now supported.
  - ・ 2023.1.4

- Simulation of peripheral modules supports more MCUs (RL78 Family).

  The following group is now supported.

  ・ RL78/G22 group (Note)

   (Note) In this revision, the simulation of peripheral modules is available for all the RL78/G22 group devices.

  For details, see the release note at the link below. (The note is applicable as of July 20.)

   https://www.renesas.com/cs+_document

   RL78/G22 Simulator V1.02.00 Release Note

- The virtual board panel supports more components (RL78 Family).

  The following components are now supported.

  ・ Flow sensor (I2C)

  ・ Character LCD

  ・ Fire detector

  For details, see the user's manual at the link below. (The manual is applicable as of July 20.)

   https://www.renesas.com/cs+_document

   CS+ V8.10.00 Integrated Development Environment User's Manual: RL78 Debug Tool

- Improved the watch panel

  Auxiliary strings in watch expressions can now be displayed as symbols.

  Whether to display or hide the symbol column can be selected on the toolbar or context menu in the watch panel.

  The symbol column displays a string for a watch expression from which the scope specification is removed.

(c) Improved the analysis tool

- The maximum number of channels has been increased in the [Variable Value Changing Chart] tab in the Analysis Chart panel.

(d) Improved the Python console

- Added the functions of external communication features between the Python 3 execution environment

  The following functions that control CS+ from Python 3.x have been added.

csplus.add_address_breakpoint	Adds an address breakpoint.
csplus.get_all_breakpoints	Acquires information for all breakpoints.
csplus.get_expression_info	Acquires the size, type, and value of an expression.
csplus.get_float_expression	Acquires the floating-point value of an expression.
csplus.get_integer_expression	Acquires the integer value of an expression.
csplus.get_source_line_address	Acquires the address corresponding to the source line.
csplus.get_variable_size	Acquires the size of a variable.
csplus.get_variable_type	Acquires the type of a variable.
csplus.remove_all_breakpoints	Deletes all breakpoints.
csplus.set_float_expression	Assigns a floating-point value to an expression.
csplus.set_integer_expression	Assigns an integer value to an expression.
csplus.skip_all_breakpoints	Specifies whether to ignore all breakpoints.

(e) Fixed an issue of Update Manager

- The following issue has been fixed.
  - ・ The CS+ Update Manager may crash while installing updates without displaying the Finish page.
    Related Tool News: https://www.renesas.com/document/tnn/notes-cs-update-manager

(2) CS+ for CA, CX (for 78K, RL78 and V850 Family)

(a) Fixed an issue of Update Manager

- The following issue has been fixed.
  - ・ The CS+ Update Manager may crash while installing updates without displaying the Finish page.
    Related Tool News: https://www.renesas.com/document/tnn/notes-cs-update-manager

3.2 Device Information

Device information has been updated as follows.

3.2.1 CS+ Device Information for RX Family

The information has been updated from V3.11.00 to V3.13.00.

V3.13.00 includes the following update.

(a) Added supported devices

Supported devices have been added to the following group.

- RX26T group

For details, refer to the link below. (The information is applicable as of July 20.)

https://www.renesas.com/cs+/eng/CSPlus_DevInfo_RX.html

3.2.2 CS+ Device Information for RL78 Family

(1) CS+ for CC

The information has been updated from V8.09.01 to V8.10.00.

V8.10.00 includes the following update.

(a) Corrected the information

The following device information has been corrected.

- RL78/G22 group

For details, refer to the link below. (The information is applicable as of July 20.)

https://www.renesas.com/cs+/eng/CSPlus_DevInfo_RL78.html

(2) CS+ for CA, CX

The information has been updated from V8.08.00 to V8.09.01.

V8.09.01 includes the following update.

(a) Corrected the information

The following device information has been corrected.

- RL78/FGIC group

For details, refer to the link below. (The information is applicable as of April 20.)

https://www.renesas.com/cs+/eng/CSPlus_DevInfo_RL78.html

3.2.3 CS+ Device Information for RH850 Family

The information has been updated from V8.09.00 to V8.10.00.

V8.10.00 includes the following updates.

(a) Added supported devices

Supported devices have been added to the following group.

- RH850/U2B group

For details, refer to the link below. (The information is applicable as of July 20.)

https://www.renesas.com/cs+/eng/CSPlus_DevInfo_RH850.html

(b) Corrected the information

The following device information has been corrected.

- RH850/U2B group

For details, refer to the link below. (The information is applicable as of July 20.)

https://www.renesas.com/cs+/eng/CSPlus_DevInfo_RH850.html

4. Updating the Product

CS+ can be updated online free of charge. The update method varies depending on the version/revision. See the following and update accordingly.

Note 1: For update of CubeSuite+ to CS+ V3.01.00 or later, the free evaluation edition of the CC-RL build tool is provided.

The license for the C Compiler Package for the RL78 and 78K families (CA78K0R, CA78K0) does not lift the restrictions on the CC-RL free evaluation edition.

In order to lift the restrictions, purchase the commercial edition of the C Compiler Package for RL78 Family V1 (CC-RL).

Note 2: The license for the C Compiler Package for RH850 Family V1 (CC-RH) does not lift the restrictions on the free evaluation edition of V2 (CC-RH) of the package.

In order to lift the restrictions, purchase the commercial edition of the C Compiler Package for RH850 Family V2 (CC-RH).

Note 3: The licenses for the C/C++ Compiler Package for RX Family V1 and V2 (CC-RX) do not lift the restrictions on the free evaluation edition of V3 (CC-RX) of the package.

In order to lift the restrictions, purchase the commercial edition of the C/C++ Compiler Package for RX Family V3 (CC-RX).

Note 4: For how to purchase a compiler package, see section 6.

4.1 CS+ V3.00.00 or Later

Update in either of the following ways.

(1) Open the Windows Start menu, select [Renesas Electronics CS+], and then run Update Manager. (The service is available as of July 20.)

Note:

If you have started CS+ with the Rapid Startup function enabled, exit CS+, and then run Update Manager.
If the Rapid Startup function is enabled and CS+ is shown in the Windows notification area, the following error message appears.

M0120001

"CubeSuiteW+.exe"

Installation is suspended because "CubeSuiteW+.exe" is running.

It will be resumed next time you start the tool.

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(2)   Download and install the desired software tool from the link below. (Tools are available as of July 20.)

https://www.renesas.com/cs+_download

4.2   CubeSuite+ V2.02.00 or Earlier

Update Manager does not support CubeSuite+ V2.02.00 and earlier.

Download and update to CS+ for CC V8.10.00 from the link below. (V8.10.00 is available as of July 20.)

https://www.renesas.com/cs+_download

5.   Free Evaluation Edition

Before purchasing a compiler package, you can try its functions and performance with the free evaluation edition.

The free evaluation edition of CS+ for CC is available for download at the link below. (The installer is available as of July 20.)

https://www.renesas.com/cs+_download

You can convert the free evaluation edition to the commercial edition by entering a license for CubeSuite, CubeSuite+, or a compiler package.

6.   Purchasing the Product

If you use the CS+ IDE for developing products, a compiler package is required. Purchase the one that suits the intended purpose.

Contact your local Renesas Electronics sales office or distributor and inform them of which product you wish to purchase.

For product pricing, contact the sales office or distributor.

CS+ supports the following packages.

- C Compiler Package for RH850 Family Professional Edition
- C Compiler Package for RH850 Family Standard Edition
- C/C++ Compiler Package for RX Family Professional Edition
- C/C++ Compiler Package for RX Family Standard Edition
- C Compiler Package for RL78 Family Professional Edition
- C Compiler Package for RL78 Family Standard Edition
- C Compiler Package for the RL78 and 78K Families
- C Compiler Package for V850 Family

Note:

The compiler packages no longer include the installation medium (CD/ DVD) from January 2022.

The installers are available for download at the Renesas website. For information, see section 4.

For details of the packages, refer to the following links:

- C Compiler Package for RH850 Family: https://www.renesas.com/rh850_c
- C/C++ Compiler Package for RX Family: https://www.renesas.com/rx_c
- C Compiler Package for RL78 Family: https://www.renesas.com/rl78_c
- C Compiler Package for the RL78 and 78K Families: https://www.renesas.com/rl78_78k_c
- C Compiler Package for V850 Family: https://www.renesas.com/v850_c

For the compiler licenses, refer to the link below.

https://www.renesas.com/compiler_licenses

RENESAS

Revision History

Rev.	Date	Description	
		Page	Summary
1.00	Jul.16.23	-	First edition issued

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