

[Upgrade to revision]

R20TS0648EJ0100

Rev.1.00

CS+ Integrated Development Environment V8.05.00

Jan. 16, 2021

Overview

The CS+ integrated development environment has been revised from V8.04.00 to V8.05.00.

1. Version to Be Updated

- CubeSuite+ Common Program: V1.00.00 to V1.03.00 and 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, and V8.01.00 to V8.04.00

To check which version you currently have, refer to the following URL:

<https://www.renesas.com/cs+ ver>

2. Topics of Revision Description

This release of CS+ for CC includes the following new features and enhancements.

- = Improved zoom factor in [Measuring Current Consumption] panel (Target device: RX and RL78 families)
- Improvement in the debug function (Target device: RH850 family)

For details of these features, refer to the following.

- (1) Improved zoom factor in [Measuring Current Consumption] panel (Target device: RX and RL78 families)

Zoom factor that can be specified in [Measuring Current Consumption] panel was greatly increased up to 60,000%. Now you can see subtler changes in current consumption.

- (2) Improvement in the RH850 debug function (Target device: G4MH core of the RH850 family)

- (a) Addition of the trace function for the Generic timer module (GTM)

- The trace function has been added to display execution history (branch trace) and data access history on the trace panel.
- This function is supported by the E2 emulator and IE850A emulator.

The screenshot shows the Trace panel with a table of execution history. The table has columns: Nu..., Time (h:min:s,ms,μs,ns), Line..., Source/Dissasse..., Factor, Area, ID, Address, Data, and Others. The data shows a sequence of instructions being executed, including JBC STP, SUBL RC, RET, ANR R4, MWRI R1, and JMP 0x3. The last row is highlighted in blue, showing the current instruction being executed.

Nu...	Time (h:min:s,ms,μs,ns)	Line...	Source/Dissasse...	Factor	Area	ID	Address	Data	Others
0		0x0408	JBC STP						
1	00h00min00s000ms000μs012n.2	0x0404	SUBL RC						
2		0x0408	JBC STP						
2-1	00h00min00s000ms000μs012n.2	0x0404	SUBL RC						
3		0x0408	JBC STP						
3-1	00h00min00s000ms000μs012n.2	0x0404	SUBL RC						
4		0x0408	JBC STP						
4-1	00h00min00s000ms000μs012n.2	0x0404	SUBL RC						
5		0x0408	JBC STP						
5-1	00h00min00s000ms000μs012n.2	0x0404	SUBL RC						
6		0x0408	JBC STP						
6-1	00h00min00s000ms000μs012n.2	0x0404	SUBL RC						
7		0x0408	JBC STP						
7-1	00h00min00s000ms000μs012n.2	0x0404	SUBL RC						
8		0x0408	JBC STP						
8-1	00h00min00s000ms000μs050n.8	0x040c	HRDI RC						
9	00h00min00s000ms000μs012n.2						0x026c	R 23	
10	00h00min00s000ms000μs012n.2						0x0100	R 896	
11		0x0410	RET						
11-1	00h00min00s000ms000μs025n.4	0x0344	ANR R4,						
11-2		0x0348	MWRI R1						
12	00h00min00s000ms000μs025n.4						0x026c	M 24	
13		0x034c	JMP 0x3						
13-1	00h00min00s000ms000μs037n.6	0x0330	HRD R1,						

Figure 1 Execution history (branch trace) and data access history are displayed on the trace panel

3. Items Revised

3.1 CS+ Common Program (with building, debugging, analysis, and other capabilities)

- CS+ for CC (for RX, RH850 and RL78) Common Program has been updated from V8.04.00 to V8.05.00.
- CS+ for CA,CX (for 78K, RL78 and V850) Common Program has been updated from V4.04.00 to V4.05.00.

CS+ for CC V8.05.00 and CS+ for CA,CX V4.05.00 include the following updates.

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

The version has been updated from V8.04.00 to V8.05.00.

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/cs#documents>

CS+ for CC V8.05.00 Release Note

(a) Addition of build tool functions

- Support for the following compilers has been added.
 - CC-RH V2.03.00
 - CC-RX V3.03.00
 - CC-RL V1.10.00
- The following version of the RH850 compiler from Green Hills Software Inc. is now supported.
 - 2020.5.5

For more information about GHS compilers, contact Green Hills Software, Inc.

<https://www.ghs.com/>

(b) Improvements in the debug tool functions

- Support for the RH850 compiler from Green Hills Software, Inc.
The following version is now supported.
 - 2020.5.5
- Additional components supported by the Virtual Board panel for RL78 family
The Virtual Board panel supports more components.
 - Brushless DC motor, analog input switches, detailed waveform monitor

For details, refer to the User's Manual. This information will be released on January 20.

<https://www.renesas.com/software-tool/cs#documents>

CS+ V8.05.00 Integrated Development Environment User's Manual: RL78 Debug Tool

- Improved reception data display of serial window in peripheral simulation function (Target device: RL78 family)

Refer to the release note for details. This information will be released on January 20.

<https://www.renesas.com/software-tool/cs#documents>

CS+ for CC V8.05.00 Release Note

- Improvements in the Virtual Board panel operation (Target device: RL78 family)
Refer to the release note for details. This information will be released on January 20.
<https://www.renesas.com/software-tool/cs#documents>

CS+ for CC V8.05.00 Release Note

- The RL78 Simulator has been updated. Refer to the release note for details.
This information will be released on January 20.
<https://www.renesas.com/software-tool/cs#documents>

RL78/L12 Simulator V1.02.00 Release Note

(c) Improvement in the Python console

- More information and notes on the Python functions were added.

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

The version has been updated from V4.04.00 to V4.05.00.

Refer to the release note for details. This information will be released on January 20.

<https://www.renesas.com/software-tool/cs#documents>

CS+ for CA,CX V4.05.00 Release Note

3.2 Code Generation

3.2.1 CS+ Code Generator for RL78

The version has been updated from V2.20.00 to V2.21.00.

Refer to the following URL for details. This information will be updated on January 20.

- CS+ Code Generator for RL78 (CS+ for CC)
https://www.renesas.com/cs+/eng/CSPlus_CC_Code_Generator_for_RL78.html
- CS+ Code Generator for RL78 (CS+ for CA,CX)
https://www.renesas.com/cs+/eng/CSPlus_CACX_Code_Generator_for_RL78.html

3.3 Device Information

3.3.1 CS+ Device Information for RH850 Family

The version has been updated from V8.04.01 to V8.05.00.

V8.05.00 includes the following updates.

(1) Addition of device information

Device information for the following groups were added.

- RH850/F1KM group
 - R7F701760
 - R7F701762
 - R7F701764

Refer to the following URL for details. This information will be updated on January 20.

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

3.3.2 CS+ Device Information for RX Family

The version has been updated from V3.05.00 to V3.06.00.

V3.06.00 includes the following updates.

- (1) Preliminary updates provided for upcoming CS+ updates

Refer to the following URL for details. This information will be updated on January 20.

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

3.3.3 CS+ Device Information for RL78 Family

The version has been updated from V8.04.00 to V8.05.00.

V8.05.00 includes the following updates.

- (1) Addition of supported devices

Support for the following devices has been added.

- RL78/I1C group

Refer to the following URL for details. This information will be updated on January 20.

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

3.4 Quick and Effective tool solution

The version has been updated from V9.04.00 to V9.05.00.

Refer to the following URL for details. This information will be updated on January 20.

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

3.5 License Manager

The version has been updated from V2.03.01 to V2.04.00.

Refer to the following URL for details. This information will be updated on January 20.

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

3.6 Software for Floating License Management

The version has been updated from V2.03.01 to V2.04.00.

Support for the License Manager V2.04.00 was added in V2.04.00. This program will be updated on January 20.

4. How to Update Your Copy

Online updating is available free of charge. The method of updating depends on the edition of CS+.

Note 1. An evaluation edition of the CC-RL build tool will be included when you update from CubeSuite+ to CS+ V3.01.00 or later.

However, we are unable to lift the restrictions on the evaluation edition of CC-RL in response to customers holding licenses for earlier C compiler package for RL78 and 78K families (CA78K0R, CA78K0).

You will need to purchase the commercial edition of C compiler package for RL78 family (with IDE) V1 (CC-RL) if you wish to have the restrictions on the evaluation edition lifted.

Note 2. Even if you have a license for V1 of the C compiler package for RH850 family (CC-RH), the restrictions on the evaluation edition of V2 of the C compiler package for RH850 family (CCRH) will not be lifted.

If you wish to lift the restrictions, please purchase the commercial edition of V2 of the C compiler package for RH850 family (CC-RH).

Note 3. Even if you have a license for V1, V2 of the C/C++ compiler package for RX family (CC-RX), the restrictions on the evaluation edition of V3 of the C/C++ compiler package for RX family (CC-RX) will not be lifted.

If you wish to lift the restrictions, please purchase the commercial edition of V3 of the C/C++ compiler package for RX family (CC-RX).

Note 4. Refer to section 6 for details on how to purchase the product.

4.1 For CS+ V3.00.00 or Later

To update your program, use either of the following methods:

- (1) From the Windows Start menu, select Renesas Electronics CS+ to start the Update Manager and update the program. This service will be available from January 20.

Note: If your CS+ has been launched with rapid startup enabled, exit the CS+ once, and then run the Update Manager.

If the CS+ is resident in the notification area of Windows (system tray) due to rapid startup, an error occurs and produces the following message:

M0120001

"CubeSuiteW+.exe"

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

It will be resumed next time you start the tool.

- (2) Download and install the desired software tools from the URL below.

(Downloads will be available as of January 20.)

<https://www.renesas.com/software-tool/cs#documents>

4.2 For CubeSuite+ V2.00.00 to 2.02.00

Update the tool in the same way as in 4.1.

In the description, change the name from "Renesas Electronics CS+" to "Renesas Electronics CubeSuite+".

4.3 For CubeSuite+ V1.03.00 or Earlier

CubeSuite+ V1.03.00 or earlier versions do not support Update Manager.

Download the evaluation edition of CS+ for CC V8.05.00 or CS+ for CA,CX V4.05.00 to install the update. (Downloads will be available as of January 20.)

<https://www.renesas.com/software-tool/cs#documents>

5. Evaluation Software

The evaluation edition allows for evaluation of product performance and functionality prior to purchasing.

Download the evaluation edition of CS+ for CC or CS+ for CA,CX from the following URL.

The installer will be available from January 20.

<https://www.renesas.com/software-tool/cs#documents>

You can turn the evaluation edition into the commercial edition by inputting a license for CubeSuite, CubeSuite+, or compiler products at installation.

6. Purchasing the Product

Please purchase a compiler product which includes CS+.

For product ordering, contact your local Renesas Electronics marketing office or distributor with the following information.

For product pricing, make inquiries in the same manner.

The compiler products which include CS+ are as follows.

- C Compiler and IDE for RH850 Family Professional edition
- C Compiler and IDE for RH850 Family Standard edition
- C/C++ Compiler and IDE for RX Family Professional edition
- C/C++ Compiler and IDE for RX Family Standard edition
- C Compiler and IDE for RL78 Family Professional edition
- C Compiler and IDE for RL78 Family Standard edition
- C Compiler and IDE for RL78, 78K Family
- C Compiler and IDE for V850 Family

Note: Since the CS+ which is included with a compiler product might not be the latest version, you may need to update it with reference to section 4 before using it.

Although CS+ is not included with a compiler product with an annual license, you can use CS+ by installing an evaluation edition of CS+ for CC. For how to download an evaluation edition, refer to section 5.

For details on each product, refer to the product page at the following URL.

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 V850 Family: https://www.renesas.com/v850_c

C Compiler Package for RL78, 78K Families https://www.renesas.com/rl78_78k_c

Information about compiler licenses is available in the following web page.

https://www.renesas.com/compiler_licenses

Revision History

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

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