[Upgrade to revision]

CS+ Integrated Development Environment V8.01.00

Outline

We have updated the CS+ integrated development environment from V8.00.00 to V8.01.00.

1 Products and Versions to be Updated

➢ Cube Suite + 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 V4.01.00, V5.00.00, V6.00.00 to V6.01.00 and V7.00.00.

To check the version number of your product, refer to the URL below.
https://www.renesas.com/cs+_ver

2 Main Features of Update

Following features have been added to CS+ for CC.

- Support added for the new emulator IE850 for RH850/E2x series equipped with the next-generation G4MH core.

- RL78/G11 group has been added to supported MCUs for simulation of peripheral functions and current consumption.

For details about each feature, see the following sections.

 (1) Support added for the new emulator IE850A for RH850/E2x series

You will be able to debug the RH850/E2x series using the new full-spec emulator IE850A, which is scheduled to be released in February.

IE850A can acquire large trace data, supporting up to 512KB when used in combination with CS+ V8.01.00. More features are continued to be added/improved in the future updates such as increasing trace data capacity and addition of a coverage function that uses trace data.
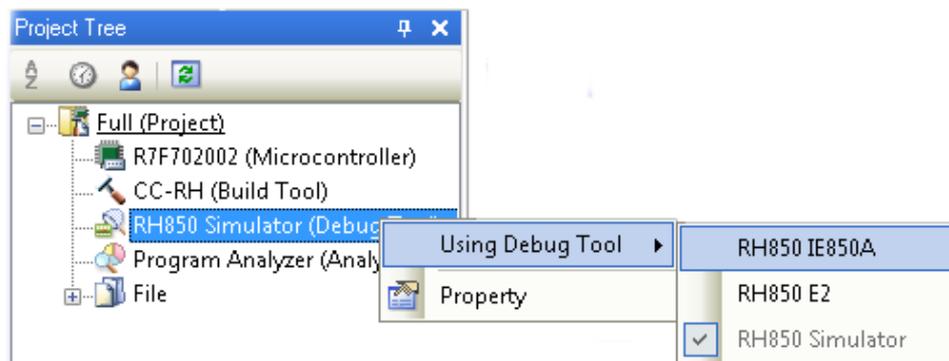

Figure 2-1 Select RH850 IE850A in CS+ V8.01.00

Figure 2-2 IE850A main unit

(2) Simulation of peripheral functions and current consumption (Applicable MCUs: RL78 family)

You can now simulate the peripheral functions and current consumption of the RL78/G11 group in virtual environment on computer.

Peripheral function simulations can use the components such as LED, buzzer, and meter and check the I/O waveforms and serial communication waveforms of the MCU.

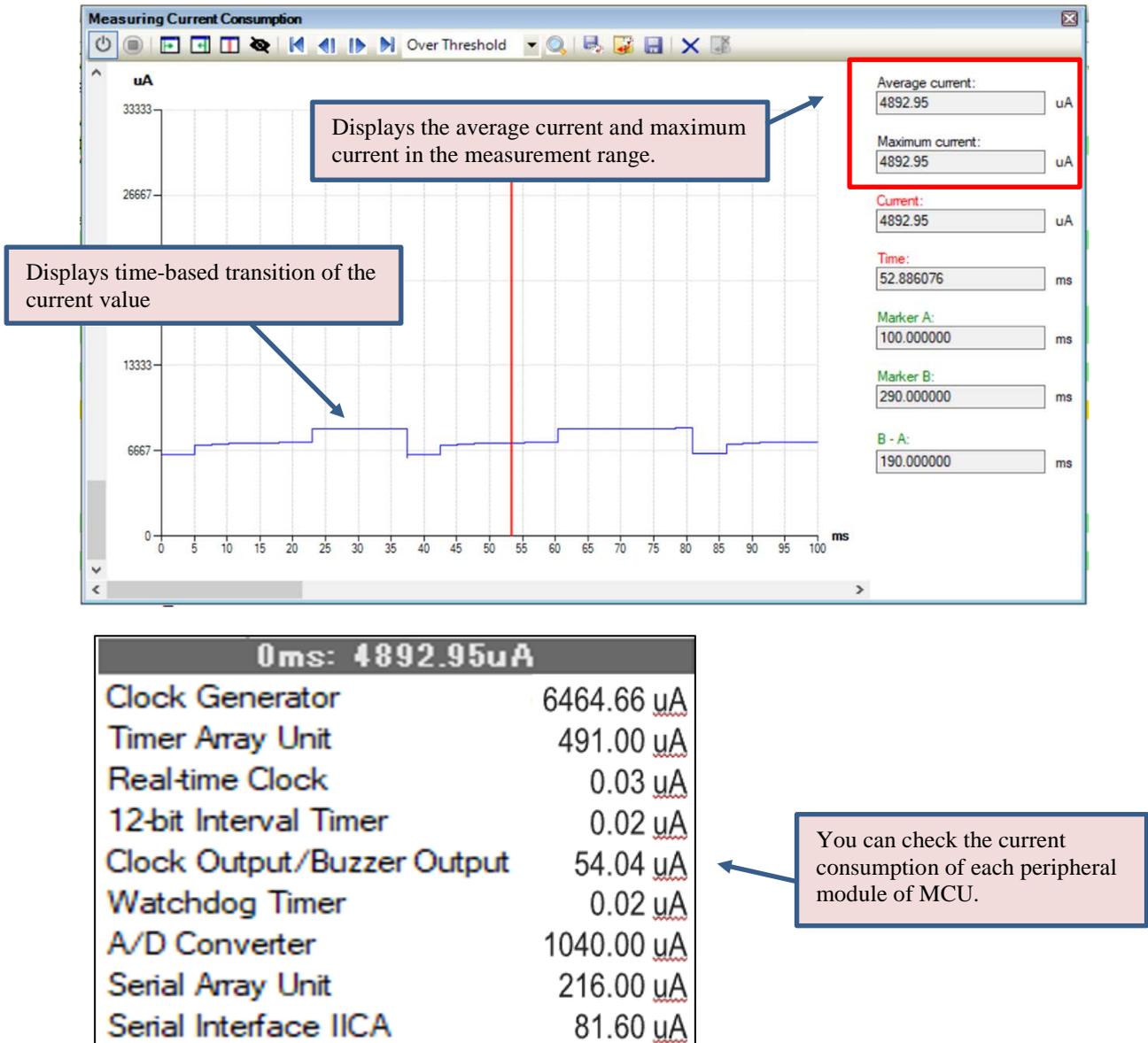This function also supports RL78/G10, RL78/G12, RL78/G13, and RL78/G14 groups.

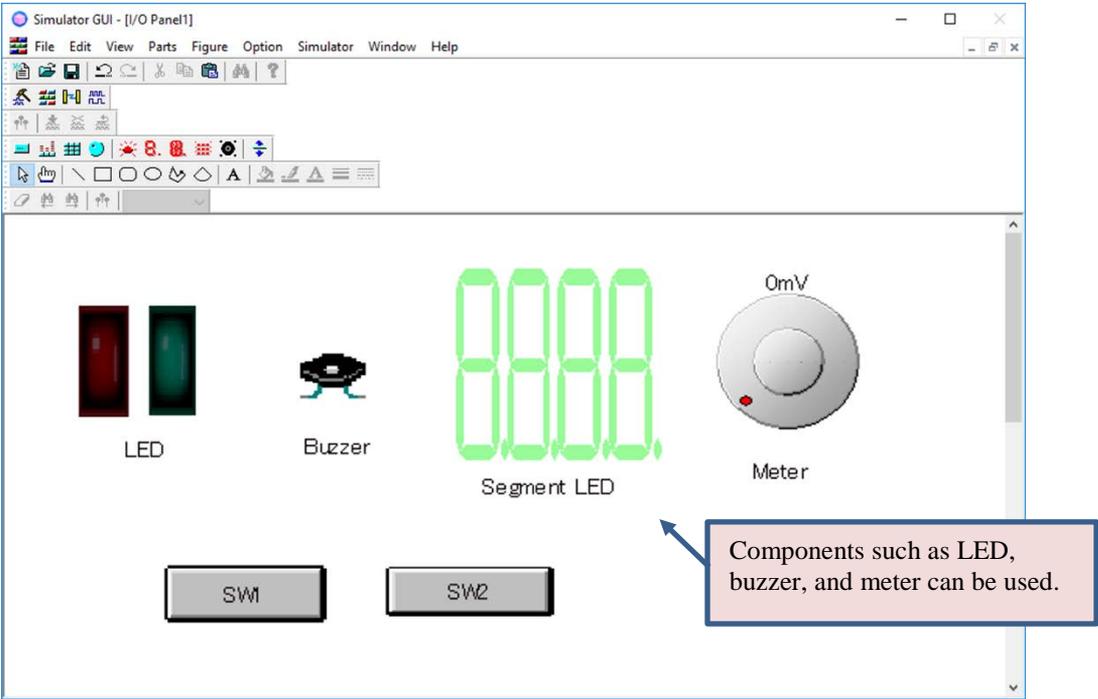Figure 2-3 Measurement results of current consumption simulation

Figure 2-4 Simulator GUI

The callout in the figure reads: "Components such as LED, buzzer, and meter can be used."

3 Description of Update

3.1 CS+ Common Program (Common Program of Build, Debug and Analysis Operations)

- CS+ for CC (for RX, RH850, and RL78) common program has been updated from V7.00.00 to V8.01.00.

CS+ for CC V8.01.00 includes the following updates.

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

The version has been upgraded from V7.00.00 to V8.01.00.
The main items of the update are listed below. For details, refer to the release note. (Scheduled to be released on January 21.)
https://www.renesas.com/cs+_document
CS+ for CC V8.01.00 Release Note

(a) Improvement of overall functionalities

In addition to the main features of this update, we have added and updated the following functions.

- Enhanced functionalities of Smart Manual
  You can now check the version number of the User's Manual: Hardware referenced in the Smart Manual.
  (Applicable MCUs: RX family and RL78 family)

- Addition of supported emulator
  - IE850A Emulator (Applicable MCUs: RH850 family [RH850/E2x series])

- The problem listed in the RENESAS TOOLNEWS Document No. R20TS0348EJ0100 has been fixed [Note].

  1. Contents of the offline help cannot be displayed.

  For details about this problem, see the URL below.
  https://www.renesas.com/search/keyword-search.html#genre=document&q=r20ts0375

  Note: The error has been corrected so that the applicable help contents are displayed by using the [Help] button or [F1] key. Note, however, that compilers and build tools cannot display the help contents for the family that is different form the family of the first project they opened.
  Furthermore, all help contents cannot be searched and displayed at the same time.
  To search and display all help contents at once, open the help by following the steps below.

  1. CS+ [Help] menu → [How to Access Help] → select [Offline]
  2. CS+ [Help] menu → select [Help]

(b) Additional features of build tools

- Support has been added for the following compilers.
  - CC-RH V2.01.00
  - CC-RH V1.07.01
  - CC-RX V3.01.00
  - CC-RL V1.08.00

- Support for RH850 compilers from Green Hills Software, Inc. has been added.

  The versions of the supported compilers are as follows.

  - January 5, 2018

  - May 5, 2017

  For details about the GHS compilers, refer to the URL below.
  http://www.ghs.com/

- The problem listed in the RENESAS TOOLNEWS Document No. R20TS0343EJ0100 has been fixed.

  1. Verify specification options of CC-RL
  For details about this problem, see the URL below.
  https://www.renesas.com/search/keyword-search.html#genre=document&q=r20ts0343

  (c) Improved functionalities of debug tools

  - Instruction-Simulator for RX has been updated. For details, refer to the release note. (Scheduled to be released on January 21.)

    https://www.renesas.com/cs+_document
    CS+ Simulator for RX V3.01.00 Release Note

  - Instruction Simulator for RL78 has been updated. For details, refer to the releasee note. (Scheduled to be released on January 21.)

    https://www.renesas.com/cs+_document
    Simulator for RL78/G11 V1.00.00 Release Note

  - Support for RH850 compilers from Green Hills Software, Inc has been added.

    The versions of the supported compilers are as follows.

    - January 5, 2018

    - May 5, 2017

  - The problem listed in the RENESAS TOOLNEWS Document No. R20TS0279EJ0100 has been fixed.

    1. When using the large trace capacity or coverage function of the E20 emulator for the RX family
    For details about this problem, see the URL below.
    https://www.renesas.com/search/keyword-search.html#genre=document&q=r20ts0279

    Note that the error cannot be avoided if debugging via JTAG communication is selected, and a pin reset or internal reset occurs while the program is running.

  - The problem listed in the RENESAS TOOLNEWS Document No. R20TS0348EJ0100 has been fixed.

    1. Using the watch panel
    For details about this problem, see the URL below.
    https://www.renesas.com/search/keyword-search.html#genre=document&q=r20ts0348

3.2 Build Tools

3.2.1 CC-RH (Compiler for RH850 Family)

The versions have been updated from V2.00.00 to V2.01.00, and from V1.07.00 to V1.07.01.

For details, see the URL below. (Scheduled to be updated on January 21.)

https://www.renesas.com/cs+/jpn/CSPlus_CC-RH.html

To use the CC-RH V2.01.00, install the License Manager V2.02.01 or later.

3.2.2 CC-RX (Compiler for RX Family)

The version has been updated from V3.00.00 to V3.01.00.

For details, see the URL below. (Scheduled to be updated on January 21.)

https://www.renesas.com/cs+/jpn/CSPlus_CC-RX.html

To use the CC-RX V3.01.00, install the License Manager V2.02.01 or later.

3.2.3 CC-RL (Compiler for RL78 Family)

The version has been updated from V1.07.00 to V1.08.00.

For details, see the URL below. (Scheduled to be updated on January 21.)

https://www.renesas.com/cs+/jpn/CSPlus_CC-RL.html

To use the CC-RL V1.08.00, install the License Manager V2.02.01 or later.

3.3 Code Generators

3.3.1 CS+ Code Generator for RL78

The version has been updated from V2.16.00 to V2.17.00.

For details, see the URL below. (Scheduled to be updated on January 21.)

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

3.4 Device Information

3.4.1 CS+ Device Information for RH850 Family

The version has been updated from V7.00.01 to V8.01.00.

V8.01.00 includes the following update.

(1) Correction of device information

The device information of the following series has been corrected.

- RH850/E2x series

For details, see the URL below. (Scheduled to be updated on January 21.)
https://www.renesas.com/cs+/jpn/CSPlus_DevInfo_RH850.html

3.4.2   CS+ Device Information for RX Family

The version has been updated from V2.05.01 to V3.00.00.

V3.00.00 includes the following update.

(1) Correction of device information

The device information of the following groups has been corrected.

- RX110 group
- RX111 group

For details, see the URL below. (Scheduled to be updated on January 21.)
https://www.renesas.com/cs+/jpn/CSPlus_DevInfo_RX.html

3.4.3   CS+ Device Information for RL78 Family

The version has been updated from V7.00.00 to V8.01.00.

V8.00.01 includes the following updates.

(1)   Addition of supported device

Support for the following device has been added.

- RL78/FGIC

(2)   Changes to the startup routine

The startup routine included in the CS+ device information for RL78 family has been changed and initialization processing of stack area has been added. No change has been made to the startup routine for the RL78-S1 core.

For details, see the URL below. (Scheduled to be updated on January 21.)
https://www.renesas.com/cs+/jpn/CSPlus_DevInfo_RL78.html

3.5 USB Driver

We have updated the following USB driver to support the new emulator IE850A.

- USB Driver for MCU Tools (E2, E2 Lite, IE850, IE850A, PG-FP5) (32-bit Windows OS)

The version has been updated from V2.76.01 to V2.77.00.

For details, see the URL below. (Scheduled to be updated on January 21.)
https://www.renesas.com/cs+/jpn/CSPlus_USB_Driver_x86_for_MCU_Tools_IE850.html

 - USB Driver for MCU Tools (64-bit Windows OS)

The version has been updated from V2.76.01 to V2.77.00.

For details, see the URL below. (Scheduled to be updated on January 21.)
https://www.renesas.com/cs+/jpn/CSPlus_USB_Driver_x64_for_Renesas_MCU_Tools.html

3.6 Update Manager

The version has been updated from V2.02.00 to V2.03.00.

For details, see the URL below. (Scheduled to be updated on January 21.)

https://www.renesas.com/cs+/jpn/CSPlus_Update_Manager.html

4 Updating Your Product

Online update is available free of charge. Updating method varies depending on the edition of CS+ you are using.

Note 1. When updating from Cube Suite+ to CS+ V3.01.00 or later, an evaluation edition of the CC-RL build tool is included in the update.
Note that the license for C Compiler Package for RL78, 78K Family (CA78K0R, CA78K0) cannot lift the restrictions on the CC-RL evaluation edition.
To use the evaluation edition of CC-RL without restrictions, purchase the commercial edition of C Compiler Package for RL78 Family (with IDE) V1 (CC-RL).

2. A license for C Compiler Package for RH850 Family V1 (CC-RH) cannot lift the restrictions on the evaluation edition of C Compiler Package for RH850 Family V2 (CC-RH).
To use the C Compiler Package for RH850 Family V2 (CC-RH) without restrictions, purchase the commercial edition of C Compiler Package for RH850 Family V2 (CC-RH).

3. A license for C/C++ Compiler Package for RX Family V1, V2 (CC-RX) cannot lift the restrictions on the evaluation edition of the C/C++ Compiler Package for RX Family V3 (CC-RX).
To use the C/C++ Compiler Package for RX Family V3 (CC-RX) without restrictions, purchase the commercial edition of C/C++ Compiler Package for RX Family V3 (CC-RX).

4. See section 6 for how to purchase products.

4.1 For CS+ V3.00.00 for Later

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

(1) On the Start menu, select Programs → Renesas Electronics CS+ to start the Update Manager. The update will be available on January 21.

Note: If you have started the CS+ when rapid start is enabled, exit the CS+ first and start the Update Manager.
If the CS+ is resident in the notification area of Windows (system tray) due to rapid start, an error occurs, and the following message is output:

M0120001

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

It will be resumed next time you start the tool.

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(2) Download the software tools you need from the following URL and start the installation.
(Scheduled to be released on January 21.)

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

4.2 For Cube Suite+ V2.00.00 to V2.02.00

Update your program in the same way as in section 4.1.

4.3 For Cube Suite+ V1.03.00 or Earlier

Download and install the evaluation edition of CS+ for CC V8.01.00 or CS+ for CA,CX V4.02.00 from the following URL. (Scheduled to be released on January 21.)

https://www.renesas.com/cs+#download

5 Evaluation Edition

Before purchasing a compiler product, you can evaluate its performance and functionalities by using the evaluation edition.

Download the evaluation edition of CS+ for CC or CS+ for CA,CX from the following URL: The installer will be available on January 21.
https://www.renesas.com/cs+#download

You can use your evaluation edition as a commercial edition by inputting a license for CubeSuite, CubeSuite+ or a compiler when installing the evaluation edition.

Note 1. A license for C Compiler Package for RL78, 78K Family (CA78K0R, CA78K0) cannot lift the restrictions on the CC-RL evaluation edition.
To use the evaluation edition of CC-RL without restrictions, purchase the commercial edition of C Compiler Package for RL78 Family (with IDE) V1 (CC-RL).

2. A license for C Compiler Package for RH850 Family V1 (CC-RH) cannot lift the restrictions on the evaluation edition of C Compiler Package for RH850 Family V2 (CC-RH).
To use the C Compiler Package for RH850 Family V2 (CC-RH) without restrictions, purchase the commercial edition of C Compiler Package for RH850 Family V2 (CC-RH).

3. A license for C/C++ Compiler Package for RX Family V1, V2 (CC-RX) cannot lift the restrictions on the evaluation edition of the C/C++ Compiler Package for RX Family V3 (CC-RX).
To use the C/C++ Compiler Package for RX Family V3 (CC-RX), purchase the commercial edition of C/C++ Compiler Package for RX Family V3 (CC-RX).

6 How to Purchase a Product

CS+ is included in the compiler package. To get CS+, purchase a compiler product.

To order a product, contact your local Renesas Electronics sales office or distributor with the following information.

For product pricing, contact us in the same manner.

For details on compiler licenses, see the webpage below:

https://www.renesas.com/products/software-tools/tools/compiler-assembler/compiler-licenses.html

Revision History

Rev.	Date	Description	
		Page	**Summary**
1.00	Jan. 16, 2019	-	First edition issued

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