

---

**[Upgrade to revision]  
e<sup>2</sup> studio Integrated Development Environment V7.7.0**

---

R20TS0532EJ0100  
Rev.1.00  
Jan. 16, 2020

---

## Outline

We have updated the e<sup>2</sup> studio integrated development environment from V7.6.0 to V7.7.0.

For an overview of the product, refer to the URL below.

<https://www.renesas.com/e2studio>

## 1. Products and Versions to Be Updated

- e<sup>2</sup> studio V7.0.0 through V7.6.0

To see the version of e<sup>2</sup> studio, select the [Help] menu of e<sup>2</sup> studio →[About e2 studio] and open the dialog box.

## 2. Description of the Update

The main features of the update are described in the following sections. Refer to the release note for details. (Scheduled to be released on Jan. 20th.)

<https://www.renesas.com/search/keyword-search.html#genre=document&q=r20ut4673ee>

Note: Windows 7 support has ended with e<sup>2</sup> studio V7.6.0 as Microsoft ended support for Windows 7.

### 2.1 Improved Functionalities

We have improved the following functionalities.

For details about the improvements, please refer to “**What is new in 7.7.0?**” in the release note listed above.

#### 2.1.1 New Compiler support

Supported the following new toolchains.

- “C/C++ Compiler Package for RX Family” (CC-RX) V3.02.00.
- “C/C++ Compiler Package for RX Family” (CC-RX) V2.08.01.
- “C Compiler Package for RL78 Family” (CC-RL) V1.09.00.


#### 2.1.2 Improved Build related features

- Improved Stack Analysis view
  - ✓ Enabled to switch the following two formats of stack size list.
    - ✧ Stack size demanded within each functions (added in V7.7.0)
    - ✧ Maximum stack size demanded in caller and callee functions
  - ✓ In addition to current call tree format, table format is now available.
  - ✓ Added headless export feature from stack information file \*.sni to \*.csv file format.
  - ✓ Added one-click configuration in builder dialog to enable/disable stack analysis compiler option.

- Added heap size estimation view for RTOS projects

Added a view shows heap size estimation calculated based on maximum number of task and queue.

- Added C/C++ Project configuration button in Toolbar

Added  Button in Toolbar to launch C/C++ Project configuration dialog, defined with shortcut key as 'Ctrl+Alt+P' for keyboard and context menu operation.

Project Explorer's shortcut key 'Alt+Enter' is still available to launch property dialog of project, file or folder.

## 2.1.3 Improved Debug related features

- Added task load monitoring feature for FreeRTOS projects

Task CPU loads are shown in real-time manner as TotalTickCount and DeltaTickCount in the resource view of FreeRTOS debugger.

- Improved interface of ID code in Debug Configuration dialog

Two new formats in 32bit x 4 and 128bit hex integer are available to configure debugger connection ID code, in addition to current byte-stream format applied to debugger launch option parameter.

Preview shows byte-stream format updated immediately with entering the new formats stated above.

## 2.1.4 Improved Amazon FreeRTOS project support features

The following features have been added or improved for Amazon FreeRTOS projects.

- AWS (Amazon Web Services) libraries (e.g. GGD, MQTT, Device Shadow) can be configured in SC (Smart Configurator) GUI. Users can easily integrate IoT software to access AWS cloud and the services.
- RZ/A2M group is now supported for Amazon FreeRTOS powered with "RZ/A2M FreeRTOS™ Software Development Kit". See the following page for more details:  
<https://www.renesas.com/rza2-software-development-kit-free-rtos>

## 2.1.5 Added Smart Configurator availability status in 'Renesas Device Support' dialog

In the 'Renesas Device Support' dialog launched through 'About e2 studio', a new column of The following features have been added to browse availability of Smart Configurator feature for each devices.

## 2.1.6 Added My Renesas login status and configuration dialog

Added a new dialog in the Workspace property view to confirm My Renesas login status with which account is used. There you can also clear login status, or login as another account.

## 2.2 Updates of Supported Devices

Device support has been updated for the following device groups. Refer to the release note for the list of supported devices.

- RL78 peripheral simulator supports new device groups

RL78 peripheral simulator and current consumption simulation are added for RL78/L12 group and RL78/G13A group.

### 3. Updating Your Product

Download the e<sup>2</sup> studio installer from the URL below for an installation.  
(V7.7.0 is scheduled to be released on Jan. 20th.)

[https://www.renesas.com/e2studio\\_download](https://www.renesas.com/e2studio_download)

Note 1: Read the notes on the download page before starting the installation.

2: Once you have updated the e<sup>2</sup> studio, specify a newly created folder as a workspace. If you need to use an existing project, please import it into the new workspace.

Revision History

Rev.	Date	Description	
		Page	Summary
1.00	Jan.16.20	-	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.

URLs in 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](http://www.renesas.com)

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/](http://www.renesas.com/contact/)

Trademarks

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