# [Upgrade to Version] e<sup>2</sup> studio Integrated Development Environment 2022-10

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#### Overview

We have updated the e<sup>2</sup> studio integrated development environment from 2022-07 to 2022-10.

Major functional improvements and changes are as follows.

- Upgrade versions of Eclipse platform and CDT (C/C++ Development Tooling)
- Support of new compiler version C Compiler Package for RH850 Family (CC-RH) v2.04.01
- Added device support in RL78/FGIC group
- ➤ Support of new versions of Smart Configurator for RX (2.15.0) and RL78(1.4.0)
- Improvements of build and debug features for CC-RH projects
- Improvements of Linker Script Editor for GCC/LLVM projects

For an overview of the product, refer to the following URL:

https://www.renesas.com/e2studio

## 1. Version to Be Updated

e² studio versions from 2020-04 to 2022-07

To check the version of e<sup>2</sup> studio, click the [Help] menu of e<sup>2</sup> studio > [About e<sup>2</sup> studio] to open the dialog box.

## 2. Description of Upgrade

The main contents of the upgrade are described below. Refer to the release note below for details. The release note is available in the [Documentation] list on the e² studio product page. It will be available from Oct. 20<sup>th</sup>.

https://www.renesas.com/search?keywords=R20UT5198

#### 2.1 New functions, Improvements to Functionality

We have improved and changed the following.

For details about the improvements, refer to "What is new in 2022-10?" in the release note listed above.

## 2.1.1 New eclipse/CDT platform support

2022-10 includes a new eclipse platform and new version of CDT (C/C++ Development Tooling). Please refer to the following documents from <a href="www.eclipse.org">www.eclipse.org</a> for further information about the eclipse/CDT updates.

| e <sup>2</sup> studio version | 2022-07       | 2022-10       |                                |
|-------------------------------|---------------|---------------|--------------------------------|
| eclipse                       | 4.23(2022-03) | 4.24(2022-06) | Eclipse Project 4.24           |
| CDT                           | 10.6.0        | 10.7.0        | eclipse Wiki – New in CDT 10.7 |

#### 2.1.2 Added compiler support

C Compiler Package for RH850 Family v2.04.01 is supported for single core devices of RH850 Family.

Project generation and project build features with the toolchain is supported for the devices.

#### 2.1.3 New devices support

Added support device in RL78/FGIC group (Battery Fuel Gauge IC).

The following are supported with the features of project generation, project build and debugging.

RAJ240310, RAJ240055 and RAA240123

Note: RAJ240090 and RAJ240100 have been supported in 2022-07 and later.

### 2.1.4 New versions of Smart Configurator support

The following new version is supported. Please refer to each of Smart Configurator Release Note for details.

Smart Configurator for RX 2.15.0

Register value format is selectable either macro definition or hexadecimal number in code generation.

Smart Configurator for RL78 1.4.0

Added device support.

#### 2.1.5 Improvements of builder and debugger features for CC-RH projects

The following features are added or improved in CC-RH projects.

Support of MISRA-C checker for professional version of CC-RH

MISRA-C checker and file logging features are available in CC-RH projects.

Support of Stack Analysis view

The view lists stack size of functions based on linker generated file with -stack option.

Support of External Trace in debugger

#### 2.1.6 Improvements of Linker Script Editor for GCC and LLVM toolchain projects

Linker Script Editor has been replaced to a new improved editor which capable to handle more complexed script than previous editor. This solves issues of false alerts derive from script structure.



# 3. Updating Your Product

Download the installer from the e<sup>2</sup> studio product page (the following URL) and install the program. (2022-10 will be available from Oct. 20<sup>th</sup>.)

https://www.renesas.com/e2studio

The installer is available in the [Downloads] section in the [Documentation & Downloads] list.

Note 1: Do not overwrite-install the installed e² studio.

Make sure that the folder path of the install destination does not include any multi-byte characters, extended ASCII (half byte character greater than 0x7f) characters or symbol characters other than " "(underscore).

Note 2: Windows version of this product supports 64-bit Windows.

This product does not work on a 32-bit Windows.

Note 3: For RA family, RZ/A3UL group, RZ/T2M group, RZ/N2L group and Renesas Synergy™, use the following installer that includes the software packages:

RA Family: https://github.com/renesas/fsp/releases

RZ/A3UL group: <a href="https://github.com/renesas/rza-fsp/releases">https://github.com/renesas/rza-fsp/releases</a>
RZ/T2M group: <a href="https://github.com/renesas/rzt-fsp/releases">https://github.com/renesas/rzt-fsp/releases</a>
RZ/N2L group: <a href="https://github.com/renesas/rzn-fsp/releases">https://github.com/renesas/rzn-fsp/releases</a>

Renesas Synergy™: https://www.renesas.com/software-tool/e-studio-renesas-synergy

# **Revision History**

|      |            | Description |                                       |  |
|------|------------|-------------|---------------------------------------|--|
| Rev. | Date       | Page        | Summary                               |  |
| 1.00 | Oct. 16.22 | -           | First edition issued                  |  |
| 1.01 | Oct. 16.22 | 1           | Updated the hyperlink to Release Note |  |

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