

## Outline

We have updated the e<sup>2</sup> studio integrated development environment from 2024-01.1 to 2024-04.

Major functional improvements and changes are as follows.

- Upgraded eclipse/CDT versions
- New device support : DA14706
- Device file update: RL78 Family and RH850 Family
- Improvements of Smart Configurator
- Improvements of Builder and Debugger features
- Improvements in macOS version

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

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

## 1. Products to Be Updated

- e<sup>2</sup> studio versions from 2020-04 to 2024-01.1

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

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 e<sup>2</sup> studio product page. It will be available from April 22<sup>nd</sup>.

<https://www.renesas.com/search?keywords=R20UT5467>

### 2.1 New Features, Improved Functionality

We have improved and changed the following.

For details about the improvements, refer to “What is new in 2024-04?” in the release note listed above.

#### 2.1.1 New eclipse platform support

Updated eclipse platform and the version of CDT (C/C++ Development Tooling).

Please refer to the following documents for details.

e <sup>2</sup> studio version	2024-01.1	2024-04	
eclipse	4.29(2023-09)	4.30(2023-12)	<a href="#">Eclipse Project 4.30</a>
JRE(JustJ)	17.0.8	17.0.10	<a href="#">JustJ JREs</a>
OpenJFX	17.0.6	21.0.2	<a href="#">OpenJFX</a>
CDT	11.3.1	11.4.0	<a href="#">CDT New &amp; Noteworthy</a>

## 2.1.2 Updates of Device Support

- Added support of DA14706 in e<sup>2</sup> studio 2024-04 as a part of DA1470x SDK project import and debug feature. Please refer to [DA1470x SDK10.2.4.44 Release Note](#) for details.
- Updated device files of RL78 Family: RL78/G15, RL78/G16, RL78/G23 and FGIC device groups.
- Updated device files of RH850 Family: RH850/U2A and RH850/U2B device groups.
- Updated register definitions in SVD and iodefines header files for RISC-V MCU devices.

## 2.1.3 Improvements of Smart Configurator

The following new versions of Smart Configurator are supported.

- ✧ Smart Configurator for RX V2.21.0
- ✧ Smart Configurator for RL78 V1.10.0
- ✧ Smart Configurator for RH850 V1.11.0
- ✧ Smart Configurator for RISC-V MCU V1.1.0

Please refer to each of Smart Configurator Release Note for details.

## 2.1.4 Improvements of Builder

The following improvements are implemented in e<sup>2</sup> studio 2024-04.

- Supported the following Renesas compilers and License Manager in Linux environment. Refer to attached document (Readme) in each product for installation. Stack Analysis view is available with the toolchains.
  - ✧ CC-RX V3.06.01
  - ✧ CC-RL V1.13.01
  - ✧ CC-RH V2.06.01
  - ✧ License Manager V2.07.00
- Added LLVM for Arm toolchain support for DA1453x SDK projects.
- Added -Ofast option support in the build configuration dialog for LLVM for Arm projects.

## 2.1.5 Improvements of Debugger

The following improvements are implemented in e<sup>2</sup> studio 2024-04.

- Upgraded GDB version to GDB 12.1 in debugger for RX and RL78 Family. As a result, Python version used by GDB is upgraded from 2.7 to 3.10.
- Added option in Debugger Configuration for RISC-V MCU to allow or disable memory read with temporary halt. This option is available for E2/E2 Lite and J-Link emulators.

## 2.1.6 Improvements in macOS version

The following improvements are implemented in macOS version of e<sup>2</sup> studio 2024-04.

- Supported macOS 14 (Sonoma).
- Added build and debug support for GCC for RX and LLVM for RL78 projects.

### 3. Updating Your Product

Download the installer from the e<sup>2</sup> studio product page (the following URL) and install the program. (2024-04 will be available from April 22<sup>nd</sup>.)

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

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

Note 1: When you have e<sup>2</sup> studio 2022-10 and older (older than Java 11) versions, newer e<sup>2</sup> studio versions should be installed to new location instead of using "Upgrade" installation.

The destination folder path should 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 32-bit Windows.

Note 3: For FSP/SSP supported device families and groups (RA, RZ/T2x, RZ/N2x, RZ/A2x, RZ/A3x, RZ/G2x, RZ/V2x and Renesas Synergy™), use the installer that includes the software packages.

Please refer to the following page for software packages and the installers :

Software - Middleware, Drivers, OS:

<https://www.renesas.com/design-support/software>

**Revision History**

Rev.	Date	Description	
		Page	Summary
1.00	Apr. 16.24	-	First edition issued

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