Overview

We have updated the e² studio integrated development environment from 2021-10 to 2022-01. Major functional improvements and changes are as follows.

- Upgrade versions of Eclipse platform and CDT (C/C++ Development Tooling)
- Support of new Renesas compiler products CC-RX V3.04.00 and CC-RL V1.11.00
- Support of RL78/F24 group
- Support of Smart Configurator for RX version 2.12.0

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 2021-10

To check the version of e² studio, click the [Help] menu of e² studio > [About e² 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 [Other] section in the [Documentation & Downloads] list on the e² studio product page. It will be available from Jan. 20th.

https://www.renesas.com/search/keyword-search.html#q=R20UT5076&genre=document

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 2022-01?” in the release note listed above.

2.1.1 New eclipse/CDT platform support

2022-01 includes a new eclipse platform and new version of CDT (C/C++ Development Tooling). Please refer to the following documents from www.eclipse.org for further information about the eclipse/CDT updates.

<table>
<thead>
<tr>
<th>e² studio version</th>
<th>2021-10</th>
<th>2022-01</th>
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<tbody>
<tr>
<td>eclipse</td>
<td>4.20(2021-06)</td>
<td>4.21(2021-09)</td>
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<tr>
<td>CDT</td>
<td>10.3.1</td>
<td>10.4.1</td>
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2.1.2 New Renesas compilers support

The following new compiler versions are released and supported in e² studio 2022-01.

- C/C++ Compiler Package for RX Family V3.04.00
- C Compiler Package for RL78 Family V1.11.00

Please refer to Release Note and Tool News of each product for further information.
2.1.3 New device group support
Added support of RL78/F24 group. Project generation, build and debug features are available for the device group.

Note: RL78/G24 group has been supported since e² studio 2021-10.

2.1.4 Improvements of Smart Configurator for RX Family
Added support of Smart Configurator for RX version 2.12.0.

2.1.5 Improvements of builder
- Added collaborative operation between linker and compiler option configuration for CC-RX and CC-RL projects.
  When linker optimization was enabled, builder automatically sets -goptimize compiler option which is required to enable linker optimization.
- Stack Analysis view added support for LLVM for RL78 projects.
  Stack Analysis view shows call tree with stack size of functions in the projects built with LLVM for RL78 toolchain.

2.1.6 Improvements of debugger
- Added support of synchronized debug for RH850 multi-core devices
  This feature enables trigger break and run for multiple cores simultaneously.
- Improved user interface peripheral simulator for RL78 Family. The following windows are restored at the next time of launching simulator.
  - Signal Data Editor
  - Timing Chart
  - I/O Panel
  - Serial
- Added support devices of RL78/G23 up to 128pin products in current consumption feature of peripheral simulator for RL78 Family. The devices are also supported by “QE for current consumption”.
- Added support of Simplified I2C in SAU in peripheral simulator for RL78 Family
3. Updating Your Product

Download the installer from the e² studio product page (the following URL) and install the program.
(2022-01 will be available from Jan. 20th.)

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: Use this product on a 64-bit Windows OS.
This product does not work on a 32-bit Windows OS.

Note 3: For RA family and Renesas Synergy™, use the following installer that includes the software packages:

RA Family https://github.com/renesas/fsp/releases
Renesas Synergy™: https://www.renesas.com/software-tool/e-studio-renesas-synergy
## Revision History

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<th>Date</th>
<th>Page</th>
<th>Description</th>
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<td>1.00</td>
<td>Jan. 16.22</td>
<td>-</td>
<td>First edition issued</td>
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The URL in the Tool News also may be subject to change or become invalid without prior notice.

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

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