Overview

We have updated the e² studio integrated development environment from 2022-10 to 2023-01. Major functional improvements and changes are as follows.

- Upgrade version of Eclipse platform
- Support of new compiler version CC-RX V3.05.00, CC-RL V1.12.0 and CC-RH V2.05.00
- Support of RL78/F23 group
- Support of new versions of Smart Configurator for RX (2.16.0) and RL78(1.5.0)
- Improvements of build features for CC-RH projects
- Improvements of debug features for RA Family
- Update device files in RH850/U2A group

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 2022-10

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 [Documentation] list on the e² studio product page. It will be available from Jan. 20th.

https://www.renesas.com/search?keywords=R20UT5248

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 2023-01?” in the release note listed above.

2.1.1 New eclipse platform support

2023-01 includes a new eclipse platform version. Please refer to the following documents from www.eclipse.org for further information about the eclipse/CDT (C/C++ Development Tooling) updates.

<table>
<thead>
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<th>e² studio version</th>
<th>2022-10</th>
<th>2023-01</th>
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<tr>
<td>eclipse</td>
<td>4.24(2022-06)</td>
<td>4.25(2022-09)</td>
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<td>CDT</td>
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- Eclipse Project 4.25
- eclipse Wiki – New in CDT 10.7
2.1.2 New compiler versions support

The following new compiler versions are supported in e² studio 2023-01.

- C/C++ Compiler Package for RX Family (CC-RX) V3.05.00
- C Compiler Package for RL78 Family (CC-RL) V1.12.00
- C Compiler Package for RH850 Family (CC-RH) V2.05.00

Project generation, project build and debugging features are supported for the projects with these toolchains.

2.1.3 New devices support

Added support device in RL78/F23 group.

Features of project generation, project build and debugging are supported for the device groups.

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 2.16.0
  User codes can be added in FIT modules by closing in /* Start user codes */ and /* End user codes */. This feature will be supported for other device families in future versions.
- Smart Configurator for RL78 1.5.0
  Added device support. Smart Configurator features are available with RL/F23 group.

2.1.5 Improvements of builder features for CC-RH projects

Project generation added support for multi core devices, generated as a project with vector tables for each core. Multiple project generation for each core is planned to be supported in future versions.

2.1.6 Improvements of debug features for RA Family

Supported Vector Catch feature.

With enabled exceptions of Vector Catch in Event Point view, exceptions captured and break at the top of exception handler (i.e., before executing codes in the handler). This feature is useful to analyze reasons of exception with using Fault Status view.
3. Updating Your Product

Download the installer from the e² studio product page (the following URL) and install the program. (2023-01 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: When you have e² studio 2022-10 and older versions, please install e² studio 2023-01 to a new location instead of using "Upgrade" installation.
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: https://github.com/renesas/rza-fsp/releases
RZ/T2M group: https://github.com/renesas/rzt-fsp/releases
RZ/N2L group: https://github.com/renesas/rzn-fsp/releases
Renesas Synergy™: https://www.renesas.com/software-tool/e-studio-renesas-synergy
Revision History

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<tr>
<td>1.00</td>
<td>Jan. 16.23</td>
<td>-</td>
<td>First edition issued</td>
</tr>
<tr>
<td>1.01</td>
<td>Jan. 16.23</td>
<td>3</td>
<td>Added notification of upgrade installation</td>
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