[Upgraded to revision] e² studio Integrated Development Environment V7.8.0

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Outline

We have updated the e^2 studio integrated development environment from V7.7.0 to V7.8.0.

The update includes improved functionalities such as partner OS (including FreeRTOS) debugging feature. For an overview of the product, refer to the URL below.

https://www.renesas.com/e2studio

1. Products and Versions to Be Upgraded

➢ e² studio V7.0.0 through V7.7.0

To see the version of e^2 studio, select [About e2 studio] in the [Help] menu of e^2 studio and open the dialog box.

2. Descriptions of the Upgrade

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

https://www.renesas.com/search/keyword-search.html#genre=document&q=r20ut4786

2.1 Improved Functionality

We have improved the following functionalities.

For details about the improvements, please refer to "What is new in 7.8.0?" in the release note listed above.

2.1.1 Improved partner OS debugging features

The following features are added to task status views which shown in debugging Partner OS (including FreeRTOS) projects.

✓ Stack Usage (load) status view

During debugging RTOS projects, "Stack" tab in "RTOS resource" view (see below) shows the number and bar chart with color-coding which represents how much stack space is used in each task.

🖓 RTOS Resources 🕱 👘 👘 🔛 🖓 🖓 🖓 🗖								
Stack Ta	ask Queue Time	r						
No.	TaskName	StartOfStack	EndOfStack	TopOfStack	StackSize	StackUsageSize	StackUsageRatio	
1	IDLE	0x23a0	0x25c8	0x2568	552	96	17.39%	
2	Tmr Svc	0x2650	0x2878	0x2800	552	156	28.26%	
3	task1	0x1538	0x1930	0x18d0	1016	96	9.44%	
4	task2	0x19b8	0x1db0	0x1d44	1016	144	14.17%	
5	task3	0x1e38	0x2230	0x21c4	1016	144	14.17%	
6							Stack Threshold War	ning ×
7							Tmr Svc (No.2)	
8								
9								
10							Click here to view	/ Stack tab
Run : task3 (NO.:5) OS : FreeRTOS								



✓ Configuration guide messages appear over RTOS resource columns

When moved over mouse cursor on the column of RTOS resource view, tooltip message pops up to inform instruction to enable display value in the column. It makes easy to find solutions to browse resource status.

✓ Display of blocking cues

In the task list of RTOS resource view, que name appears if it is blocking a task.

2.1.2 Other improvements

✓ Tag jump to function in Stack Analysis view

Added tag-jump feature to the line of function declaration by double clicking on function name in the Stack Analysis view.

📱 Stack Analysis 🕴 📮 Console 🧊 🗊 🗁 🖉 🕀 👔 📅 🌣 🖻							
Tree Table							
RE.cal (Max)	Stack information Search result						
 ☑ _Default_Handler ✓ ☑ _Reset_Handler 	Function name	Attributes	Address 0x541	Size	Stack si 0	. Source startup_RE01_1500KB.c	
C _SystemInit	C _Reset_Handler		0x545	108	8	startup_RE01_1500KB.c	
SystemCoreClockUpdate	SystemCoreClockUpdate		0x0	0	0	system_RE01_1500KB.c	

✓ QE plugin installation is added in e² studio Installer as Additional Software

QE plugins can be installed by checking them as Additional Software in e^2 studio installation, no longer need to search around the plugins.

For the details about QE, visit the product page : <u>https://www.renesas.com/qe</u>

2.2 Addition of Supported Devices

> Added RZ/T1-M group support

Project generation, build and debug features are now supported for the above device group.

3. Updating Your Product

Download the e^2 studio installer from the URL below for an installation.

(V7.8.0 is scheduled to be released on April 20th.)

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 e² studio, specify a newly created folder as a workspace. If you need to use an existing project, please import it into the new workspace.

4. e² studio migration from 32bit versions to 64bit versions

Java environment of eclipse/CDT (basis of e^2 studio) has been migrated to 64bit (Java 11) and e^2 studio is planned to be migrated to 64bit environment by second half of 2020. The 32bit versions of e^2 studio (V7.x) will shift to maintenance phase providing limited services to add new device support and significant bug fixes.



Revision History

		Description				
Rev.	Date	Page	Summary			
1.00	Apr.16.20	-	First edition issued			

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