[Upgrade to Revision] RH850 Model-Based Development Environment, Embedded Target for RH850 Multicore + Multirate V5.02.00, Embedded Target for RH850 Multicore V5.02.00, Embedded Target for RH850 V5.02.00

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Rev.1.00
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Outline

The products in the title have been updated as follows.

(1) Embedded Target for RH850 Multicore + Multirate V5.01.00 to V5.02.00

(2) Embedded Target for RH850 Multicore V5.01.00 to V5.02.00

(3) Embedded Target for RH850 V5.01.00 to V5.02.00

Refer to our website below for the details of the products.

https://www.renesas.com/mbd-rh850-multicore

1. Products to Be Updated

- Embedded Target for RH850 Multicore + Multirate V5.01.00
- Embedded Target for RH850 Multicore V5.01.00
- Embedded Target for RH850 V5.01.00

2. Description

The main changes are as follows.

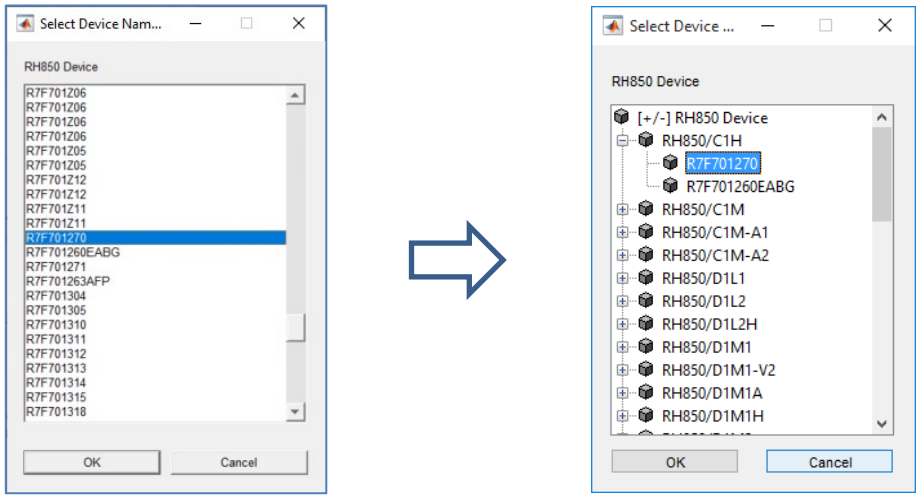
2.1 Improved Functionality

(1) Changes in the operating environment

	V5.01.00	V5.02.00
MATLAB® (MathWorks)	R2016a to R2018b	R2016a to R2019b
MEX-file compiler	Refer to the web page below for supported versions. Support - System Requirements and Supported Compilers Previous Releases - MATLAB & Simulink (mathworks.com)	
CS+	V7.00.00, V8.01.00	V8.05.00, V8.06.00
CC-RH compiler	The compliers included in above	The compliers included in above
CCRH850 compiler (Green Hills Software)	Version 2015.1.7 or 2018.1.5	No change
Cycle-accurate simulator	RH850/C1x and other simulators	Added RH850/C1M-A1 and RH850/F1KH
eMBP (eSOL)	Ver.2.0.0	Ver.2.2.2
RH850 processor element communication and exclusive control library	Download from the web page	Included in the product package

(2) Change in the microcontroller “Select Device Name” dialog

Microcontrollers are sorted by series.



(3) The nested reference models, Stateflow blocks, Function-Call Subsystem block and S-function block can be used in code generation target blocks.

(4) Silent mode

The new command has been added that does not display the measurement target specification form and confirmation dialogs during model conversion. It enables continuous evaluation by a script file without manual operation.

- ecpils_silent_mode_execution

(5) The following commands for the block performance analysis, mentioned in [4.2.2 Procedure for Manually Specifying Measurement Targets (Single Core MCU)], do not need to be executed.

- ecpils_get_rate_information
- ecpils_convert_core_csv

(6) Re-execution of a reference model

In order to repeat the PIL simulation in the previous revisions, the user needs to close the model and CS+, reopen the model, and execute the simulation.

In the new revisions, the following commands enable to repeat the simulation without closing the model and CS+. When repeating a regression test, the commands eliminate the time for restarting the model and CS+, reducing the development time.

- ecpils_enable_rerun
- ecpils_disable_rerun

(7) Devices with the single-precision FPU: Changes in the CS+ option settings

Regarding the CS+ options mentioned in [6.1.3 Models Handling double-Type Data]:

- [Floating-point calculating type] for [Output Code] needs to be changed to [Software Calculating(-Xfloat=soft)].
- In CS+ V8.06.00, [Precision of double type / long double type] for [Output Code] is automatically set to [8 bytes(No option specified)]. In CS+ V8.05.00 the setting needs to be done manually.

(8) The restriction mentioned in [6.2.5 Notes on the Trace Memory] (the size of the trace memory cannot be set to 3M) is solved.

2.2 Addition of Supported Devices

The following devices are supported.

Series	MCU	Version
RH850/C1x	RH850/C1H	Supported
	RH850/C1M-A1, RH850/C1M-A2	Supported from V5.02.00
RH850/E1x	RH850/E1M-S2*	Supported
RH850/F1x	RH850/F1L	Supported
	RH850/F1K, RH850/F1KM	Supported
	RH850/F1H	Supported
	RH850/F1KH	Supported from V5.02.00
RH850/P1x	RH850/P1M-C*, RH850/P1H-C*	Supported
	RH850/P1M-E	Supported
	RH850/P1M	Supported from V5.02.00
RH850/E2x	RH850/E2M*	Supported
	RH850/E2x-FCC2, RH850/E2H*, RH850/E2UH*	Supported from V5.02.00

In order to execute the performance analysis in blocks using the software trace, a device with the trace RAM is required.

*Only the time measurement using the performance measurement function is available. In order to execute the performance analysis in blocks using the software trace, the cycle-accurate simulator is required. Contact your local Renesas Electronics sales office or distributor for the cycle-accurate simulator.

3. Updating the Products

Contact your local Renesas Electronics sales office or distributor for the updates.

4. Evaluation Editions

Before purchasing the products, you can evaluate their performance and functionality with the evaluation editions. Contact your local Renesas Electronics sales office or distributor for the evaluation editions.

5. Purchasing the Products

The products are provided under annual (one-year) software license agreements.

Contact your local Renesas Electronics sales office or distributor and inform them of the following product information.

Regarding the prices of the products, contact the sales office or distributor.

Product name	Orderable part number
Embedded Target for RH850 Multicore + Multirate	RTC00CST000000007J
Embedded Target for RH850 Multicore	RTC00CST000000002J
Embedded Target for RH850	RTC00CST000000003J

Revision History

Rev.	Date	Description	
		Page	Summary
1.00	Dec.16.21	-	First edition issued

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