
[Notification]
Embedded Target for RH850 Multicore

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Outline

Renesas Electronics has developed a new model-based multicore development tool for RH850 microcontrollers for automotive control, the Embedded Target for RH850 Multicore RH850 (provisionally referred to as RH850 MBD in this document).

1. Outline of the Product

The RH850 MBD is a tool for interlinked operation with the CS+ integrated development environment. As well as the multicore support of the Embedded Target for Renesas CS+ processor-in-the-loop simulation (hereinafter PILS) tool for automatic environment configuration, it also includes a tool to support cooperative operation with the model-based parallelization tool from eSOL Co., Ltd. (URL: <http://www.esol.com/>).

The RH850 MBD generates parallel code for multicore RH850 devices through the implementation phase of a Simulink model from The MathWorks, Inc. (URL: <http://www.mathworks.com/>). It contributes to innovative automotive control systems for “eco-cars” (fuel economy and CO2 regulation) and to enhanced safety through the evaluation of functionality and performance in the flow of development.

Refer to the URL below for an overview of the RH850 MBD.

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

2. Features

The following are the main features.

- Acquiring execution times in units of subsystems through the debugging function of CS+, and displaying the states of execution during the worst timespans in simulations
- Interlinked operation with the optional eSOL MBP Renesas RH850 PILS Package (provisional name) of the Model Based Parallelizer (provisionally referred to as the eSOL MBP) from eSOL, and automatic searching for the optimal allocations of cores based on execution times which are acquired by the PILS of single core
- Automatically allocating synchronous processing between cores and using Embedded Coder from The MathWorks, Inc. to generate parallel source code for the RH850 based on core allocation plans from the model-based parallelization tool, or on allocation plans specified by the user

3. Operating Environment (Schedule)

- Windows 7 (32- and 64-bit)
- MATLAB R2011b to R2016a from The MathWorks, Inc.
- Renesas Integrated Development Environment CS+ V4.01.00 and later versions

4. Release Schedule

RH850 MBD will be released in fall, 2016. Contact your local Renesas Electronics marketing office or distributor for the details.

Revision History

Rev.	Date	Description	
		Page	Summary
1.00	Jun. 24, 2016	-	First edition issued

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■Inquiry

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