[New Release]

RH850, R-Car Model-Based Environment Embedded Target for Virtual Platform

Outline

RH850, R-Car Model-Based Environment has been released.

The free evaluation edition of this product has also been published.

Embedded Target for RH850/U2B Virtual Platform V1.00.00

Embedded Target for R-Car S4 Virtual Platform V1.00.00

Embedded Target for R-Car V4H Virtual Platform V1.00.00

Product web page: https://www.renesas.com/mbd-rh850-rcar-vpf

1. Product Overview

Embedded Target for Virtual Platform (ET-VPF) is a development environment that generates peripheral code for target devices from Simulink® models and enables cooperative verification as Virtual Hardware In the Loop Simulation (vHILS) in a virtual environment with Simulink.

- Peripheral code is generated from Simulink models, along with the algorithm code, making it easy to check the operation and evaluate the performance of the application including peripheral functions for device selection and prototyping, even if you are not familiar with device specifications.

- The use of a virtual environment enables early verification, even before the WS of the device is completed, and verification can be performed without the need for actual devices.

2. Product Features

- Peripheral code is generated by adding blocks corresponding to the peripheral functions of the device to the model. The supported peripheral functions are as follows.

Devices	Peripheral functions
RH850/U2B, RH850/F1KM-S1, RH850/F1KM-S4	Port, ADC, CAN, UART, PWD
R-Car S4, R-Car V4H	GPIO, CAN, Ethernet

RH850/F1KM was released in October 2022

- It automatically builds a vHILS verification environment using a virtual environment and enables verification of the cooperation between Simulink and the virtual environment.

- A comparison of vHILS and the Model In the Loop Simulation (MILS) execution results enables back-to-back testing as recommended by ISO 26262.
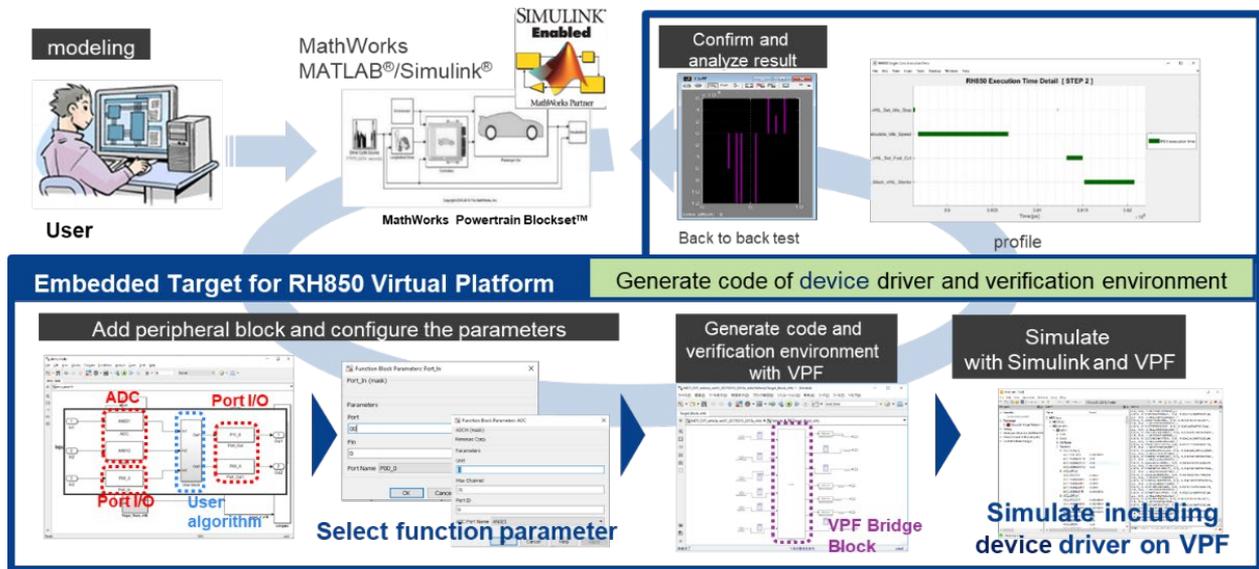
Figure 1: Product overview for RH850

3. Target Devices

RH850/U2B, R-Car S4, R-Car V4H

4. Operating Environment

• Windows® 10 (64-bit version)	Microsoft Corporation
• MATLAB® R2020a	The MathWorks Inc.

• RH850/U2B
  • VLAB V2.8.3   Australian Semiconductor Technology Company
  • Cygwin V2.11.2   www.cygwin.com
  • Smart Configurator for RH850 V1.8.0   Renesas Electronics Corporation
  • CC-RH V2.05.00 (Included in CS+ V8.09.00)   Renesas Electronics Corporation
• R-Car
  • Virtualizer Development Kit   Synopsys Inc.
      T-2022.06-3 (R-Car S4)
      Q-2020.06   (R-Car V4H)
  • MCAL   Renesas Electronics Corporation
      Ver19.1.0   (R-Car S4)
      Ver19.0.20 (R-Car V4H)

5. Free Evaluation Edition

   Before purchasing the product, you can evaluate its performance and functionality with the evaluation edition.

   After obtaining the evaluation edition from the download list in Product web page, please request the license key from your distributor or our sales representative.

6. Purchasing the Product

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

For the price of the product, contact the sales office or distributor.

Product name	Part No.
Embedded Target for RH850 Virtual Platform	RTC00CST000000011J
Embedded Target for R-Car Virtual Platform	RTC00CST000000013J

Revision History

		Description	
Rev.	**Date**	**Page**	**Summary**
1.00	Jan.16.24	-	First edition issued

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Contact Information

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