

[Notification]

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Rev.1.00

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IE850 Full-spec Emulator System

Capable of Large Trace Capacity

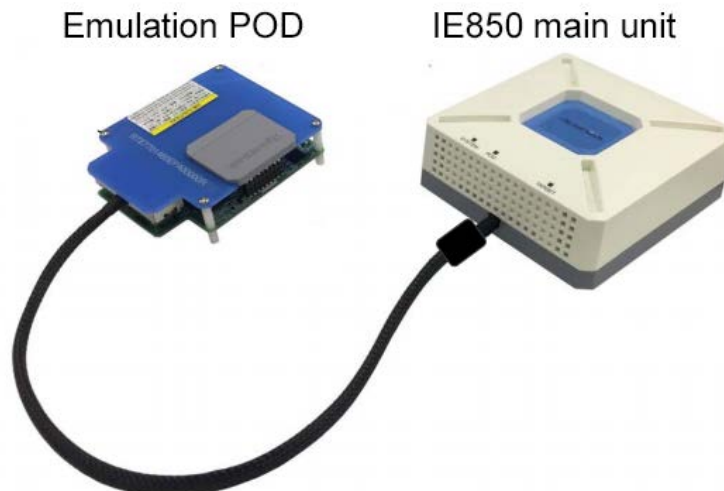
for the RH850/D1x and RH850/E1x Series

Outline

This news is to introduce the IE850 full-spec emulator system (IE850 emulator system), which provides powerful debugging functionality, including large trace capacity of 9 MB (512 K frames) intended for debugging of automotive control applications using MCUs of the RH850/D1x and RH850/E1x series.

1. Overview of IE850 Emulator System

The IE850 emulator system consists of the IE850 emulator main unit and emulation POD for each supported MCU. There are two software tools to control the system: CS+ integrated development environment from Renesas Electronics Corporation, and MULTI integrated development environment from Green Hills Software.



For details, refer to the URL below.

<https://www.renesas.com/IE850>

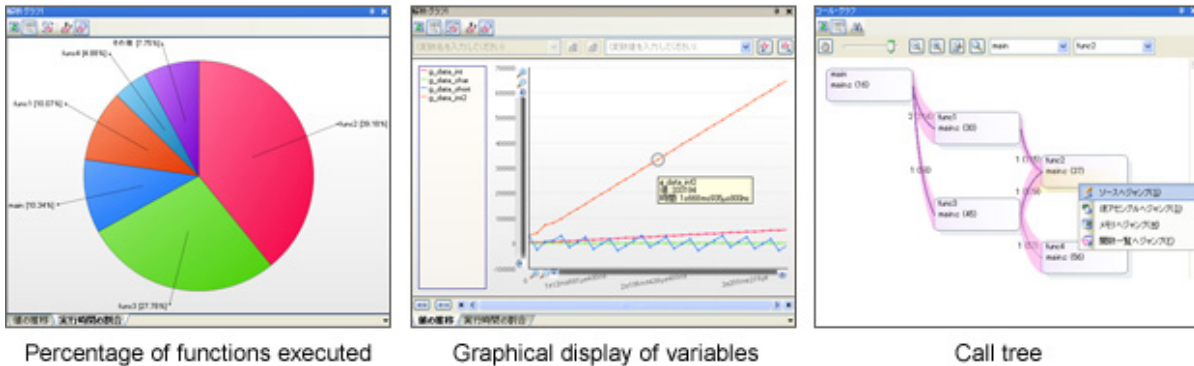
2. Solid Functionality of IE850 Emulator System

2.1 Large Trace Capacity

The trace function can record 9 MB (512 K frames) of trace data. This large trace capacity allows for efficient debugging of enlarging programs in automotive control applications.

Additionally, when used in the CS+ integrated development environment from Renesas Electronics Corporation, this function can be applied to a variety of analysis functions, such as showing percentage of functions executed or graphical display of variables, and visualizing call relationships. You can retrieve trace results at the instruction level and source level, and furthermore, can save them in text or CSV format.

Renesas IDE CS+ user interface



When using the MULTI integrated development environment from Green Hills Software, you can extend the trace capacity to 2.25 GB (128 M frames) by using the option product QB-V850E2-SP. When using this system on the MULTI integrated development environment, you need to check the supported versions of MULTI in advance.



2.2 Available for Target-less Debugging

The IE850 emulator system is normally used by in-circuit connection with the MCU foot pattern on the user system (through the IC socket). However, even if the user system is not yet prepared, debugging can be performed with only the IE850 emulator main unit and emulation POD. Therefore, you can debug the software alone to check the logic before completing construction of the user system. Then, after completion, the entire system (including hardware) can be debugged. The following image shows an example of when the IE850 emulator main unit, emulation POD, and option product are connected. The software can be debugged alone in the following state.

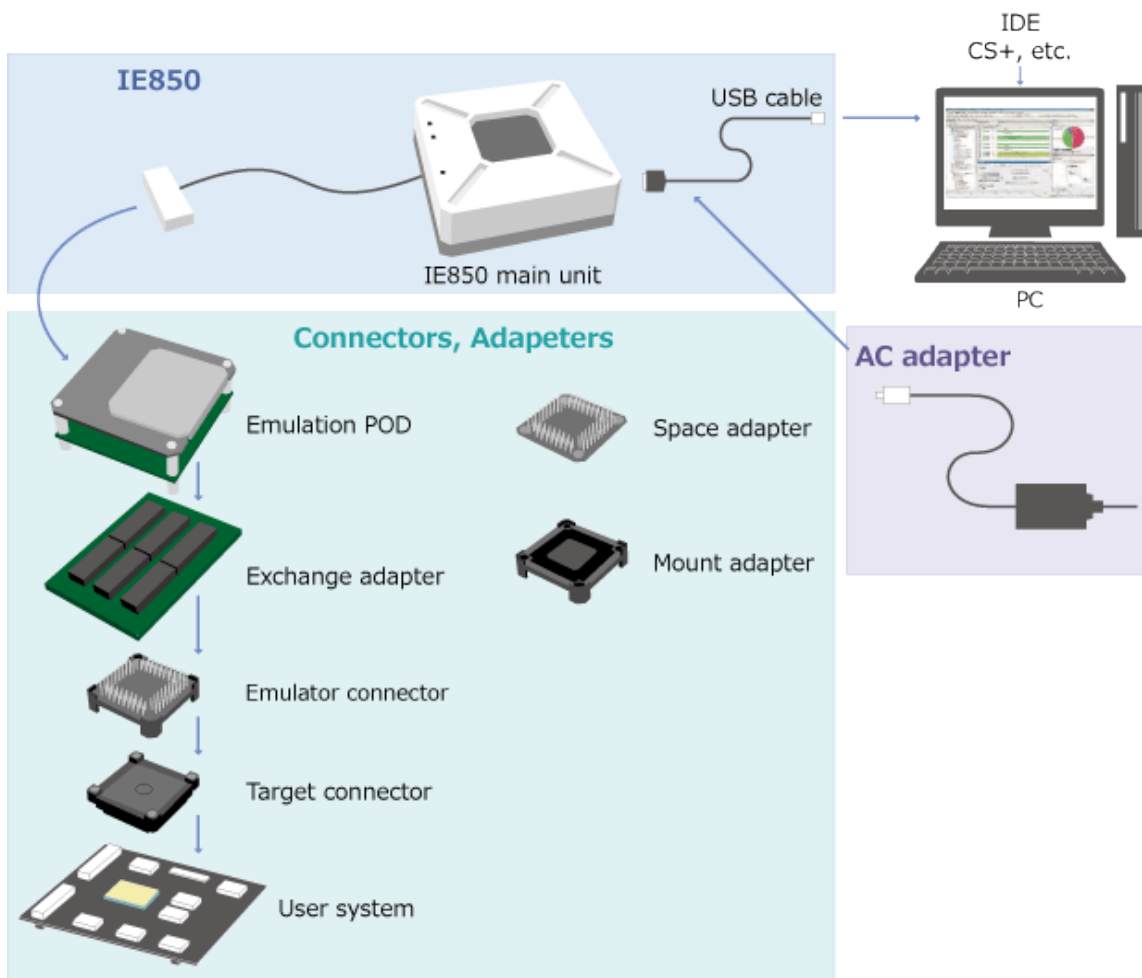


2.3 Various Accessories Prepared for Connecting User Systems

This system provides a variety of accessories, such as an IC socket suited for each MCU package, space adapter which is useful for height adjustment, and mount adapter for mounting an MCU. For details, refer to the URL below.

<https://www.renesas.com/search/keyword-search.html#genre=document&q=r20ut3782>

Product Lineup (IE850 for RH850) and Option Products



3. Purchasing the Product

For ordering of IE850 emulator system products, contact your local Renesas Electronics marketing office or distributor with the following information. For product pricing, make inquiries in the same manner.

Product name	Product part number	Order model name
IE850 emulator main unit for the RH850 and V850E2M MCUs	QB-V850E2	As at left
Emulation POD for the RH850/D1x series	RTE7701460EPA00000R	As at left
Emulation POD for the RH850/E1L and RH850/E1M-S groups	RTE7701202EPA00000J	As at left
Emulation POD for the RH850/E1M-S2 group	RTE7701216EPA00000R	As at left
Option product for long term trace for MULTI	QB-V850E2-SP	As at left

Revision History

Rev.	Date	Description	
		Page	Summary
1.00	Mar. 16, 2017	-	First edition issued

TOYOSU FORESIA, 3-2-24 Toyosu, Koto-ku, Tokyo 135-0061 Japan
 Renesas Electronics Corporation

■Inquiry
<https://www.renesas.com/contact/>

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