

[Notification]

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## E2 Emulator, a High-Performance On-Chip Debugging Emulator for R-Car D1 with ARM® Cortex®-A7 and RH850 Family

### Outline

The E2 emulator is an advanced on-chip debugging emulator and flash programmer, released in February 2017, and based on the concept of "improvement of development efficiency".

This product supports R-Car D1, an automotive SoC with ARM®Cortex®-A7, optimized for 3D graphics clusters, and supports RH850/D1M and RH850/D1L, automotive MCUs (with RH850 core) for 2D graphics clusters.

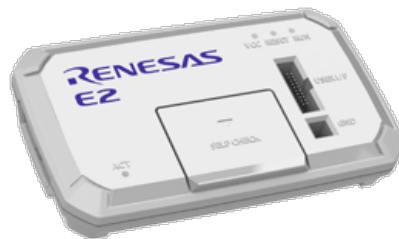
### 1. Efficient Debugging for Systems in which R-Car D1 and MCUs of the RH850 Family Coexist

Recently, among high end class systems which require gage control<sup>(Note 1)</sup>, systems in which R-Car D1 and MCUs of the RH850 family coexist have increased. It is hoped you will use the E2 emulator, which can provide effective debugging of both devices.

Additionally, MULTI<sup>(Note 2)</sup> integrated development environment from Green Hills Software also supports both R-Car D1 and MCUs of the RH850 family<sup>(Note 3)</sup>, allowing for debugging in the same environment by using MULTI and the E2 emulator in combination.

For product details, visit our Web site at:

<https://www.renesas.com/e2>



Note 1: This function controls numeric values (for example, driving speed or engine speed) in an easily readable way, such as in meter form.

Note 2: For details of products from Green Hills Software, refer to the URL below:

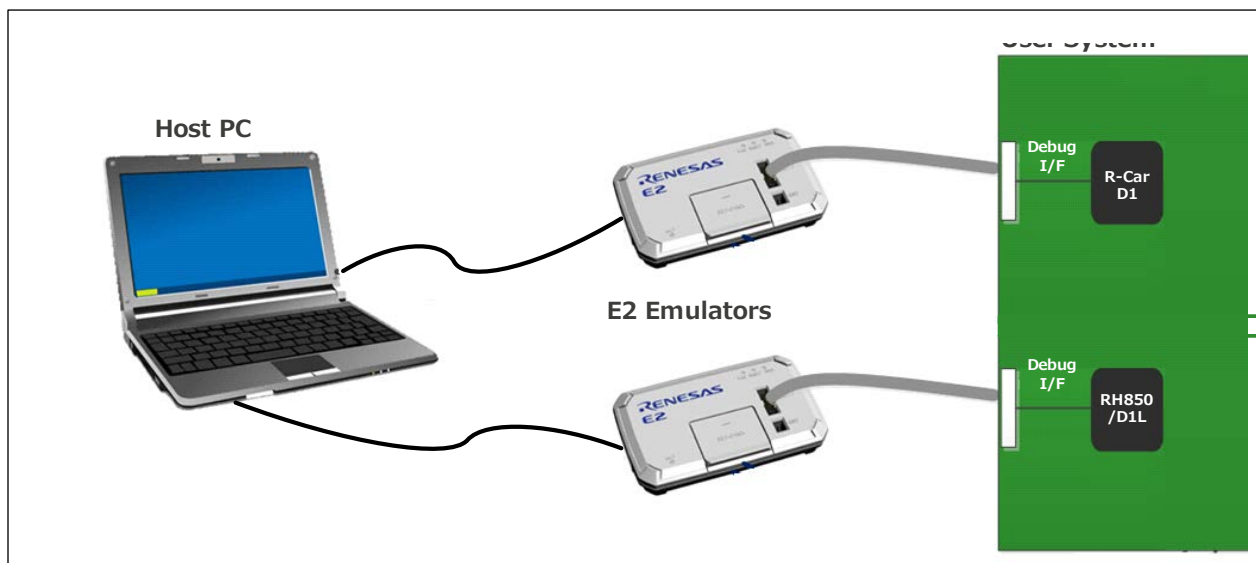
<http://www.ghs.com>

Note 3: The RH850 family also supports the CS+ integrated development environment from Renesas.

### 2. Combined Debugging of R-Car D1 and MCUs of the RH850 Family

#### 2.1 Debugging by Two E2 Emulators

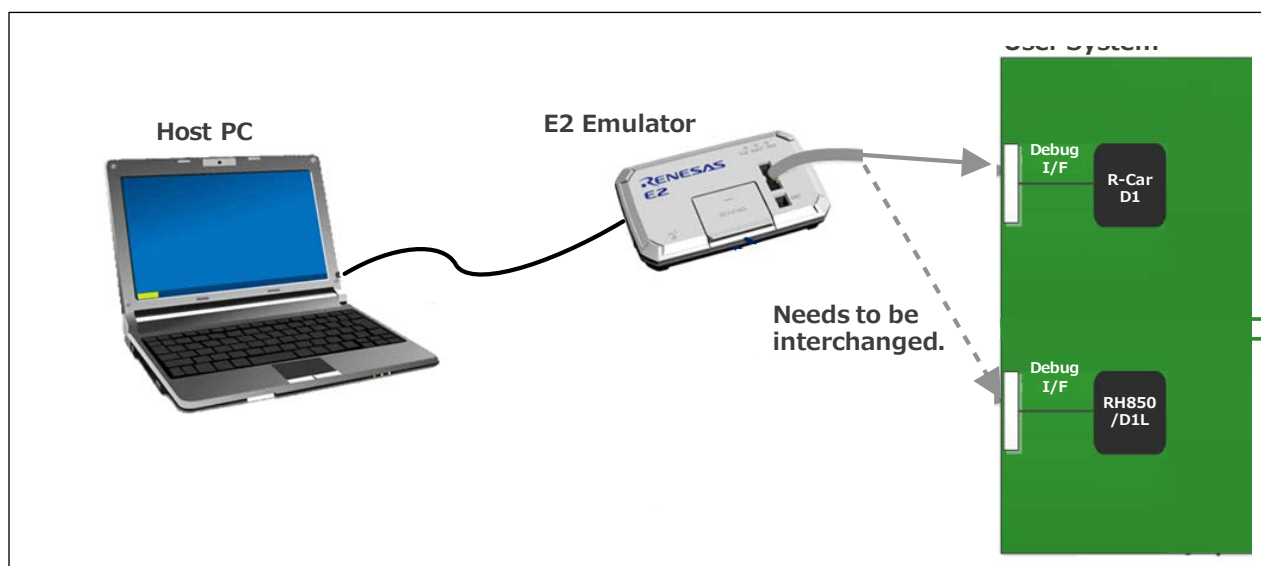
You can debug R-Car D1 and an MCU of the RH850 family in the same development environment (MULTI<sup>®</sup> integrated development environment from Green Hills Software) by using an E2 emulator for R-Car D1 and another E2 emulator for an MCU of the RH850 family on a single host PC.



## 2.2 Individual Debugging by One E2 Emulator

You can use a single E2 emulator to perform debugging for each device<sup>(Note)</sup> according to the debugging phase. Debugging in this way can reduce the cost investment in emulators.

Note: The connector needs to be interchanged.



The debugger for R-Car D1 is MULTI<sup>®</sup> integrated development environment from Green Hills Software. The debugger for MCUs of the RH850 family can also be combined with the CS+ integrated development environment (V5.00 or later) from Renesas.

## 2.3 Purchasing the Product

For product ordering, contact your local Renesas Electronics marketing office or distributor with the following information.

For product pricing, make inquiries in the same manner.

Product part number	Orderable part name
RTE0T00020KCE00000R	As at left

**Revision History**

Rev.	Date	Description	
		Page	Summary
1.00	Apr. 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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