

RENESAS TOOL NEWS on October 16, 2012: 121016/tn5

# RX E1/E20 Emulator Debugger Revised to V.1.03.00

We have revised RX E1/E20 Emulator Debugger (managed by the integrated development environment High-performance Embedded Workshop) from V.1.02.00 to V.1.03.00. This emulator debugger, in combination with the E1 or E20 emulator, is used for debugging systems designed with MCUs of the RX family.

# 1. Descriptions of Revision

# 1.1 Device Support

The following MCUs of the RX family have been added to the support line:

- R5F562G7 (NOTE) and R5F562GA (NOTE) (RX62G group)
- R5F5630A (NOTE) and R5F5630B (NOTE) (RX630 group)
- R5F5631D (NOTE), R5F5631E (NOTE), R5F5631M,
   R5F5631N, and R5F5631P (RX631 group)
- R5F563ND (NOTE) and R5F563NE (NOTE) (RX63N group)
- R5F563T4 (NOTE), R5F563T5 (NOTE), and R5F563T6 (NOTE) (RX63T group)
- R5F52103, R5F52104, R5F5210A, and R5F5210B (RX210 group)
- R5F521A6, R5F521A7, and R5F521A8 (RX21A group)
- R5F52201, R5F52203, R5F52205, and R5F52206 (RX220 group)

NOTE: These MCUs have already been supported by the MCU files released on July 1, 2012. For details, see: https://www.renesas.com/search/keyword-search.html#genre=document&q=120701tn7

### 1.2 Capability Introduced

The value of a register in the on-chip memory-protection unit (MPU) can be set and referenced on the debugger. (See NOTES.)

### NOTES:

- 1. These setting and referencing can be made only when the user program is halted. However, the referencing is allowed on the RAM Monitoring window even if the user program is under execution.
- 2. If either of the following operations has been performed on the RAM Monitoring window, an incorrect value of the register in the

MPU appears on this window:

- The Access Data Clear command has been executed.
- The register area of the MPU has been added to the RAM monitoring area by selecting the RAM Monitor Area Setting menu.

If the program is re-executed and the register of the MPU is once accessed after execution of the above command, the value of the register is updated.

# 1.3 Capability Improved

In the debuggers of the preceding versions, if a USB boot program has been written to the memory of the MCU mounted on the system to be debugged, and the debugger has been started with the user boot mode being selected (see NOTE), the USB boot program is deleted. In the revised debugger, the USB boot program is not deleted; the debugger is exited after dispatching a warning message.

#### NOTE:

To select the user boot mode in the debugger, (1) click the Startup and Communication tab in the Initial Settings dialog box, and (2) then select the user boot mode from the Mode Pin Setting pull-down list.

To use the user boot mode under the above-mentioned condition (that is, the USB boot program has been written), follow these steps to start the emulator:

- (1) Select the Single-Chip mode from the Mode Pin Setting pull-down list.
- (2) Start the emulator.
- (3) Replace the UB codes A and B with their prescribed values for the user boot mode. For these prescribed values, see the hardware manual of the MCU involved.

### 1.4 Problems Fixed

The following problems have been fixed:

- (1) With using MCUs in bi-endian architecture
  For details see RENESAS TOOL NEWS Document No. 110816/tn2 at:
  https://www.renesas.com/search/keyword-search.html#genre=document&q=110816tn2
- (2) With reset circuit in communications using FINE interface and with loading data on external RAM area For details see RENESAS TOOL NEWS Document No. 111116/tn6 at: https://www.renesas.com/search/keyword-search.html#genre=document&q=111116tn6
- (3) With debugging programs for rewriting on-chip ROM areas
  For details see RENESAS TOOL NEWS Document No. 111216/tn3 at:
  https://www.renesas.com/search/keyword-search.html#genre=document&q=111216tn3
- (4) With using the "Writing the on-chip flash memory" mode

For details see RENESAS TOOL NEWS Document No. 120216/tn8 at: https://www.renesas.com/search/keyword-search.html#genre=document&q=120216tn8

- (5) With loading programs and data on external flash memory
  For details see RENESAS TOOL NEWS Document No. 120316/tn5 at:
  https://www.renesas.com/search/keyword-search.html#genre=document&q=120316tn5
- (6) With using the debugger in the "Writing the on-chip flash memory" mode

For details see RENESAS TOOL NEWS Document No. 120416/tn5 at: https://www.renesas.com/search/keyword-search.html#genre=document&q=120416tn5

### 2. Updating Your Product

Online update is available free of charge. To update yours, do either of the following:

- (1) Use AutoUpdate Utility. This service will be available on and after October 22, 2012.
- (2) Download the update program of the product from the Web site at: https://www.renesas.com/e20\_download
  Then execute it. The update program will be published on this site on October 19.

The above URL is one of our global sites.

#### NOTE:

When this update program is executed in a development system where High-performance Embedded Workshop earlier than V.4.09.01 resides, it will be updated to V.4.09.01.

#### [Disclaimer]

The past news contents have been based on information at the time of publication. Now changed or invalid information may be included. The URLs in the Tool News also may be subject to change or become invalid without prior notice.

© 2010-2016 Renesas Electronics Corporation. All rights reserved.