RENESAS Tool News

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E10A-USB Emulator Software Revised to V.3.00 Release 00

We have revised the emulator software for the E10A-USB emulators HS0005KCU01H and HS0005KCU02H from V.2.14 Release 01 to V.3.00 Release 00. The emulator software and the emulators are used for developing systems designed with MCUs of the SuperH RISC engine, H8S, and H8SX families.

1. Product and Versions to Be Updated

The emulator software for the E10A-USB emulators HS0005KCU01H and HS0005KCU02H

V1.0.00 through V.2.14 Release 01

NOTICE:

The following MCUs are not supported by E10A-USB Emulator Software V.3.00 Release 00 and later, so use the V.2.14 Release 01 or earlier for those:

Device group	MCUs
SH-3	All
SH-4	All
SH-Mobile	All
SH-2	SH7615, SH7616, SH7047F, SH7144F, SH7145F, SH7618, SH7619, SH7606, and SH7618A
H8S	MCUs of H8S/2437 group, H8S/2114 group, H8S/2172 group, H8S/2158 group, H8S/2189R group, H8S/2116

	group, and H8S/2125 group

2. Descriptions of Revision

2.1 Supported MCUs Increased

The following MCUs have been added to the support line:

Device group	MCUs
SH-2A	SH72531, SH72531FCC, SH72624, SH72625, SH72626, SH72627, SH72644, SH72645, SH72646, and SH72647
H8S	H8S/24569, H8S/24569R, H8S/24562, H8S/24562R, H8S/24549, H8S/24542, H8S/24269, H8S/24269R, H8S/24262, H8S/24262R, H8S/24249, and H8S/24242

2.2 Windows Vista(R) Supported

You can run the revised product on the 32-bit edition of Windows Vista(R) by using your user rights. However, its 64-bit edition is not supported.

2.3 High-performance Embedded Workshop Updated

The High-performance Embedded Workshop included in the emulator software has been updated from V.4.04.01 to V.4.05.01 in four steps. For details of two steps of revision, see the following RENESAS TOOL NEWS items:

- Document No. 081125/tn1 at:
  http://tool-support.renesas.com/eng/toolnews/081125/tn1.htm
- Document No. 090201/tn3 at:
  http://tool-support.renesas.com/eng/toolnews/090201/tn3.htm

2.4 Real-Time OS Aware Debugging Function Supported

Real-time OS aware debugging function has been supported. This function comes standard with High-performance Embedded Workshop and allow you to

debug applications using the real-time OS in task levels.
For details of those functions, see:
http://www.renesas.com/ecxos

The above URL is one of our global site (in English).

2.5 Improvements in Functions

2.5.1 Performance Measurement Function

The performance measurement function can be used when you emulate systems designed with any of the following MCUs, which belong to the H8SX family. This function counts the number of cycles by using a counter in the MCU.

MCUs involved

H8SX/1653F, H8SX/1654F, H8SX/1663F, H8SX/1664F, H8SX/1638F, H8SX/1632F, H8SX/1634F, H8SX/1638LF, H8SX/1632LF, H8SX/1634LF, H8SX/1648F, H8SX/1642F, H8SX/1644F, H8SX/1648LF, H8SX/1642LF, H8SX/1644LF, H8SX/1648GF, H8SX/1642GF, H8SX/1644GF, H8SX/1648HF, H8SX/1642HF, H8SX/1644HF, H8SX/1622F, H8SX/1658RF, H8SX/1654RF, H8SX/1653RF, H8SX/1658MF, H8SX/1653MF, H8SX/1654MF, H8SX/1668RF, H8SX/1664RF, H8SX/1663RF, H8SX/1668MF, H8SX/1663MF, H8SX/1664MF, H8SX/1725F, H8SX/1635F, H8SX/1631F, H8SX/1633F, H8SX/1645F, H8SX/1641F, H8SX/1643F, H8SX/1655F, H8SX/1652F, H8SX/1665F, and H8SX/1662F

2.5.2 Start/Stop Function

The Start/Stop function can be used when you emulate systems designed with MCUs of the H8S, SH-4A, New_SH-Mobile, and SH-2A device groups. For details of this function, see Section 2.3 in RENESAS TOOL NEWS Document No. 080301/tn3 at:
http://tool-support.renesas.com/eng/toolnews/080301/tn3.htm

2.5.3 On-chip Breaking Functions

The functions for saving On-chip breakpoints already set and loading those already saved can be used when systems designed with MCUs of H8SX, SH-4A, and New_SH-Mobile device groups are debugged. Note that these functions have been available for the H8S device group since V.2.14 Release 01.

2.5.4 Problem Fixed

The following problem has been fixed: If the user program is halted at a break point during the period from the issuance of an instruction causing an FPU exception to the cycle where an FPU exception handling request is generated, the emulator software

provides the incorrect contents for floating-point registers.
This problem arises when you debug systems designed with any of the MCUs of the following groups, SuperH RISC engine family:
All groups in SH7260 series;
SH7201 and SH7203 groups, SH7200 series; and
SH7670 group, SH-Ether series

For details see RENESAS TOOL NEWS Document No. 071001/tn6, published on October 1, 2007, at:
http://tool-support.renesas.com/eng/toolnews/071001/tn6.htm

3. How to Update Your Product

Online update is available free of charge. Update yours in either of the following ways:
(1) Use AutoUpdate Utility (available on and after July 31).
(2) Use the following procedure (available on and after July 23):
(a) Download the update program of the product (a ZIP file) from:
http://www.renesas.com/e10a_usb_download
Two types of update program are available. The one consists of the update programs each of which is downloaded individually for the corresponding device group supported by the E10A-USB emulators. The other, the full-package edition, consists of those that can be downloaded at a time for all the device groups. Use either of them as necessary.
(b) Decompress the downloaded ZIP file to obtain the installer program and then execute it.
If you have downloaded the full-package edition of the update programs, you will obtain the HewInstMan.exe file, and if the other, setup1.exe, after decompression.

The above URL is one of our global site (in English).

4. Notice

(1) When the installer program is executed, be it HewInstMan.exe or setup1.exe, in the development system where High-performance Embedded Workshop V.4.04.01 or earlier resides, it will be updated to V.4.05.01.
(2) The updated emulator software can run with High-performance Embedded Workshop V.4.06.00 or later.

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