

To our customers,

Old Company Name in Catalogs and Other Documents

On April 1st, 2010, NEC Electronics Corporation merged with Renesas Technology Corporation, and Renesas Electronics Corporation took over all the business of both companies. Therefore, although the old company name remains in this document, it is a valid Renesas Electronics document. We appreciate your understanding.

Renesas Electronics website: <http://www.renesas.com>

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RENESAS TECHNICAL UPDATE

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Product Category	MPU&MCU		Document No.	TN-SH7-A594A/E	Rev.	1.00
Title	Note on Using the Debugging Function of SH7261/ SH7201 Group products		Information Category	Technical Notification		
Applicable Product	SH7261 Group SH7201 Group	Lot No.	Reference Document	SH7261 Group Hardware Manual Rev. 1.00 REJ09B0320-0100		
		All lots		SH7201 Group Hardware Manual Rev. 1.00 REJ09B0321-0100 SuperH™ Family E10A-USB Emulator User's Manual Rev. 5.00 REJ10B0052-0500 Additional Document for User's Manual (Supplementary Information on Using the SH72611 and SH72612) Rev. 2.00 REJ10J1274-0200		

Thank you for your consistent patronage of Renesas semiconductor products.

We would like to inform you of some points for caution in usage of the debugging function in products of the SH7261/SH7201 Group. Please note these points before using the products.

Conflicts between the following conditions in a system connected to SDRAM via a 32-bit bus can lead to malfunctions.

- Cache fill (burst) from SDRAM connected via a 32-bit bus
- Access by the CPU
- H-UDI access (H-UDI read/write with the E10A-USB or a JTAG-connection emulator made by a third party) or AUD access (RAM monitoring function of AUD-II)

1. Note When Using the E10A-USB or a JTAG-Connection Emulator Made by a Third Party

In memory access by a H-UDI read/write using the E10A-USB or a JTAG-connection emulator made by a third party, the generation of conflicts between the above conditions may cause malfunctions. Since the following window functions will produce access through the H-UDI during the execution of the user program, do not use them with a system connected to SDRAM via a 32-bit bus.

◆ Windows that automatically generate access via the H-UDI (E10A-USB)

The following windows automatically generate access to memory via the H-UDI. To avoid malfunctions, do not open these windows.

- [Monitor] window
- [Stack Trace] window
- [Watch] window (when automatic updating is enabled)
- [Image] window (when automatic updating is enabled)
- [Waveform] window (when automatic updating is enabled)

◆ Windows that can produce access via the H-UDI in response to user manipulation (E10A-USB)

The following user actions in windows can produce memory access via the H-UDI during execution of the user program. To avoid malfunctions, do not perform the following actions during the execution of the user program.

- Updating of the [Memory] window (by selecting [Refresh])
- Changing the contents of the [Memory] window
- Display of the tool-tip function for the C source code (to look at values of variables)
- Setting on-chip breaks (including those set by double-clicking in a column)
- Updating of the [I/O] window (by selecting [Refresh])
- Changing the contents of a register displayed in the [I/O] window

Note: These actions only cause problems during execution of the user program; i.e. they do not cause problems while the user program is stopped.

2. Note on Usage of the RAM Monitoring Function of AUD-II

In memory access by the RAM monitoring function of AUD-II, occurrence of the conflicting conditions listed above may produce malfunctions. Please take care to ensure that the RAM monitoring function does not attempt access to the SDRAM via a 32-bit bus during execution of the user program.