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

April 1st, 2010
Renesas Electronics Corporation

Issued by: Renesas Electronics Corporation (http://www.renesas.com)

Send any inquiries to http://www.renesas.com/inquiry.

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RENESAS TECHNICAL UPDATE

Nippon Bldg., 2-6-2, Ohte-machi, Chiyoda-ku, Tokyo 100-0004, Japan
Renesas Technology Corp.

Product Category	MPU&MCU		Document No.	TN-H8*-A348A/E	Rev.	1.00
Title	Restrictions on Block Transfer Instructions of the H8SX Family		Information Category	Technical Notification		
Applicable Product	All products of the H8SX/1500 Series	Lot No. All lots	Reference Document	H8SX Family Software Manual (REJ09B0102-0300Z Rev. 3.00)		

The following restrictions apply to the H8SX Family products when using the block transfer instructions stated below.

Please take this information into consideration when using the products.

[Applicable block transfer instructions]

MOVMD.B MOVMD.W MOVMD.L MOVSD

[Restrictions]

When instruction 1 or 2 stated below is used to set ER5 before MOVMD/MOVSD, do not place MOVMD/MOVSD immediately after instruction 1 or 2.

[Setting instruction 1] <instruction> @<source>, ER5/R5/E5/R5H/R5L

<instruction> is one of the following instructions which involve memory access on the source side.

MOV, LDM, MOVFPE, POP

[Setting instruction 2] <instruction> <source>, ER5/R5/E5/R5H/R5L

<instruction> is one of the following 7 types of arithmetic operation instructions.

MULS, MULS/U, MULU, MULU/U, MULXS, MULXU, STMAC

[Example of prohibited usage]

MOV.L @ER1,ER5 ← Load from memory

MOVMD.B

Likewise, when instruction 1 or 2 stated below is used to set ER6 before MOVMD.L, do not place MOVMD.L immediately after instruction 1 or 2.

[Setting instruction 1] <instruction> @<source> ER6/R6/R6L

<instruction> is one of the following instructions which involve memory access on the source side.

MOV, LDM, MOVFPE, POP

[Setting instruction 2] <instruction> <source>, ER6/R6/R6L

<instruction> is one of the following 7 types of arithmetic operation instructions.

MULS, MULS/U, MULU, MULU/U, MULXS, MULXU, STMAC

[Example of prohibited usage]

```
MOV.L   @ER1,ER6  ← Load from memory
MOVMD.L
```

With Renesas H8,H8S, and H8SX C/C++Compiler, using the facilities listed below may lead to generation of code that violates the above restrictions, therefore we advise that you not use them.

If any of the facilities listed below is used, please check the assembly code listing for cases of the prohibited usages and correct any that are found before using the code.

- -eepmov option specification
- Call of built-in functions (movmd, movsd)
- Inline expansion of memcpy or strcpy with -library=i specified
- Assembly language embedding by __asm, #pragma asm ….. #pragma endasm