

To our customers,

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## Old Company Name in Catalogs and Other Documents

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On April 1<sup>st</sup>, 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.

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April 1<sup>st</sup>, 2010  
Renesas Electronics Corporation

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# RENESAS TECHNICAL UPD

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Product Category	User Development Environment		Document No.	TN-CSX-A083A/E	Rev.	1.0
Title	H8S, H8/300 Series Assembler V.6 bug information		Information Category	Technical Notification		
Applicable Product	R0C40008XSW06R R0C40008XSS06R R0C40008XSH06R	Lot No.	Reference Document	H8S, H8/300 Series C/C++ Compiler Assembler Optimizing Linkage Editor User's Manual (REJ10B0058-0100H Rev.1.00)		
		Ver 6.0.01 Ver 6.0.02				

Problems with the H8S, H8/300 series Assembler Ver.6 are listed below.

Please be careful to use this version of the assembler.

This bug is fixed on Ver.6.0.03.

1) When a structured assembly directive without size is in your program, (E)300 ILLEGAL MNEMONIC is occurred.

[Conditions]

This problem occurs if the following condition is satisfied.

(1) A structured assembly directive without size is in your assembler program.

[Solutions]

This problem can be circumvented in either of the following ways:

(1) Describe a branch size of DISPSIZE control instruction instead of a size of structured assembly directive and select neither BR\_RELATIVE nor OPTIMIZE option.

Original:

```
.IF:16 (R0LR1L)      ;(E)300 ILLEGAL MNEMONIC
    add.w #1,r0
.ELSE:8              ;(E)300 ILLEGAL MNEMONIC
    add.w #2,r0
.ENDI                ;(E)631 END DIRECTIVE MISMATCH
```

Modified:

```
.DISPSIZE FBR=16      ;Added
.IF (R0LR1L)          ;Remove the branch size description
    add.w #1,r0
.DISPSIZE FBR=8       ;Added
.ELSE                 ;Remove the branch size description
    add.w #2,r0
.ENDI
```

(2) Describe the size description of structured assembly directive.

Original:

```
.IF:16 (R0LR1L) ;(E)300 ILLEGAL MNEMONIC
    add.w #1,r0
.ENDI
```

Modified:

```
.IF.B:16 (R0LR1L) ; Added size description
    add.w #1,r0
.ENDI
```

Note: .ELSE, .CASE, .BREAK and .CONTINUE structured assembly directives do not have a size and use (1) workaround.

2) A no error of illegal delay slot instruction 1. Description

When delay slot instruction is not 1-word instruction, assemble error (E)150 INVALID DELAY SLOT INSTRUCTION is not shown.

[Conditions]

This problem occurs if the following two conditions are satisfied:

- (1)H8SXN, H8SXM, H8SXA or H8SXX is selected as CPU option.
- (2)Delay instruction is not one-word instruction.

[Examples]

```
.import _a
.import _b
.SECTION P,CODE,ALIGN=2
L1:BRAS L2 ;delay branch instruction MOV.L @_a,@_b ;delay slot instruction ;(8-byte length instruction) L2:
```

[Solution]

Check the delay slot instruction in your assembler program whether one-word instruction or not.