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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 UPD

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Product Category	User Development Environment		Document No.	TN-CSX-064A/EA	Rev.	1.0
Title	Optimizing Linkage Editor Ver.8 bug information		Information Category	Usage Limitation		
Applicable Product	P0700CAS8-MWR P0700CAS8-SLR P0700CAS8-H7R	Lot No.	Reference Document	SuperH RISC engine C/C++ Compiler Assembler Optimizing Linkage Editor User's Manual REJ10B0047-0100H Rev.1.0		
		Ver.8.0.00 Ver.8.0.01				

The following bug information were detected in the Optimizing Linkage Editor included the SuperH RISC engine C/C++ Compiler Packages (Ver.8.0.00, Ver.8.0.01).

The bug will affect these package versions.

Illegal output data for empty area at S-Type/HEX format files

[Description]

When an output file format is S-Type (or HEX), "0" character (ASCII-Code:0x30) might incorrectly be changed to NULL character (ASCII-Code:0x00) at empty area in which neither instructions nor data would exist.

Some ROM writers might be unable to accept NULL character.

[Conditions]

The problem might occur when all of the following conditions were fulfilled.

- (1) The endian=little option was specified to the compiler (or assembler).
- (2) The form=stype(or hexadecimal) option was specified to the linker.
- (3) The code (or data) that are linked to the same section are divided and exist in two or more input object files.
- (4) "0" character is inserted in the section of (3) by the boundary adjustment at the linkage process.

[Solutions]

This problem can be prevented with all of the following methods.

- (1) Rewrite the NULL character (0x00) to "0" character(0x30) by using binary editors
- (2) Recalculate check sum data of affected lines
(The specification of a S-Type/HEX file formats is written to Chapter 18 of the compiler manual.)