# RENESAS TECHNICAL UPDATE

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| Product Category | User Development Environment | | Document No. | TN-CSX-064A/EA | Rev. | 1.0 |
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| 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) Recaluculate check sum data of affected lines
         (The specification of a S-Type/HEX file formats is written to
          Chapter 18 of the compiler manual.)

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