To our customers,

## Old Company Name in Catalogs and Other Documents

On April 1$^{st}$, 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 Electronics Corporation

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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-R8C-A005A/E | Rev. | 1.00 |
|---|---|---|---|---|---|---|
| Title | Notes on Option Function Select Area (OFS and OFS2) | | Information Category | Technical Notification | | |
| Applicable Product | R8C Family | Lot No. | Reference Document | | | |
| | | __ | | | | |

The R8C Family has an option function select area. The option function select area is used to select the MCU state after a reset, the function to prevent rewriting in parallel I/O mode. Set appropriate values to this area by a program.

1. Option function select area

   Option function select register (OFS):           address 0FFFFh

   Option function select register 2 (OFS2):      address 0FFDBh

   \* The R8C/1x Series and R8C/2x Series do not have the OFS2 register.

2. Notes on registers OFS and OFS2

   • These registers are allocated in the flash memory, not in the special function registers (SFRs). Set appropriate values as ROM data by a program.

   • Do not perform additional writes to these registers. If blocks are erased that include these registers, the registers become FFh.

   • When blank products are shipped, these registers are set to FFh. The registers values after programming to the flash memory are the written values.

   • When factory programmed products are shipped, the register's values are the values programmed by a program.

3. Setting examples of registers OFS and OFS2

   Programming formats vary depending on the compiler. Check the compiler manual.

   • To set FFh in the OFS register

       .org 00FFFCH

       .lword reset | (0FF000000h) ; RESET

   • To set FFh in the OFS2 register

       .org 00FFDBH

       .byte 0FFh