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.

RENESAS

RENESAS TECHNICAL UPDATE

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

Product Category	MPU&MCU		Document No.	TN-16C-A138A/E	Rev.	1.0
Title	R8C/14, 15, 16, 17 Groups Precautions on SFR Access Related to Clock Synchronous Serial I/O with Chip Select and I2C bus Interface[(1)]		Information Category	Technical Notification		
Applicable Product	R8C/14, 15, 16, 17 Groups	Lot No.	Reference Document	-		
		All				

1. Precautions

   When writing the values to the registers associated with the clock synchronous serial I/O with chip select (00B8h to 00BFh) or the registers associated with the I2C bus interface (00B8h to 00BFh)" and reading their values in the following instruction, their values may not be reflected. After the conditions of "3 instructions or more after writing or "4 cycles or more after writing to them" are met, read these registers.

2. Applicable SFR

   R8C/14, 15 Groups
   • SS Control Register H (SSCRH)   00B8h
   • SS Control Register L (SSCRL)   00B9h
   • SS Mode Register (SSMR)   00BAh
   • SS Enable Register (SSER)   00BBh
   • SS Status Register (SSSR)   00BCh
   • SS Mode Register 2 (SSMR2)   00BDh
   • SS Transmit Data Register (SSTDR)   00BEh
   • SS Receive Data Register (SSRDR)   00BFh

   R8C/16, 17 Groups
   • IIC bus Control Register 1 (ICCR1)   00B8h
   • IIC bus Control register 2 (ICCR2)   00B9h
   • IIC bus Mode Register (ICMR)   00BAh
   • IIC bus Interrupt Enable Register (ICIER) 00BBh
   • IIC bus Status Register (ICSR)   00BCh
   • Slave Address Register (SAR)   00BDh
   • IIC bus Transmit Data Register (ICDRT) 00BEh
   • IIC bus Receive Data Register (ICDRR) 00BFh

3. Countermeasures

      Example 1 : An example to wait for 3 instructions or more

```
MOV.B    #00h, 00BBh
NOP
NOP
NOP
MOV.B    00BBh, R0L
```

      Example 2 : An example to wait for 4 cycles or more

```
        BCLR    4,00BBh
        JMP.B   NEXT
NEXT:
        BSET    3,00BBh
```

NOTES:

  1. I^2C bus is a trademark of Koninklijke Philips Electronics N.V.