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)

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GRADE A

MESC TECHNICAL NEWS

No. M380-20-9910

7516 Group, 3850/3851 Group
Usage Notes Concerning CPU Mode Register

1. Related products

One Time PROM version

M37516E6HP, M38504E6SP/FP, M38514E6SP/FP

Mask ROM version

M37516M6-XXXHP, M37516M4-XXXHP, M38504M6-XXXSP/FP, M38514M6-XXXSP/FP, M38503M2H-XXXSP/FP, M38503M4H-XXXSP/FP

2. Usage Note

Fix bit 3 of the CPU mode register to “1”. (Do not write “0” to this bit.)
This bit becomes “1” after reset is released.

3. Reason

Oscillation between X_{CIN} and X_{COUT} will not be performed normally when using ports $P2_0$ and $P2_1$ as X_{CIN}-X_{COUT} oscillation function by setting “0” to bit 3 of the CPU mode register (address $003B_{16}$).

4. Countermeasures

Fix bit 3 of the CPU mode register to “1”.

5. Remarks

M37515M4-XXXHP, M37515E4HP, M38503M2-XXXSP/FP, M38503M4-XXXSP/FP, M38513M4-XXXSP/FP, M38503E4SP/FP, M38513E4SP/FP

For use of above products, oscillation between X_{CIN} and X_{COUT} can be performed by setting “0” to bit 3 of the CPU mode register (address $003B_{16}$). However, we recommend to set the bit to “1”.