

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>

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MAEC TECHNICAL NEWS

No. M16C-75-0110

Corrections and Supplementary Explanation for M16C/20 Series, M16C/60 Series, M16C/80 Series Data Sheet and User's Manual

Classification

✓ Corrections and supplementary explanation of document

Notes

Knowhow

Others

Products Effected

M16C/20 Series (Except for M16C/24 Group)

M16C/60 Series

M16C/80 Series

This is to inform you of the errors that have been found in the data sheets and user's manuals of the M16C/20, M16C/60 and M16C/80 Series. The error statements found in each data sheet and user's manual of the said series may not be exactly the same as the ones shown below. So please rectify the equivalent errors as shown below.

Data Sheet

Location: Timer B, pulse period/pulse width measurement mode

Error: The timer Bi overflow flag changes to "0" when the count start flag is "1" and a value is written to the timer Bi mode register.

Correction: Assume that the count start flag condition is "1" and then the Timer Bi overflow flag becomes "1". If the Timer Bi mode register has a write-access after next count cycle of the timer from the above condition, the Timer Bi overflow flag becomes "0".

Location: Timer X (exist in M30201 Group), pulse period/pulse width measurement mode

Error: The timer Xi overflow flag changes to "0" when the count start flag is "1" and a value is written to the timer Xi mode register.

Correction: Assume that the count start flag condition is "1" and then the Timer Xi overflow flag becomes "1". If the Timer Xi mode register has a write-access after next count cycle of the timer from the above condition, the Timer Xi overflow flag becomes "0".

User's Manual

Location: Hardware, timer B, pulse period/pulse width measurement mode

Error: The timer Bi overflow flag changes to "0" when the count start flag is "1" and a value is written to the timer Bi mode register.

Correction: Assume that the count start flag condition is "1" and then the Timer Bi overflow flag becomes "1". If the Timer Bi mode register has a write-access after next count cycle of the timer from the above condition, the Timer Bi overflow flag becomes "0".

Location: Hardware, timer X (exist in M30201 Group), pulse period/pulse width measurement mode

Error: The timer Xi overflow flag changes to "0" when the count start flag is "1" and a value is written to the timer Xi mode register.

Correction: Assume that the count start flag condition is "1" and then the Timer Xi overflow flag becomes "1". If the Timer Xi mode register has a write-access after next count cycle of the timer from the above condition, the Timer Xi overflow flag becomes "0".

Location: Peripheral functions usage, timer B, pulse period measurement mode

Error: The timer Bi overflow flag goes to "0" if timer Bi mode register is written to when the count start flag is "1".

Correction: Assume that the count start flag condition is "1" and then the Timer Bi overflow flag becomes "1". If the Timer Bi mode register has a write-access after next count cycle of the timer from the above condition, the Timer Bi overflow flag becomes "0".

Location: Peripheral functions usage, timer B, pulse width measurement mode

Error: The timer Bi overflow flag goes to "0" if timer Bi mode register is written to when the count start flag is "1".

Correction: Assume that the count start flag condition is "1" and then the Timer Bi overflow flag becomes "1". If the Timer Bi mode register has a write-access after next count cycle of the timer from the above condition, the Timer Bi overflow flag becomes "0".

Location: Peripheral functions usage, precautions for timer B, pulse period/pulse width measurement mode

Error: When reset, the timer Bi overflow flag goes to "1". This flag can be set to "0" by writing to the timer Bi mode register when the count start flag is "1".

Correction: After reset, the Timer Bi overflow flag is undefined. Under this condition, assume that the count start flag is set to "1" and then the Timer Bi mode register has a write-access after the timer starts counting. Therefore, the Timer Bi overflow flag becomes "0".

Location: Peripheral functions usage, timer X (exist in M30201 Group), pulse period measurement mode

Error: The timer Xi overflow flag goes to "0" if timer Xi mode register is written to when the count start flag is "1".

Correction: Assume that the count start flag condition is "1" and then the Timer Xi overflow flag becomes "1". If the Timer Xi mode register has a write-access after next count cycle of the timer from the above condition, the Timer Xi overflow flag becomes "0".

Location: Peripheral functions usage, timer X (exist in M30201 Group), pulse width measurement mode

Error: The timer Xi overflow flag goes to "0" if timer Xi mode register is written to when the count start flag is "1".

Correction: Assume that the count start flag condition is "1" and then the Timer Xi overflow flag becomes "1". If the Timer Xi mode register has a write-access after next count cycle of the timer from the above condition, the Timer Xi overflow flag becomes "0".

Location: Peripheral functions usage, precautions for timer X (exist in M30201 Group), pulse period/pulse width measurement mode

Error: When reset, the timer Xi overflow flag goes to "1". This flag can be set to "0" by writing to the timer Xi mode register when the count start flag is "1".

Correction: After reset, the Timer Xi overflow flag is undefined. Under this condition, assume that the count start flag is set to "1" and then the Timer Xi mode register has a write-access after the timer starts counting. Therefore, the Timer Xi overflow flag becomes "0".