

To our customers,

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## Old Company Name in Catalogs and Other Documents

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On April 1<sup>st</sup>, 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 1<sup>st</sup>, 2010  
Renesas Electronics Corporation

Issued by: Renesas Electronics Corporation (<http://www.renesas.com>)

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# MAEC TECHNICAL NEWS

No.4500-03-0206

## 4554 Group Notes For CNTR1 Output Auto-Control Circuit

### Classification

Corrections and supplementary  
explanation of document

√ Notes  
Knowhow  
Others

### Concerned Products

M34554M8-XXXFP, M34554MC-XXXFP, M34554EDFP

### Concerned Function

CNTR1 pin output auto-control circuit

### (1) CNTR1 Pin Output Auto-Control Circuit Specification

This function is valid when the bit 1 of register W6 is set ( $W6_1=1$ ).

Each timer 3 underflows, valid/invalid of the PWM signal output to CNTR1 pin are repeated alternately.

(However, it is necessary to set the bit 3 of register W4 ( $W4_3=1$ ) to change into a CNTR1 output valid state.)

If the bit 1 of register W6 is cleared again ( $W6_1=0$ ) when using this function, the valid/invalid state of a PWM signal output is retained.

This function is canceled when the bit 2 of register W3 is cleared ( $W3_2=0$ ) to stop timer 3. (A PWM signal output is in a valid state.)

### (2) Error

The registers  $W6_1$  and  $W3_2$  in a CNTR1 pin output auto-control circuit were exchanged.

Valid/invalid state of the PWM signal output to be retained when register  $W6_1$  is cleared (0) is not retained by this, and this function is canceled and the output is set to be valid forcibly.

Moreover, when register  $W3_2$  is cleared (0) in the state where the register  $W6_1$  is set (1), the valid/invalid state of a PWM signal output is retained.

### (3) Measurement

This error poses a problem when PWM signal output is controlled by register  $W6_1$ .

Please fix register  $W6_1$  to "1" while the CNTR1 pin output auto-control function is used.

**\* Please be careful about this error in the case of software development.**

**\* This product will be revised to resolve this error.**

**Immediately after its revising, we will inform you.**

