

## A Note on Using the MCU Unit R0E521300MCU00 in Combination with the E100 Emulator

Please take note of the following problem in using the MCU unit R0E521300MCU00, which is used for the R8C/3x series of MCUs:

- With using any functions of the RD timer except Input Capture

### 1. Product Concerned

Product type: MCU unit used in combination with the E100 emulator

Type name: R0E521300MCU00

Note that when the product concerned is used in combination with the following products, the problem described in Section 2 does not arise, because the evaluation MCU mounted on the MCU unit R0E521300MCU00 has the problem:

- (1) In the R8C/3x series
  - Actual MCUs
  - E8a emulator and Actual MCUs
- (2) In the R8C/2x series
  - Actual MCUs
  - E8a emulator and Actual MCUs
  - E8 emulator and Actual MCUs
  - Emulation probe R0E521000EPB00
  - Compact emulator R0E521000CPE00

### 2. Description

If fOCO40M is selected as a count source of the RD timer, the TRDGRD0 register cannot be used as a buffer register for the TRDGRB0 register.

### 3. Workarounds

For a function and modes used in the RD timer, the methods of avoiding this problem are as follows:

#### (1) Output Compare function

Use either of the following methods:

- Select any of the count sources except fOCO40M.
- If fOCO40M is selected as a count source, do not use the TRDGRD0 register as the buffer register for the TRDGRB0 register.

#### (2) PWM mode

Use either of the following methods:

- Select any of the count sources except fOCO40M.
- If fOCO40M is selected as a count source, do not use the TRDGRD0 register as the buffer register for the TRDGRB0 register.

#### (3) Reset Synchronous PWM mode

Use either of the following methods:

- Select any of the count sources except fOCO40M.
- If fOCO40M is selected as a count source, do not use the TRDGRD0 register as the buffer register for the TRDGRB0 register.

#### (4) Complementary PWM mode

- Select any of the count sources except fOCO40M.

#### (5) PWM3 mode

Use either of the following methods:

- Select any of the count sources except fOCO40M.
- If fOCO40M is selected as a count source, do not use the TRDGRD0 register as the buffer register for the TRDGRB0 register.

If none of the above methods resolves the problem, use the E8a emulator instead of the E100.

### 4. Schedule of Fixing the Problem

Now under consideration. We will inform you of the schedule of fixing the problem in RENESAS TOOL NEWS at a later date.

-> We have been upgrading the product free of charge to fix this problem. For detailed information of this upgrading, see RENESAS TOOL NEWS Document No. 120401/tn4 at:  
<http://tool-support.renesas.com/eng/toolnews/120401/tn4.htm>  
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