[Notes]
e² studio Smart Configurator Plug-in,
Smart Configurator for RX

R20TS0638ES0100
Rev.1.00
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Outline

When using the products in the title, note the following points.

1. Note on setting timer operation period in Motor component.
2. When loading project with port configuration created in V2.5.0 or version before into V2.6.0 version onwards

1. Note on setting timer operation period in Motor component

1.1 Applicable Products

- e² studio 2020-10 (Smart Configurator Plug-in V2.7.0)
- Smart Configurator for RX V2.7.0

1.2 Applicable Devices

- RX family:
  RX13T, RX23T, RX24T, RX24U, RX66T, RX72T, RX72M Group

1.3 Details

When any of the following settings are changed, incorrect values may be displayed on the configuration window because TGRA register value is not correctly calculated in some cases. When this problem occurs, values set to the registers in generated code will be also incorrect. Refer to "■Registers that display incorrect values" to see the applicable registers.

・Timer operation period value
・Unit of timer operation period
・Frequency of input clock source in clocks page

■Registers that display incorrect values

・MTU3/6.TGRA, and other timer general registers
・MTU.TDDRA/B
・MTU.TCDRA/B
・MTU.TCBRA/B

These may also display incorrect values, however they do not affect generated code.

・A/D Conversion Trigger Interval
・Crest Interrupt Interval

Error examples

・Incorrect TGRA value

Input clock frequency: 80MHz

Correct TGRA value: 44000

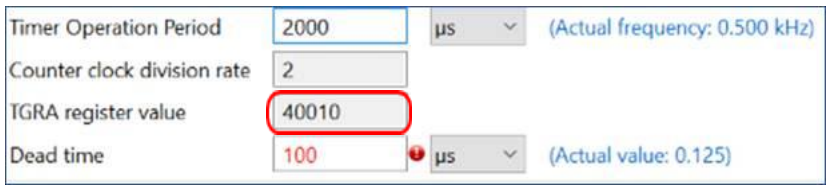

Figure.1.1 Example of incorrect TGRA value

・Incorrect A/D Conversion Trigger Interval and Crest Interrupt Interval

Input clock frequency: 80MHz

Correct interval: 1kHz

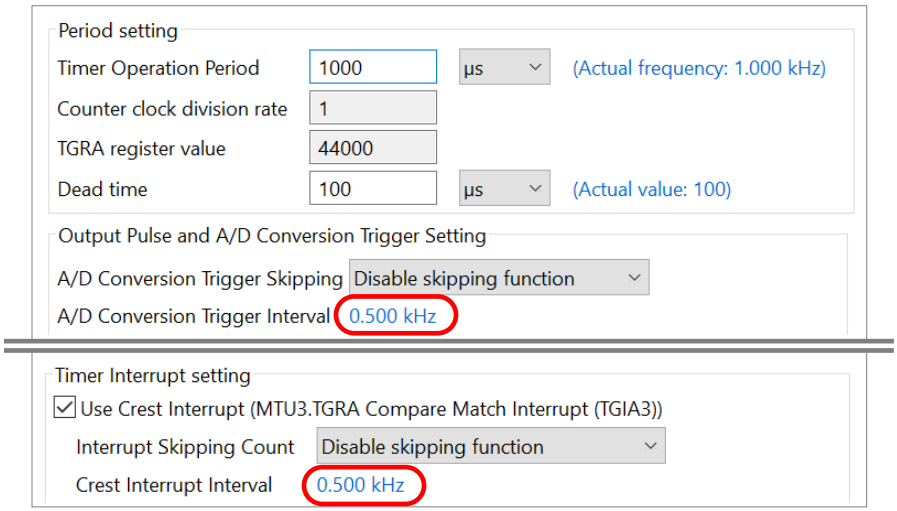

Figure.1.2 Example of incorrect A/D Conversion Trigger Interval and Crest Interrupt Interval

1.4 Workaround

To obtain correct TGRA register value, please do either of the following:

- Delete and re-input the dead time value

1) Delete dead time value

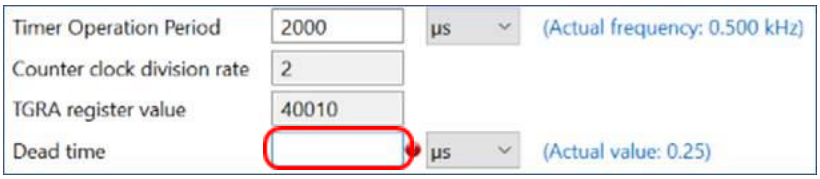

Figure.1.3 Workaround (Re-inputting the dead time) (Step 1)

2) Re-input dead time value

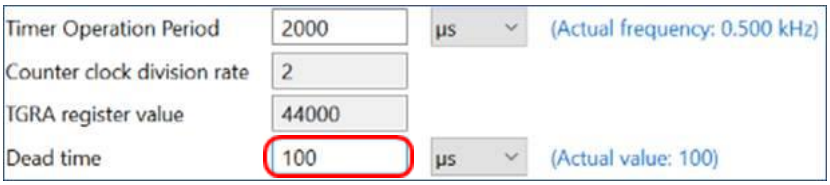

Figure.1.4 Workaround (Re-inputting the dead time) (Step 2)

- Change the unit of dead time once and restore to original settings

1) Change the unit of dead time

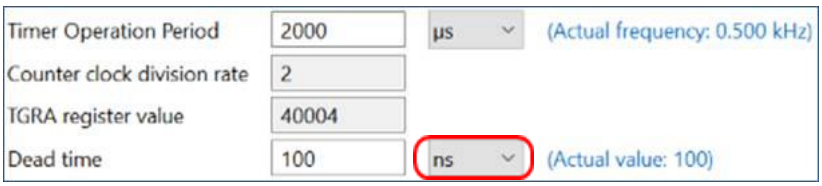

Figure.1.5 Workaround (Changing and restoring the dead time unit) (Step 1)

2) Restore to original unit settings

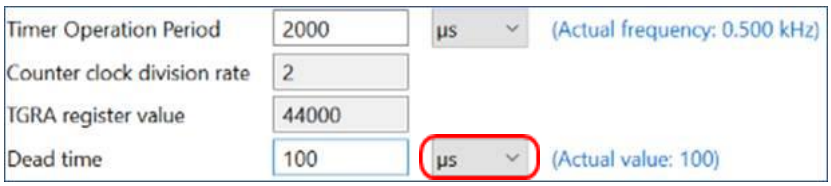

Figure.1.6 Workaround (Changing and restoring the dead time unit) (Step 2)

1.5 Schedule for Fixing the Problem

This problem will be fixed in the following versions. (Scheduled to be released in Jan 2021)

- e^2 studio 2021-01
- Smart Configurator for RX V2.8.0

2. When loading project with port configuration created in V2.5.0 or version before into V2.6.0 version onwards

2.1 Applicable Products

- e² studio 2020-07 (Smart Configurator Plug-in V2.6.0) or later
- Smart Configurator for RX V2.6.0 or later

2.2 Applicable Devices

- RX family:
  RX651, RX65N Groups

2.3 Details

When loading a project that meets the following (a) and (b), if you click the “Generate Code” button without opening the port component configuration GUI, redundant codes with DSCR/DSCR2 registers’ settings will be generated in the initialization API. This then will cause a build error.

(a) A project is created in Smart Configurator for RX V2.5.0 or earlier

(b) P35 is not configured as general purpose I/O port in the port configuration

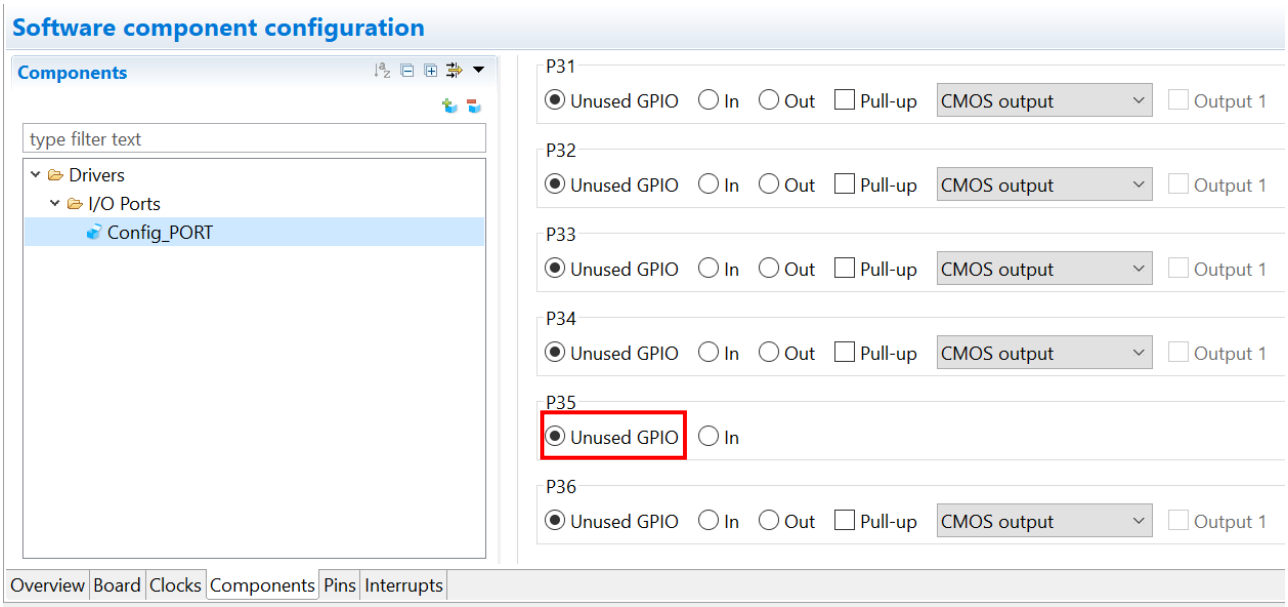

Figure 2.1 Example of when P35 is not configured as general purpose I/O port

```
/***********************************************************************
* Function Name: R_Config_PORT_Create
* Description: This function initializes the PORT
* Arguments: None
* Return Value: None
***********************************************************************/

void R_Config_PORT_Create(void)
{
    /* Set PORT3 registers */
    PORT3.PCR.BYTE = _00_Pm0_PULLUP_OFF | _02_Pm1_PULLUP_ON |
_04_Pm2_PULLUP_ON;
    PORT3.DSCR.BYTE = _00_Pm5_HIDRV_OFF;
    PORT3.DSCR2.BYTE = _00_Pm5_HISPEED_OFF;
    PORT3.PMR.BYTE = _00_Pm0_PIN_GPIO | _00_Pm1_PIN_GPIO | _00_Pm2_PIN_GPIO;
    PORT3.PDR.BYTE = _00_Pm0_MODE_INPUT | _00_Pm1_MODE_INPUT |
_00_Pm2_MODE_INPUT;

    R_Config_PORT_Create_UserInit();
}
```

Redundant codes with DSCR/DSCR2 registers' settings of P35

Figure 2.2 Redundant codes in the initialization API of port configuration

2.4 Workaround

When loading a project with port configuration created in V2.5.0 or version before into V2.6.0 version onwards, please assure to open the port configuration GUI first before clicking the "Generate Code" button.

2.5 Schedule for Fixing the Problem

This problem will be fixed in the following versions. (Scheduled to be released in Jan 2021)

- e² studio 2021-01
- Smart Configurator for RX V2.8.0

Revision History

Rev.	Date	Description	
		Page	Summary
1.00	Dec.01.20	-	First edition issued

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