

[Notes]

R20TS0523EJ0100

Rev.1.00

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CS+ Code Generator for RX, e² studio Code Generator Plug-in, AP4 Coding Assistance Tool for RX

Outline

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

1. When using the real-time clock in calendar count mode
2. When using the 12-bit A/D converter in Single Scan Mode

1. When Using the Real-time Clock in Calendar Count Mode

1.1 Applicable Products

- CS+ Code Generator for RX V1.11.00 (CS+ for CC V4.01) or later
- Code Generator plug-in V2.5.0 (e² studio V5.2.0) and later
- AP4 for RX V1.11.00 or later

1.2 Applicable Devices

- RX family:
RX651, RX65N groups

1.3 Details

When using the calendar API to set the counter value while using the real-time clock in calendar count mode, the statement for waiting the completion of reset operation is incorrect and may cause an infinite loop.

Error location

```

/*****
* Function Name: R_RTC_Set_CalendarCounterValue
* Description  : This function set RTC calendar counter value.
* Arguments    : counter_write_val -
                  counter write value
* Return Value : None
*****/
void R_RTC_Set_CalendarCounterValue(rtc_calendarcounter_value_t counter_write_val)
{
    uint32_t rw_count;
    volatile uint32_t dummy;

    /* Stop all counters */
    RTC.RCR2.BIT.START = 0U;
    while (0U != RTC.RCR2.BIT.START)
    {
        /* Ensure the clock is stopped while configuring it.*/
    }

    /* Execute RTC software reset */
    RTC.RCR2.BIT.RESET = 1U;
    while (1U != RTC.RCR2.BIT.RESET)
    {
        /* Wait for the reset to complete */
    }
    ...
}

```

Need to wait for RESET bit value to become 0 instead of 1.

1.4 Workaround

Manually change the checking value in the while statement from 1 to 0.

Note: When code is generated again, generated code returns to the state before modification. Therefore, modify the source file each time you generate code.

- Source file: "r_cg_rtc.c"
- Function: "void R_RTC_Set_CalendarCounterValue (rtc_calendarcounter_value_t counter_write_val)"

Workaround

```

/*****
* Function Name: R_RTC_Set_CalendarCounterValue
* Description  : This function set RTC calendar counter value.
* Arguments    : counter_write_val -
                  counter write value
* Return Value : None
*****/
void R_RTC_Set_CalendarCounterValue(rtc_calendarcounter_value_t counter_write_val)
{
    uint32_t rw_count;
    volatile uint32_t dummy;

    /* Stop all counters */
    RTC.RCR2.BIT.START = 0U;
    while (0U != RTC.RCR2.BIT.START)
    {
        /* Ensure the clock is stopped while configuring it.*/
    }

    /* Execute RTC software reset */
    RTC.RCR2.BIT.RESET = 1U;
    while (0U != RTC.RCR2.BIT.RESET)
    {
        /* Wait for the reset to complete */
    }
    ...
}

```

Change the RESET bit checking value from 0 to 1.



1.5 Schedule for Fixing the Problem

There is no schedule for fixing this problem.

2. When Using the 12-bit A/D Converter in Single Scan Mode

2.1 Applicable Products

- CS+ Code Generator for RX V1.03.00 (CS+ for CC V3.00) or later
- Code Generator plug-in V1.1.2 (e² studio V3.1.0) and later
- AP4 for RX V1.03.00 or later

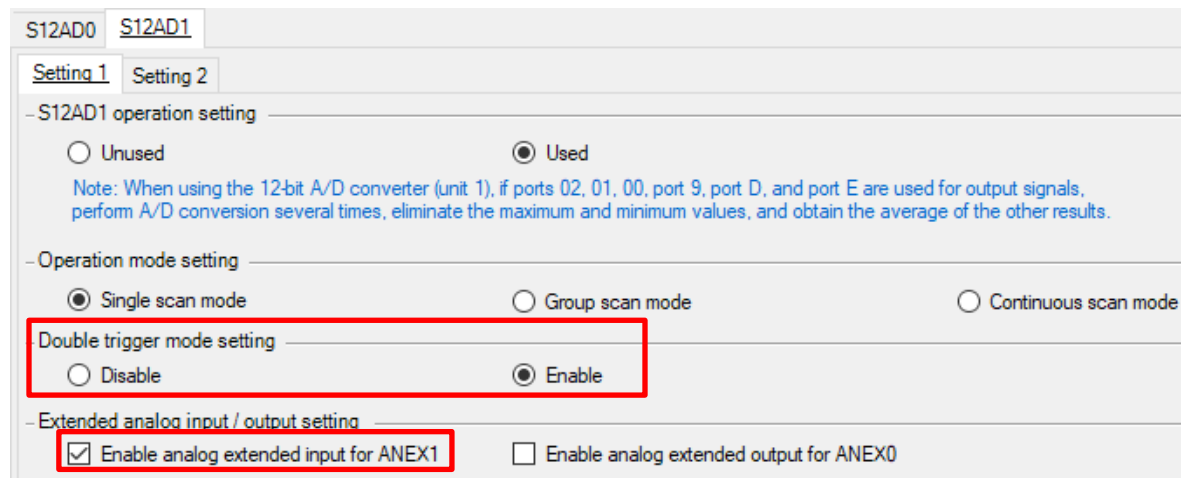
2.2 Applicable Devices

- RX family:
RX64M, RX651, RX65N, and RX71M groups

2.3 Details

When using Double trigger mode on Single Scan Mode component of the 12-bit A/D converter, “Enable analog extended input for ANEX1” is still available for configuration even though it cannot be used simultaneously.

Error location



The screenshot shows the configuration window for S12AD0 and S12AD1. The 'S12AD1' tab is selected. Under 'Setting 1', the 'S12AD1 operation setting' is 'Used'. A note states: 'Note: When using the 12-bit A/D converter (unit 1), if ports 02, 01, 00, port 9, port D, and port E are used for output signals, perform A/D conversion several times, eliminate the maximum and minimum values, and obtain the average of the other results.' The 'Operation mode setting' is 'Single scan mode'. The 'Double trigger mode setting' is 'Enable', which is highlighted with a red box. The 'Extended analog input / output setting' shows 'Enable analog extended input for ANEX1' checked, also highlighted with a red box, and 'Enable analog extended output for ANEX0' unchecked.

2.4 Workaround

Do not select [Enable analog extended input for ANEX1] when using double trigger mode.

2.5 Schedule for Fixing the Problem

There is no schedule for fixing this problem.

Revision History

Rev.	Date	Description	
		Page	Summary
1.00	Dec.16.19	-	First edition issued

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