

[Notes]

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Rev.1.00

Nov. 01, 2016

CS+ Code Generator for RX

e² studio (Code Generator Plug-in)

AP4 Coding Assistance Tool for RX

Outline

When using the CS+ Code Generator for RX, the e² studio (Code Generator Plug-in), or the AP4 coding assistance tool for RX, take note of the problems on the following points that are described in this note.

1. Selection of the MTIOC3 pin for MTU3 in Multi-Function Timer Pulse Unit 3
2. Low-speed on-chip oscillator (LOCO) when low power consumption (LPC) is specified
3. Sub-projects of CS+ and operation of multiple projects in the e² studio

1. Selection of the MTIOC3 pin for MTU3 in Multi-Function Timer Pulse Unit 3

1.1 Applicable Products

- V1.01.00 and later versions of the CS+ Code Generator for RX
- V3.0.1.9 and later versions of the e² studio (V1.1.1 and later versions of the Code Generator Plug-in)
- V1.05.00 and later versions of the AP4 coding assistance tool for RX

1.2 Applicable MCUs

- RX family: RX64M and RX71M groups

1.3 Details

Initialization code has an error when the following functions are selected for MTU3 in Multi-Function Timer Pulse Unit 3, and the MTIOC3D pin function is specified for P23. The error results in the P23 pin not being set for output.

- Reset-synchronized PWM mode
- Complementary PWM mode 1
- Complementary PWM mode 2
- Complementary PWM mode 3

1.4 Workaround

Correct the setting of the MTIOC3D pin in the following function:

- “void R_MTU3_Create (void)” in the source file “r_cg_mtu3.c”.

This modification is required every time code is generated.

An example of the correction to change the setting of MTIOC3D pin is shown below. The red text is the modification.

Before the modification:

```

/*****
 * Function Name: R_MTU3_Create
 * Description  : This function initializes the MTU3 Unit0 module.
 * Arguments   : None
 * Return Value : None
 *****/
void R_MTU3_Create(void)
{
    Omitted
    /* Set MTIOC3D pin */
    MPC.P23PFS.BYTE = 0x02U;
    PORT2.PMR.BYTE |= 0x08U;
    Omitted
}

```

After the modification:

```

/*****
 * Function Name: R_MTU3_Create
 * Description  : This function initializes the MTU3 Unit0 module.
 * Arguments   : None
 * Return Value : None
 *****/
void R_MTU3_Create(void)
{
    Omitted
    /* Set MTIOC3D pin */
    MPC.P23PFS.BYTE = 0x01U;
    PORT2.PMR.BYTE |= 0x08U;
    Omitted
}

```

1.5 Schedule for Fixing the Problem

This problem will be fixed in a later version. (January, 2017)

2. Low-speed On-chip Oscillator (LOCO) when Low Power Consumption (LPC) is Specified

2.1 Applicable Products

- V1.01.00 and later versions of the CS+ Code Generator for RX
- V3.0.1.9 and later versions of the e² studio (V1.1.1 and later versions of the Code Generator Plug-in)
- V1.05.00 and later versions of the AP4 coding assistance tool for RX

2.2 Applicable MCUs

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

2.3 Details

Generated code has an error when low-speed operating mode 1 is specified with low power consumption (LPC) as the initial power control setting for operation. LPC thus cannot be used in this case.

2.4 Workaround

Delete the line with the setting for the low-speed on-chip oscillator control register in the following function:

- “void R_LPC_Create (void)” in the source file “r_cg_lpc.c”.

This modification is required every time code is generated.

The following is an example of deletion of the line with the setting for the low-speed on-chip oscillator control register. The red text is the modification.

Before the modification:

```

/*****
* Function Name: R_LPC_Create
* Description  : This function initializes the LPC module.
* Arguments   : None
* Return Value: None
*****/
void R_LPC_Create(void)
{
    /* Disable LOCO before setting low speed */
    SYSTEM.LOCOCR.BIT.LCSTP = 1U;

    /* Set operating power control */
    SYSTEM.OPCCR.BIT.OPCM = _06_LPC_LOW_SPEED_MODE1;

    Omitted
}

```

After the modification:

```

/*****
* Function Name: R_LPC_Create
* Description  : This function initializes the LPC module.
* Arguments   : None
* Return Value : None
*****/
void R_LPC_Create(void)
{
    /* Disable LOCO before setting low speed */
SYSTEM.LOCCR.BIT.LCSTP = 1U; (deleted)

    /* Set operating power control */
    SYSTEM.OPCCR.BIT.OPCM = _06_LPC_LOW_SPEED_MODEL;

    Omitted
}

```

2.5 Schedule for Fixing the Problem

This problem will be fixed in a later version. (January, 2017)

3. Sub-projects of CS+ and the Operation of Multiple e² studio Projects

3.1 Applicable Products

- V1.11.00 of the CS+ Code Generator for RX
- V4.1.0.018 and later versions of the e² studio (V2.1.0 and later versions of the Code Generator Plug-in)

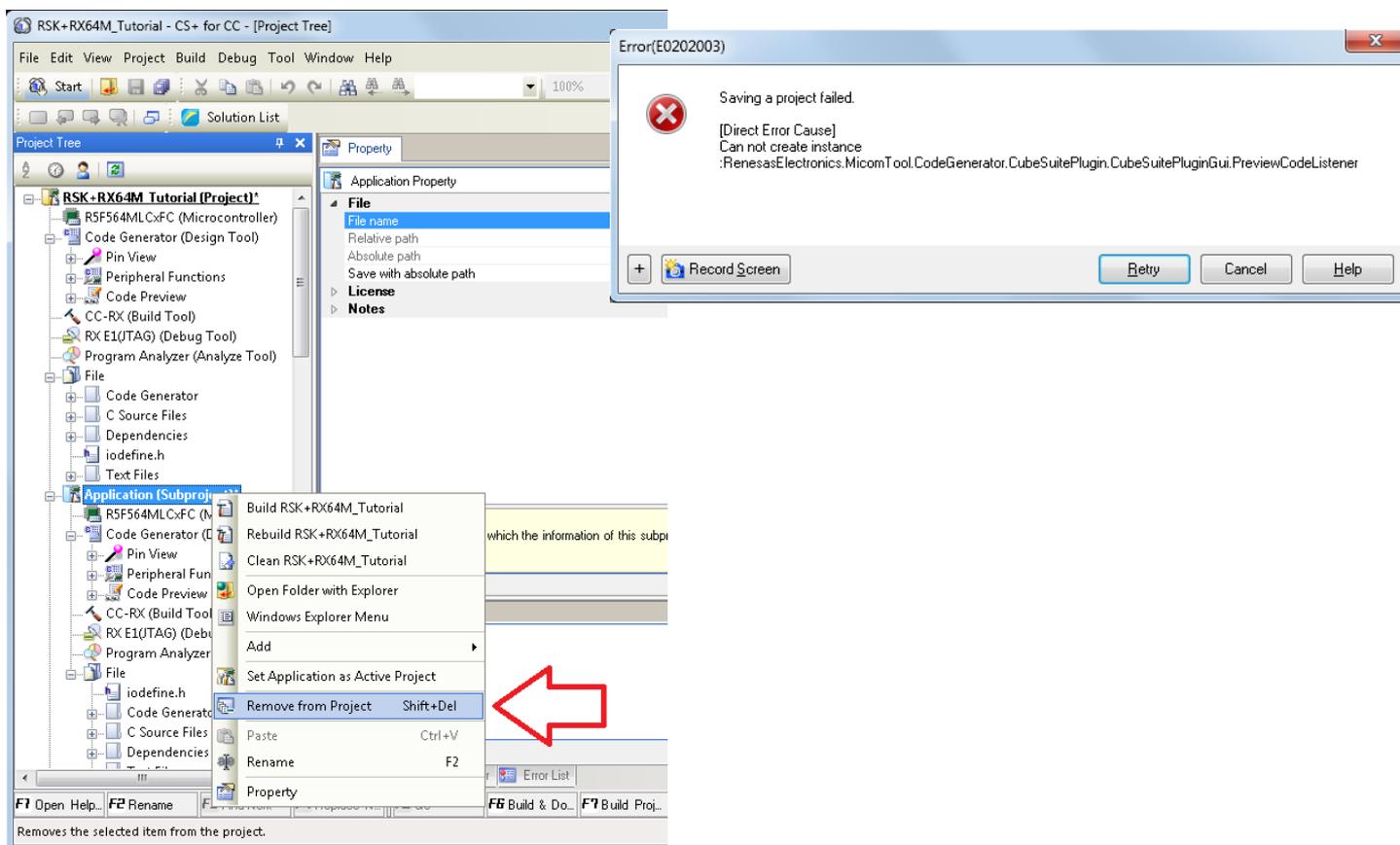
3.2 Applicable MCUs

- RX family: All groups

3.3 Details

3.3.1 CS+ for CC

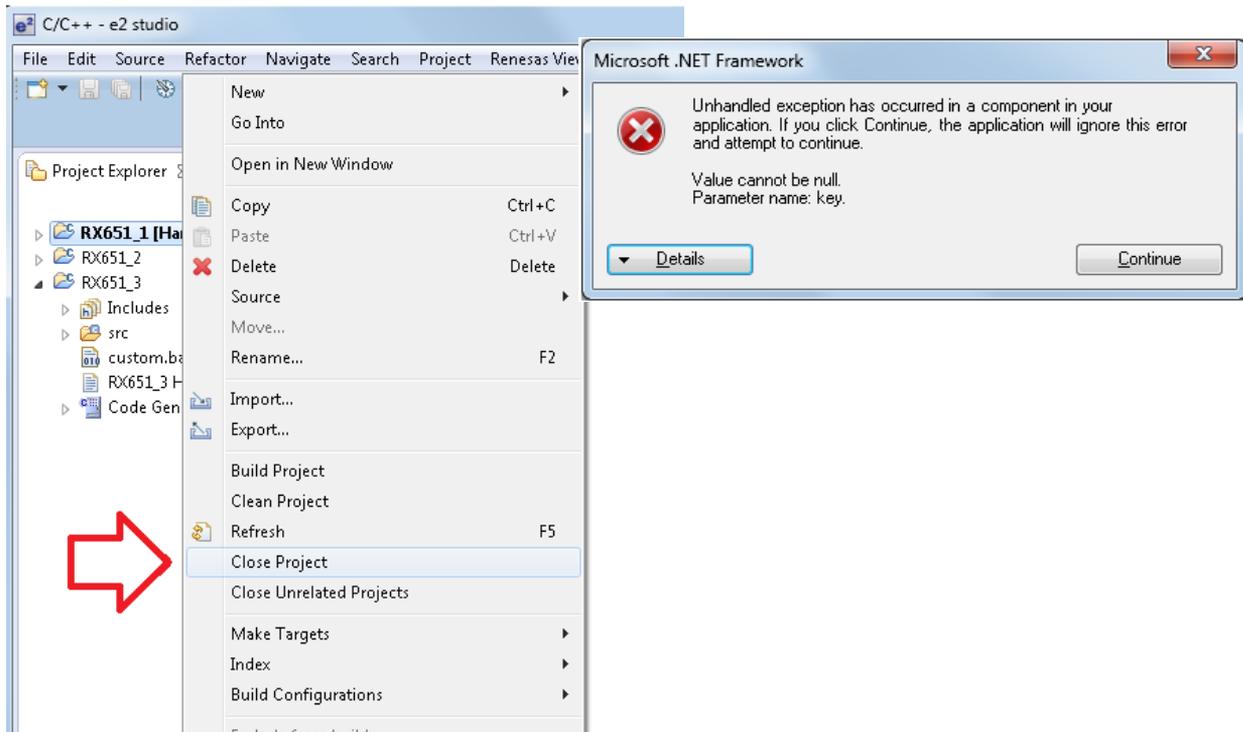
When a sub-project has been added to a project, an error occurs if the sub-project is removed from the project and the project is then saved.



3.3.2 e² studio

An error occurs when any of the following operations proceeds while there are multiple projects in the workspace.

- Operating the code generator for another project after closing a project.
- Operating the code generator for another project after deleting a project.



3.4 Workarounds

3.4.1 CS+ for CC

Uncheck [Code Generator Plug-in] and [Code Generator/PinView Plug-in] in the Plug-in Manager dialog box before removing a sub-project.

To manage the plug-ins, refer to Plug-in Manager dialog box in section A, WINDOW REFERENCE, of CS+ V4.01.00 Integrated Development Environment User’s Manual: Project Operation.

<https://www.renesas.com/search/keyword-search.html#genre=document&q=r20ut3819>

3.4.2 e² studio

Reboot the e² studio after selecting [Close Project] or [Delete].

3.5 Schedule for Fixing the Problem

These problems will be fixed in a later version. (January, 2017)

Revision History

Rev.	Date	Description	
		Page	Summary
1.00	Nov. 01, 2016	-	First edition issued

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