

[Notes]

R20TS0603EJ0100

Rev.1.00

Aug. 01, 2020

e² studio Code Generator Plug-in, AP4 Coding Assistance Tool for RZ

Outline

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

1. Notes on switching register set on transfer completion of the DMA controller

1. Notes on Switching Register Set on Transfer Completion of the DMA Controller

1.1 Applicable Products

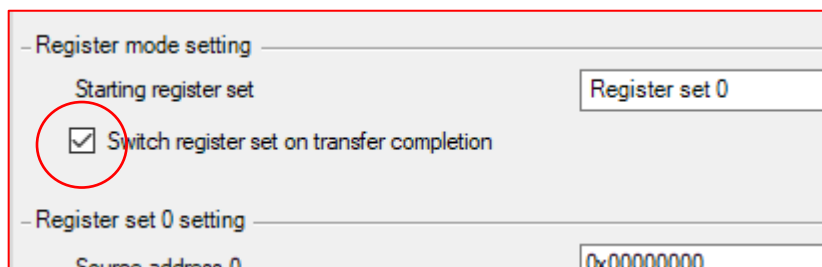
- e² studio V7.1.0 (Code Generator Plug-in V2.12 or later)
- AP4 for RZ V1.08.00 or later

1.2 Applicable Devices

- RZ family: RZ/T1 group

1.3 Details

There is an error in GUI control of the DMA controller, where clearing the [Switch register set on transfer completion] check box does not disable the setting.



1.4 Conditions

This error occurs when either of the following operations is performed after the [Switch register set on transfer completion] check box is cleared, while the DMA controller is used in register mode.

- (a) Display another DMA controller tab or another peripheral function.
- (b) Save the project and reload.

When operation (a) or (b) is performed, the disabled setting becomes enabled.

1.5 Workaround

To disable the setting for [Switch register set on transfer completion], modify the generated code (r_cg_dmac.c) as shown below.

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

- The function in the source file "r_cg_dmac.c":

"R_DMAn_Create(void)"^(Note) and "R_DMAn_Cm_Start(void)"^(Note)

Note: n = DMA controller unit number (0,1), m = channel number ((0,1,...,15)

Before modification

```

/*****
* Function Name: R_DMAn_Create
* Description  : This function initializes the DMAC unit  $n$ .
* Arguments   : None
* Return Value : None
*****/
void R_DMAn_Create(void)
{
    /* Set configuration for DMAC $n$  channel  $m$  */
    DMA0.DMACn_CHCFG_m.LONG |= Omitted
                               | _DMAC_CHCFG_RSEL_REVERSE_ENABLE;

    Omitted

/*****
* Function Name: R_DMAn_Cm_Start
* Description  : This function enables the DMAC unit  $n$  channel  $m$  transfer.
* Arguments   : None
* Return Value : None
*****/
void R_DMAn_Cm_Start(void)
{
    DMA0.DMACn_CHCTRL_m.BIT.SETREN = 1U;
    DMA0.DMACn_CHCTRL_m.BIT.SETEN  = 1U;
}

```

After modification

```

/*****
* Function Name: R_DMAn_Create
* Description  : This function initializes the DMAC unit n.
* Arguments    : None
* Return Value : None
*****/
void R_DMAn_Create(void)
{
    /* Set configuration for DMACn channel m */
    DMA0.DMACn_CHCFG_m.LONG |= Omitted
                               | _DMAC_CHCFG_RSEL_REVERSE_DISABLE;

    Omitted

/*****
* Function Name: R_DMAn_Cm_Start
* Description  : This function enables the DMAC unit n channel m transfer.
* Arguments    : None
* Return Value : None
*****/
void R_DMAn_Cm_Start(void)
{
    DMA0.DMACn_CHCTRL_m.BIT.SETEN = 1U;
}

```

Change to DISABLE

Delete line 1

1.6 Schedule for Fixing the Problem

This problem will be fixed in the next version. (Scheduled to be released in October 2020.)

Revision History

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

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