

[Notes]

R20TS0696ES0100

Rev.1.00

May. 16, 2021

## e<sup>2</sup> studio Smart Configurator Plug-in, Smart Configurator for RX

### Outline

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

1. When using PORT component and configuring PORTC multiplexed pins as input

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#### 1.1 Applicable Products

- e<sup>2</sup> studio 6.2 (Smart Configurator Plug-in V1.2.0) or later
- Smart Configurator for RX V1.2.0 or later

#### 1.2 Applicable Devices

- RX family:  
RX130 (80/64/48 pins) and RX230/1 (64/48 pins) Group

#### 1.3 Details

When using PORT component and configuring PORTC multiplexed pins as input, the generated code for PDR register is wrong, its bit 0 should be set to value 0 instead of value 1.

The affected pins are as below:

- PC0 and PC1 on RX130 (80/64 pins), RX230/1 (64 pins) which are multiplexed with PB6 and PB7
- PC0, PC1, PC2 and PC3 on RX130 (48 pins) and RX230/1 (48 pins) which are multiplexed with PB0, PB1, PB3 and PB5

#### 1.4 Condition

Below are the steps to reproduce the issue:

- (1) Creating Smart configurator project on the affected device mentioned above
- (2) Add PORT component from the software component page
- (3) Enable PORTC and configure the pins mentioned above as input (see **Figure 1.1**)
- (4) Click "Generate Code" and check PDR register generated code in the initialization API (see **Figure 1.2**)

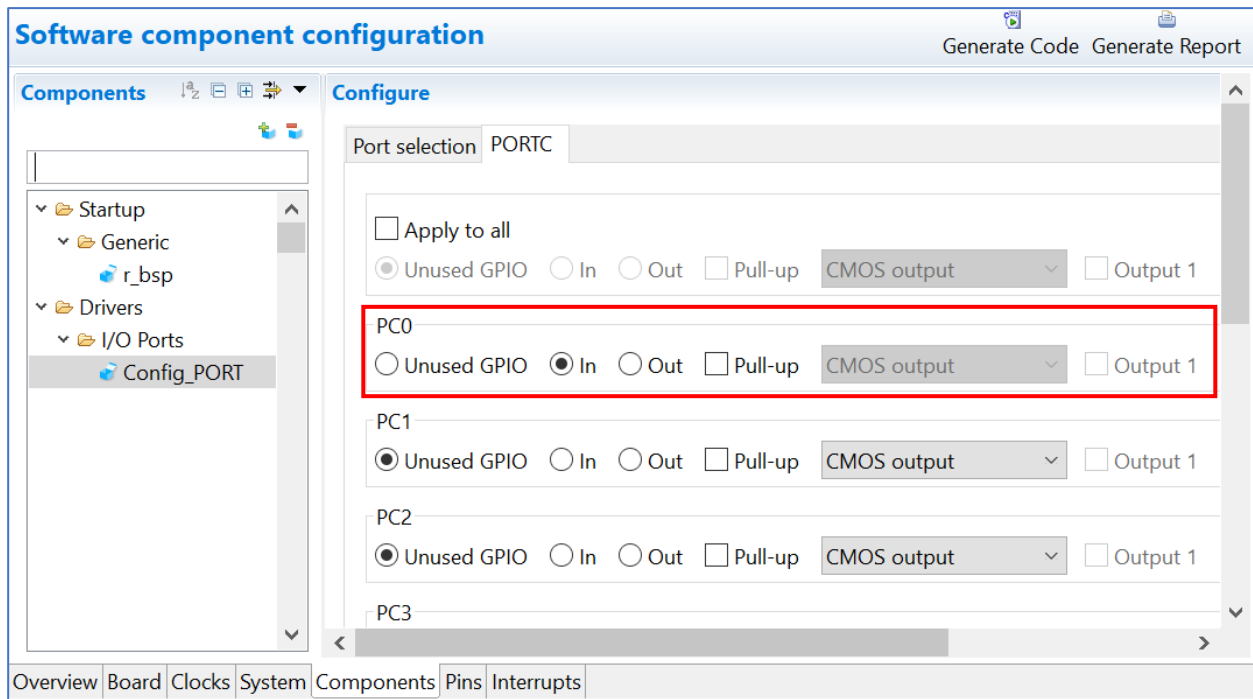


Figure 1.1 Configure PC0 as input for PORT component (RX130 64 pin)

```

/*****
* 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 */
    PORT.PSRA.BYTE = _40_PORT_PSEL6_PC0;

    ...

    PORTC.PCR.BYTE = _00_Pm0_PULLUP_OFF;
    PORTC.PMR.BYTE = _00_Pm0_PIN_GPIO;
    PORTC.PDR.BYTE = _00_Pm0_MODE_INPUT | _03_PDR_DEFAULT;

    R_Config_PORT_Create_UserInit();
}

```

PORTC PDR bit 0 should be value 0 when PC0 is configured as input, but it is value 1.

Figure 1.2 Incorrect generated code for PDR register in the initialization API

### 1.5 Workaround

Manually update corresponding bit value from 1 to 0 for this PDR register generated code, e.g. for the PC0, macro name should be updated from “\_03\_PDR\_DEFAULT” to “\_02\_PDR\_DEFAULT” and its value should also be updated from “0x03U” to “0x02U” in the “r\_cg\_port.h” generated file.

### 1.6 Schedule for Fixing the Problem

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

- e<sup>2</sup> studio 2021-07
- Smart Configurator for RX V2.10.0

**Revision History**

Rev.	Date	Description	
		Page	Summary
1.00	May.16.20	-	First edition issued

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