R20TS0733ES0100

Rev.1.00

Aug. 01, 2021

[Notes]

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 RSPI2 as resource in SPI operation (four-wire method) or in Clock synchronous operation (three-wire method)
- When using RSPI2 as resource in SPI Operation (four-wire method) or in Clock synchronous operation (three-wire method)
- 1.1 Applicable Products
 - CS+ Code Generator for RX V1.00.00 (CS+ for CC V1.11.00) and later versions
 - ➤ Code Generator plug-in V1.00.00 (e² studio V5.2.0) and later versions
 - AP4 for RX V1.10.00 and later versions

1.2 Applicable Devices

> RX family: RX651, RX65N Groups

1.3 Details

1.3.1 The generated code for enabling SPI2 idle interrupt (SPII2) is wrong

The generated code for enabling SPII2 interrupt should be "ICU.GENAL0.BIT.EN20 = 1U" in the "void R_RSPI2_Create(void)" initialization API, but the actual generated code is "ICU.GENAL0.BIT.EN20 = 0U" instead, thus SPII2 interrupt will not be triggered and r_rspi2_callback_transmittend function will not be executed after data transfer completion even it is configured to be used on the settings GUI tab.

The affected function setting and operation mode are shown in Figure 1.

- Affected function setting: SPI Operation (four-wire method) or Clock synchronous operation (three-wire method).
- Affected Operation mode: All Master mode with transmit function.

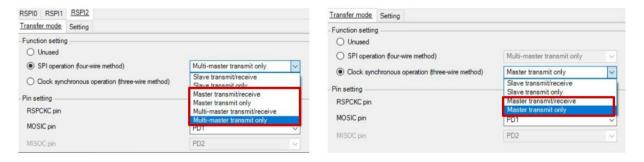


Figure 1: Affected function setting and operation mode

1.3.2 The generated code for enabling SPI2 error interrupt (SPEI2) is wrong

The generated code for enabling SPEI2 interrupt should be "ICU.GENAL0.BIT.EN21 = 1U" in the "void R_RSPI2_Create(void)" initialization API, but the actual generated code is "ICU.GENAL0.BIT.EN21 = 0U" instead, thus SPEI2 interrupt will not be triggered and r_rspi2_callback_error function will not be executed when error occurs during data transmission even they are configured to be used on the settings GUI tab.

The affected function setting and operation mode are shown in Figure 2.

- Affected function setting: SPI Operation (four-wire method) or in Clock synchronous operation (three-wire method).
- Affected Operation Mode: All operation mode except Master transmit mode only.

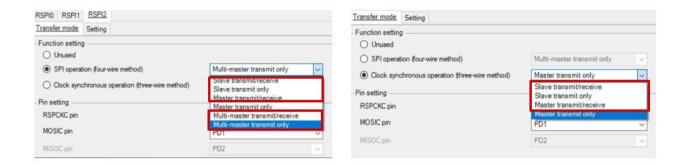


Figure 2: Affected function setting and operation mode

1.4 Condition

The problem occurs when using RSPI2 as resource in SPI operation (four-wire method) or in Clock synchronous operation (three-wire method).

1.5 Workaround

The development of CS+ Code Generator for RX is completed. Kindly switch to the new tools Smart Configurator for your development.

- Smart Configurator: https://www.renesas.com/software-tool/smart-configurator
- RX Smart Configurator e2 studio user guide: https://www.renesas.com/document/mat/rx-smart-configurator-users-guide-e-studio
- RX Smart Configurator CS+ user guide: https://www.renesas.com/document/mat/rx-smart-configurator-users-guide-cs
- RX Smart Configurator IAR user guide: https://www.renesas.com/document/mat/rx-smart-configurator-users-guide-iarew

1.6 Schedule for Fixing the Problem

There is no schedule for fixing this problem.

Revision History

		Description	
Rev.	Date	Page	Summary
1.00	Aug.01.21	-	First edition issued

Renesas Electronics has used reasonable care in preparing the information included in this document, but Renesas Electronics does not warrant that such information is error free. Renesas Electronics assumes no liability whatsoever for any damages incurred by you resulting from errors in or omissions from the information included herein.

The past news contents have been based on information at the time of publication. Now changed or invalid information may be included.

The URLs in the Tool News also may be subject to change or become invalid without prior notice.

Corporate Headquarters

TOYOSU FORESIA, 3-2-24 Toyosu, Koto-ku, Tokyo 135-0061, Japan www.renesas.com

Trademarks

Renesas and the Renesas logo are trademarks of Renesas Electronics Corporation. All trademarks and registered trademarks are the property of their respective owners.

Contact information

For further information on a product, technology, the most up-to-date version of a document, or your nearest sales office, please visit: www.renesas.com/contact/

 $\hbox{@ 2021 Renesas Electronics Corporation.}$ All rights reserved.

TS Colophon 4.2