[Notes]
Smart Configurator for RH850

R20TS0431EJ0100
Rev.1.00
Jun. 01, 2019

Outline

When using Smart Configurator for RH850, note the following point.

1. When using PLL0 Clock

1. When Using PLL0 Clock

1.1 Applicable Products

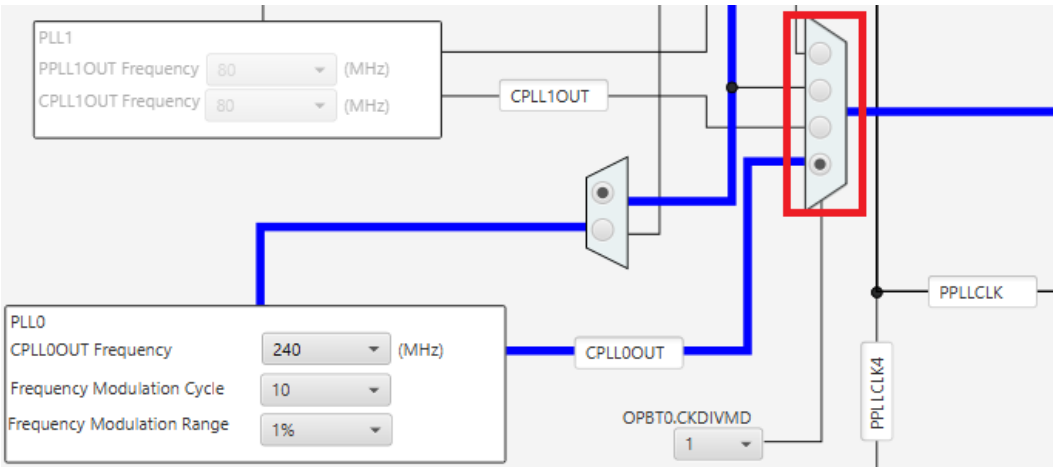
Smart Configurator for RH850 V1.0.0 or later

1.2 Applicable Devices

RH850 family: RH850/F1KM group

1.3 Details

When using the PLL0 clock of the applicable devices in section 1.2 (when CPLL0OUT is enabled as shown in the image below), incorrect code is generated.



➢ Location where incorrect code is generated

1. An incorrect macro value (red) is generated in the _CGC_PLL0C_DEFAULT_VALUE variable in the r_cg_cgc.h header file.

Source example

```
r_cg_cgc.h
#define _CGC_PLL0C_DEFAULT_VALUE            (0x6000503BUL)
```

2. The following code is generated in the R_CGC_Create function in the r_cg_cgc.c file, setting an incorrect value (red) in the CLKCTL.PLL0C register.

Source example

```
void R_CGC_Create(void)
{
    ...
    CLKCTL.PLL0C = _CGC_PLL0C_DEFAULT_VALUE | _CGC_PLL0_xxx;
    ...
}
```

1.4 Workaround

Add the code (red) in the user code editing area defined in the r_cg_cgc.h file to undefine and redefine the macro in _CGC_PLL0C_DEFAULT_VALUE.

➢ Process to redefine a macro

1. Display the user code editing area located under Global functions in the r_cg_cgc.h file.
   The user code editing area is between the following comments.
   - /* Start user code for user init. Do not edit comment generated here */
   - /* End user code. Do not edit comment generated here */
2. Add code #undef to undefine the macro in _CGC_PLL0C_DEFAULT_VALUE.
   - #undef _CGC_PLL0C_DEFAULT_VALUE
3. Add code #define to redefine the macro in _CGC_PLL0C_DEFAULT_VALUE.
   - #define _CGC_PLL0C_DEFAULT_VALUE (0x60004000UL)

Modification example:

```
r_cg_cgc.h
/***********************************************
Global functions
***********************************************/
void R_CGC_Create(void);
void R_CGC_Create_UserInit(void);
/* Start user code for function. Do not edit comment generated here */
#undef _CGC_PLL0C_DEFAULT_VALUE
#define _CGC_PLL0C_DEFAULT_VALUE (0x60004000UL)
/* End user code. Do not edit comment generated here */
```

1.5 Schedule for Fixing the Problem

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

Revision History

Rev.	Date	Description	
		Page	Summary
1.00	Jun.01.19	-	First edition issued

Corporate Headquarters

TOYOSU FORESIA, 3-2-24 Toyosu, Koto-ku, Tokyo 135-0061 Japan

www.renesas.com

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/

Trademarks

TS Colophon 4.0