

[Notes]

R20TS0747EC0100

Rev.1.00

Sep. 16, 2021

CS+ Code Generator for RH850,  
AP4 Coding Assistance Tool for RH850

Outline

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

- Notes on using CSIH Master receive and Master transmit/receive operation mode

1. Notes on using CSIH Master receive and Master transmit/receive operation mode

1.1 Applicable Products

- CS+ Code Generator for RH850 V1.00.00 (CS+ for CC V4.00) or later
- AP4 for RH850 V1.01.00 or later

1.2 Applicable Devices

RH850 family: RH850/F1K group

1.3 Details

When using CSIH as Master “Receive” and Master “Transmit/Receive” mode (refer to figure 1-1), master can only receive the first data correctly. From the second data, master fails to receive.

- RH850/F1K:  
CSIH0, CSIH1, CSIH2, CSIH3

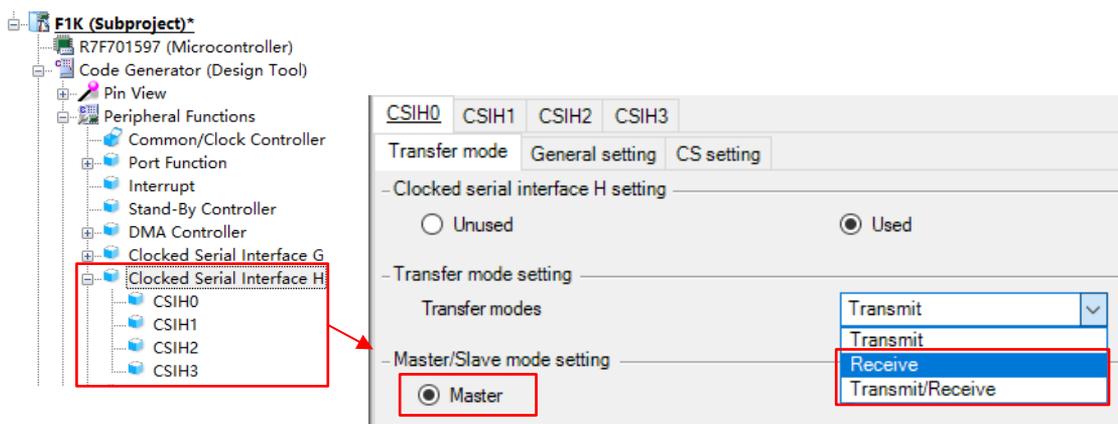


Figure 1-1 Setting of CSIH operation mode

1.4 Workaround

User can manually modify the register setting code in the following source file

- Source file: “r\_cg\_csih\_user.c”.
- Function: “void r\_<csihn>\_interrupt\_receive (void)”

Note: If code is generated again, the previous state is restored. Modification is necessary each time you perform code generation.

The following is an example of the required modification when *<csih>* is CSIH0 in the RH850/F1K group. The code in red color is wrong code before modification, while the code in blue color is correct code after modification.

## Before modification:

```
void r_Config_CSIH0_interrupt_receive(void)
{
    uint8_t err_type;
    uint16_t temp;
    .....
    else
    {
        temp = g_csih0_rx_total_num;
        if (temp > g_csih0_rx_num)
        {
            *gp_csih0_rx_address = CSIH0.RX0W;
            gp_csih0_rx_address++;
            g_csih0_rx_num++;
            CSIH0.TX0W = 0U;
        }
        .....
    }
}
```

## After modification:

```
void r_Config_CSIH0_interrupt_receive(void)
{
    uint8_t err_type;
    uint16_t temp;
    .....
    else
    {
        temp = g_csih0_rx_total_num;
        if (temp > g_csih0_rx_num)
        {
            *gp_csih0_rx_address = CSIH0.RX0W;
            gp_csih0_rx_address++;
            g_csih0_rx_num++;
            CSIH0.TX0W |= 0U;          --> change "=" to "|="
        }
        .....
    }
}
```

## 1.5 Schedule for Fixing the Problem

There is no schedule for fixing this problem.

**Revision History**

Rev.	Date	Description	
		Page	Summary
1.00	Sep.16.21	-	First edition issued

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