

[Notes]

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Rev.1.00

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

Outline

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

1. When using Clocked Serial Interface H
2. When using Clocked Serial Interface G

1. When using Clocked Serial Interface H

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

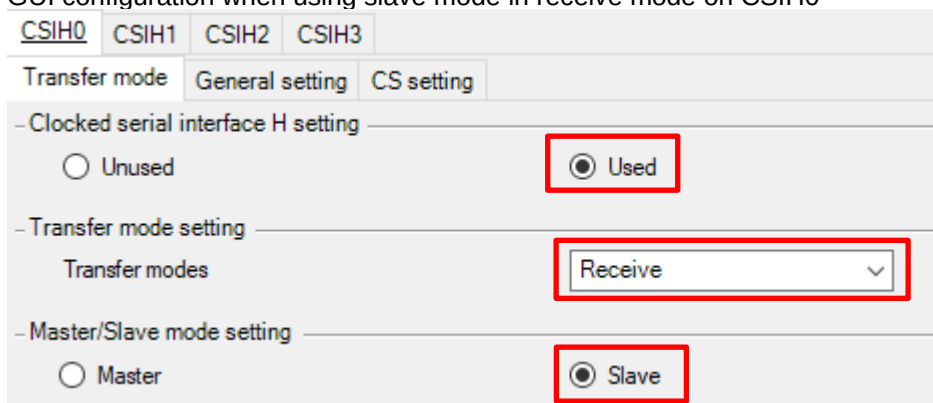
RH850 family: RH850/F1K group

1.3 Details

When using CSIH with slave mode and receive mode or transmit/receive mode selected on the following peripherals, transmission processing will not work from the second time because the variable of receive count initialization is incorrect.

- RH850/F1K:
CSIH0, CSH1, CSH2, CSH3

■ GUI configuration when using slave mode in receive mode on CSH0



The screenshot shows the GUI configuration for CSH0. It has tabs for CSH0, CSH1, CSH2, and CSH3. Under the CSH0 tab, there are sub-tabs for Transfer mode, General setting, and CS setting. The 'Transfer mode' sub-tab is active. It shows three settings:

- Clocked serial interface H setting:** Two radio buttons, 'Unused' and 'Used'. The 'Used' button is selected and highlighted with a red box.
- Transfer mode setting:** A dropdown menu labeled 'Transfer modes' with 'Receive' selected. The dropdown is highlighted with a red box.
- Master/Slave mode setting:** Two radio buttons, 'Master' and 'Slave'. The 'Slave' button is selected and highlighted with a red box.

1.4 Workaround

Manually modify the variable name of receive count from “g_<csihn>_tx_num” to “g_<csihn>_rx_num” in the following source file ^(Note). <csihn> varies depending on the selected peripheral.

- Source file: “r_cg_csih.c”.
- Function: “MD_STATUS R_<CSIHn>_Slave_Receive (uint16_t* rx_buf, uint16_t rx_num)”

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 <CSIHn> is CSIH0. Manually modify the wrong code in red to correct code in blue.

Before modification

```
MD_STATUS R_CSIH0_Slave_Receive(uint16_t* rx_buf, uint16_t rx_num)
{
    MD_STATUS status = MD_OK;
    if (rx_num < 1U)
    {
        status = MD_ARGERROR;
    }
    else
    {
        g_csih0_rx_total_num = rx_num;
        gp_csih0_rx_address = rx_buf;
        g_csih0_tx_num = 0U;
    }

    return (status);
}
```

After modification

```
MD_STATUS R_CSIH0_Slave_Receive(uint16_t* rx_buf, uint16_t rx_num)
{
    MD_STATUS status = MD_OK;
    if (rx_num < 1U)
    {
        status = MD_ARGERROR;
    }
    else
    {
        g_csih0_rx_total_num = rx_num;
        gp_csih0_rx_address = rx_buf;
        g_csih0_rx_num = 0U;
    }

    return (status);
}
```

1.5 Schedule for Fixing the Problem

This problem will be fixed in a later version.

2. When using Clocked Serial Interface G

2.1 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

2.2 Applicable Devices

RH850 family: RH850/F1KM group

2.3 Details

When using CSIG and receive mode or transmit/receive mode selected on the following peripherals, transmission processing will not work from the second time because the variable of receive count initialization is incorrect.

- RH850/F1K: 100-pin products
CSIG0
- RH850/F1K: 144-pin, 176-pin products
CSIG0, CSIG1

■ GUI configuration when using receive mode on CSIG0

The screenshot shows the GUI configuration for CSIG0. The 'CSIG0' tab is selected. Under 'Transfer mode', the 'Used' radio button is selected. Under 'Transfer mode setting', the 'Receive' option is selected in the dropdown menu. Red boxes highlight the 'Used' radio button and the 'Receive' dropdown menu.

2.4 Workaround

Manually modify the variable name of receive count from "g_<csign>_tx_num" to "g_<csign>_rx_num" in the following source file ^(Note). <csign> varies depending on the selected peripheral.

- Source file: "r_cg_csig.c".
- Function: "MD_STATUS R_<CSIGN>_Receive (uint16_t* rx_buf, uint16_t rx_num)"

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 <CSIGN> is CSIG0. Manually modify the wrong code in red to correct code in blue.

Before modification

```
MD_STATUS R_CSIG0_Receive(uint16_t* rx_buf, uint16_t rx_num)
{
    MD_STATUS status = MD_OK;
    if (rx_num < 1U)
    {
        status = MD_ARGERROR;
    }
    else
    {
        g_csig0_rx_total_num = rx_num;
        gp_csig0_rx_address = rx_buf;
        g_csig0_tx_num = 0U;
        .....
    }

    return (status);
}
```

After modification

```
MD_STATUS R_CSIG0_Receive(uint16_t* rx_buf, uint16_t rx_num)
{
    MD_STATUS status = MD_OK;
    if (rx_num < 1U)
    {
        status = MD_ARGERROR;
    }
    else
    {
        g_csig0_rx_total_num = rx_num;
        gp_csig0_rx_address = rx_buf;
        g_csig0_rx_num = 0U;
        .....
    }

    return (status);
}
```

2.5 Schedule for Fixing the Problem

This problem will be fixed in a later version.

Revision History

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

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