[Notes]
Smart Configurator for RH850

R20TS0569EC0100
Rev.1.00
Apr. 16, 2020

Outline

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

1. When using CSI master and CSI slave

1. When Using CSI Master and CSI Slave

1.1 Applicable Products

Smart Configurator for RH850 V1.1.0 or later

1.2 Applicable Devices

RH850 family: RH850/F1KM group

- RH850/F1KM-S1 (48-pin, 64-pin, 80-pin, and 100-pin products)
- RH850/F1KM-S4 (100-pin, 144-pin, 176-pin, and 233-pin products)

1.3 Details

When using CSI master or CSI slave as transmit mode or transmit/receive mode on the following peripherals, data cannot be sent correctly because CSIGnSO and CSIHmSO pin setting code is wrong.

- RH850/F1KM-S1: 48-pin, 64-pin products

  CSIG0
- RH850/F1KM-S1: 80-pin products

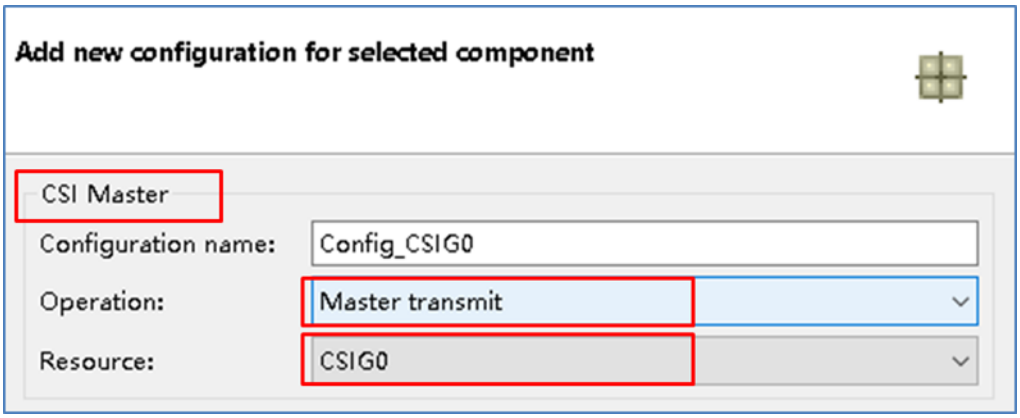
  CSIG0, CSIH2
- RH850/F1KM-S1: 100-pin products

  CSIG0, CSIH2, CSIH3
- RH850/F1KM-S4: 100-pin products

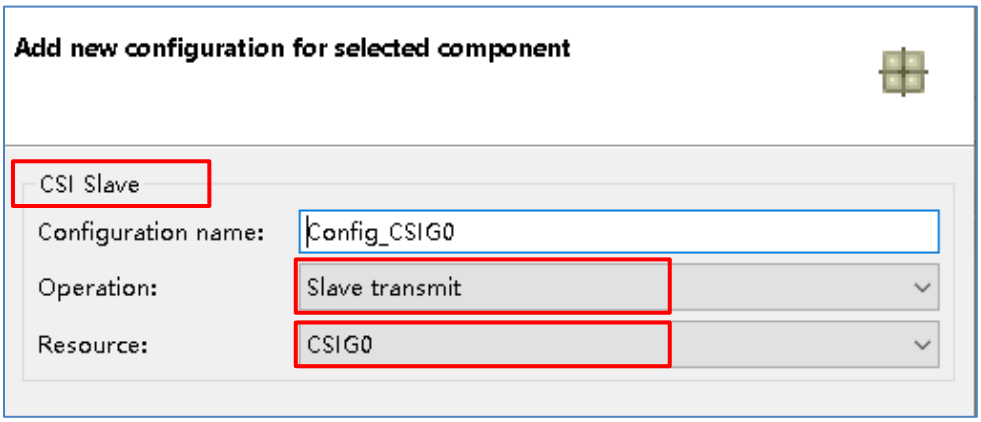
  CSIG0, CSIH2, CSIH3
- RH850/F1KM-S4: 144-pin, 176-pin, and 233-pin products

  CSIG0, CSIG1, CSIH2, CSIH3

■ When using CSI master



■ When using CSI slave



1.4 Workaround

Manually modify the generated CSIGnSO and CSIHmSO pin setting code in the following source file(Note).

- Source file: “<*Configuration-name*>.c”.
- Function: “void R_<*Configuration-name*>_Create(void)”

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

The wrong code and correct code are listed in the next table:

Pin name	Pin setting code in “void R_<Configuration-name>_Create(void)” function	
CSIG0SO (P10_6)	Wrong code	PORT.PDSC10 = (tmp_port | _PORT_SET_BIT7); PORT.PDSC10 = (uint32_t) ~(tmp_port | _PORT_SET_BIT7); PORT.PDSC10 = (tmp_port | _PORT_SET_BIT7);
	Correct code	PORT.PDSC10 = (tmp_port | _PORT_SET_BIT6); PORT.PDSC10 = (uint32_t) ~(tmp_port | _PORT_SET_BIT6); PORT.PDSC10 = (tmp_port | _PORT_SET_BIT6);
CSIG1SO (P11_9)	Wrong code	PORT.PIPC10 |= _PORT_SET_BIT9;
	Correct code	PORT.PIPC11 |= _PORT_SET_BIT9;
CSIH2SO (P11_2)	Wrong code	tmp_port = PORT.PDSC10;
	Correct code	tmp_port = PORT.PDSC11;
CSIH3SO (P11_6)	Wrong code	tmp_port = PORT.PDSC10;
	Correct code	tmp_port = PORT.PDSC11;

The following is an example of the required modification when <*Configuration-name*> is Config_ CSIG0 in the RH850/F1KM group. Manually modify the wrong code in red to correct code in blue.

Before modification

```
void R_Config_CSIG0_Create(void)
{
    ...
    /* Set CSIG0SO pin */
    PORT.PIBC10 &= _PORT_CLEAR_BIT6;
    PORT.PBDC10 &= _PORT_CLEAR_BIT6;
    PORT.PM10 |= _PORT_SET_BIT6;
    PORT.PMC10 &= _PORT_CLEAR_BIT6;
    PORT.PIPC10 &= _PORT_CLEAR_BIT6;
    tmp_port = PORT.PDSC10;
    PORT.PPCMD10 = _WRITE_PROTECT_COMMAND;
    PORT.PDSC10 = (tmp_port | _PORT_SET_BIT7);
    PORT.PDSC10 = (uint32_t) ~(tmp_port | _PORT_SET_BIT7);
    PORT.PDSC10 = (tmp_port | _PORT_SET_BIT7);
    PORT.PFC10 |= _PORT_SET_BIT6;
    PORT.PFCE10 &= _PORT_CLEAR_BIT6;
    PORT.PFCAE10 &= _PORT_CLEAR_BIT6;
    PORT.PIPC10 |= _PORT_SET_BIT6;
    PORT.PMC10 |= _PORT_SET_BIT6;
    ...
}
```

After modification

```
void R_Config_CSIG0_Create(void)
{
    ...
    /* Set CSIG0SO pin */
    PORT.PIBC10 &= _PORT_CLEAR_BIT6;
    PORT.PBDC10 &= _PORT_CLEAR_BIT6;
    PORT.PM10 |= _PORT_SET_BIT6;
    PORT.PMC10 &= _PORT_CLEAR_BIT6;
    PORT.PIPC10 &= _PORT_CLEAR_BIT6;
    tmp_port = PORT.PDSC10;
    PORT.PPCMD10 = _WRITE_PROTECT_COMMAND;
    PORT.PDSC10 = (tmp_port | _PORT_SET_BIT6);
    PORT.PDSC10 = (uint32_t) ~(tmp_port | _PORT_SET_BIT6);
    PORT.PDSC10 = (tmp_port | _PORT_SET_BIT6);
    PORT.PFC10 |= _PORT_SET_BIT6;
    PORT.PFCE10 &= _PORT_CLEAR_BIT6;
    PORT.PFCAE10 &= _PORT_CLEAR_BIT6;
    PORT.PIPC10 |= _PORT_SET_BIT6;
    PORT.PMC10 |= _PORT_SET_BIT6;
    ...
}
```

1.5 Schedule for Fixing the Problem

This problem will be fixed in a later version.

Revision History

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

Corporate Headquarters

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

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Contact information

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