

[Notes]

R20TS0717EC0100

Rev.1.00

Jun. 16, 2021

Smart Configurator for RH850

Outline

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

1. When using A/D converter with ADCJ2

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1.1 Applicable Products

Smart Configurator for RH850 V1.2.0 or later version

1.2 Applicable Devices

RH850 family: RH850/U2A group

- RH850/U2A16 (292-pin product)
- RH850/U2A8 (292-pin product)

1.3 Details

When using A/D converter on the following peripherals, the expected A/D conversion result cannot be obtained because of register setting of physical channels is wrong.

- RH850/U2A16 (292-pin product)
ADCJ2
- RH850/U2A8 (292-pin product)
ADCJ2

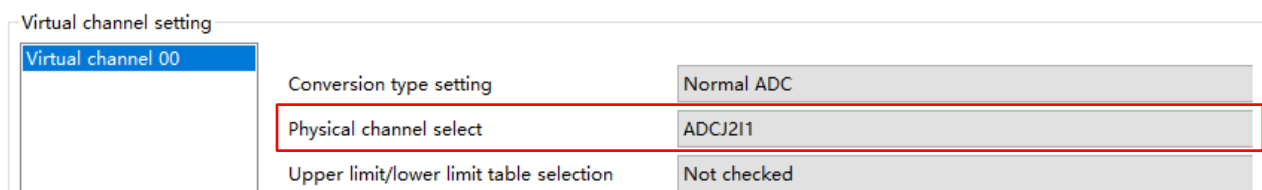


Figure 1-1 Setting of physical channel

1.4 Workaround

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

- 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 following is an example of the required modification when <Configuration-name> is Config_ADCJ2 in the RH850/U2A8 group. Manually modified the code in red color according to "Table 1-1 Correct code of physical channel setting".

```
void R_Config_ADCJ2_Create(void)
{
    .....
    /* Set ADC2 virtual channels setting */
    ADCJ2.VCR0 = _ADC_LIMIT_TABLE_SELECT_NONE | _ADC_GTM_ENTRY_ENABLE |
                 _ADC2_VIR_CHAN00_GTM_TAG | _ADC_NORMAL |
                 _ADC_VIRTUAL_END_INT_ENABLE | _ADC_PHYSICAL_CHANNEL_AN40 |
                 _ADC_TH_CHANNEL_1;
    .....
}
```

Table 1-1 Correct code of physical channel setting

Physical channel setting	Correct generation code
ADCJ2I0	_ADC_PHYSICAL_CHANNEL_AN00
ADCJ2I1	_ADC_PHYSICAL_CHANNEL_AN01
ADCJ2I2	_ADC_PHYSICAL_CHANNEL_AN02
ADCJ2I3	_ADC_PHYSICAL_CHANNEL_AN03
ADCJ2I4	_ADC_PHYSICAL_CHANNEL_AN10

1.5 Schedule for Fixing the Problem

This problem will be fixed in the next version. (Scheduled to be released in Oct 2021.)

Revision History

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

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