## **RENESAS** Tool News

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Note on Using the Following Tools: CS+ Code Generator for RX, e2 studio (Code Generator Plug-in), AP4 Coding Assistance Tool for RX

When using the CS+ code generator for RX, the e2 studio (Code Generator Plug-in), or the AP4 coding assistance tool for RX, take note of the problem on the following point that is described in this note.

- FIFO embedded Serial Communications Interface SCIFA10 Applicable MCUs: RX71M group (144 or more pins) and RX64M group (144 or more pins)
  - 1. Applicable Products
    - V1.09.00 and later versions of the CS+ Code Generator for RX
    - 4.2.0.012 and later versions of the e2 studio
      - (V2.1.1 and later versions of the Code Generator Plug-in)
    - V1.08.00 and later versions of the AP4 coding assistance tool for  $\mathsf{RX}^*$ 
      - \*: This note also applies to the following products.
        - V1.04.00 and later versions of the Application Leading Tool which is a coding assistance tool for RX

Note: The Application Leading Tool for RX is listed separately because its name has been changed to AP4 for RX from V1.08.00 (the latter are the newer versions of the former).

2. Applicable MCUs

RX family: RX71M group (144 or more pins) RX64M group (144 or more pins)

3. Description

Settings to select the following pins for the RXD10 and TXD10 pin functions of the FIFO embedded Serial Communications Interface SCIFA10 are impossible.

- Setting the P86 pin as RXD10
- Setting the P87 pin as TXD10
- 4. Workaround

The procedure for setting the RXD10 and TXD10 pin functions on pins P86 and P87 is as follows.

- (1) Select the following pin settings for the FIFO embedded Serial Communications Interface SCIFA10, and generate the code.
  - -RXD10: P81 pin
  - -TXD10: P82 pin

Note: Avoid any settings for pins P86 and P87.

(2) Modify the void R\_SCIFA10\_Create (void) in the way shown below. The function is in the r\_cg\_scifa.c file. These modifications are required every time code is generated.

```
(a) Setting P86 as RXD10
Before modification:
_____
void R_SCIFA10_Create(void)
{
. . . . . . . . . . . . . .
  /* Set RXD10 pin */
  MPC.P81PFS.BYTE = 0x0AU; /* Setting the peripheral function */
                /* to be allocated to P81. */
  PORT8.PMR.BYTE |= 0x02U; /* P81 is used for a peripheral */
                /* module. */
. . . . . . . . . . . . . .
}
       _____
After modification:
-----
                         _____
void R_SCIFA10_Create(void)
{
. . . . . . . . . . . . . .
 /* Set RXD10 pin */
 MPC.P86PFS.BYTE = 0x0AU; /* Setting the peripheral function */
                /* to be allocated to P86. */
 PORT8.PMR.BYTE |= 0x40U; /* P86 is used for a peripheral */
                /* module. */
. . . . . . . . . . . . . .
}
  _____
```

```
(b) Setting P87 as TXD10
Before modification:
void R_SCIFA10_Create(void)
{
. . . . . . . . . . . . . .
  /* Set TXD10 pin */
  MPC.P82PFS.BYTE = 0x0AU; /* Setting the peripheral function */
                 /* to be allocated to P82. */
  PORT8.PMR.BYTE |= 0x04U; /* P82 is used for a peripheral */
                 /* module. */
. . . . . . . . . . . . . .
}
       _____
After modification:
-----
                       -----
void R_SCIFA10_Create(void)
{
. . . . . . . . . . . . . .
  /* Set TXD10 pin */
  MPC.P87PFS.BYTE = 0x0AU; /* Setting the peripheral function */
                /* to be allocated to P87. */
  PORT8.PMR.BYTE |= 0x80U; /* P87 is used for a peripheral */
                 /* module. */
.....
}
        _____
```

5. Schedule for Fixing the Problem

This problem will be fixed in the next version.

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