

Note on Using Real-Time OS RI600V4 (for RX Family and Supported by CubeSuite+)

When using the RI600V4 real-time OS, which is used for the RX family of MCUs and supported by CubeSuite+, take note of the following problem:

- With using task analyzer tool for RI600V4
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1. Product and Versions Concerned

Real-time OS RI600V4 (for RX family)
V1.02.00 and V1.02.01

2. Description

If you start the kernel by using the task analyzer tool in the "Taking in trace chart by software trace mode" trace mode (see NOTE), 0s are written into address 0x00008007 a unit of a long word (4 bytes) at a time.

NOTE:

This mode is selected from the Selection of trace mode drop-down list box on the Task Analyzer tab in the RI600V4 Property panel of CubeSuite+.

3. Workarounds

3.1 Case Where Address 0x00008007 Is Within Internal RAM of MCU

To avoid this problem do either of the following:

- (1) Add the following source file (batch file) to the project, not using the source file as a library, but linking it directly to the application program and the kernel library.

Source file:

```
-----  
.SECTION    PRI_KERNEL, CODE  
.GLB    __RI_trcSW_init
```

```

__RI_trcSW_init:
    .GLB  __RI_BUFCB
    MOV.L #__RI_BUFCB,R1
    MOV.L #1,8[R1]

    MOV.L #0FFFFFFFH,4[R1]
    .GLB  __RI_TRCBUF
    MOV.L #__RI_TRCBUF,[R1]

    .GLB  __RIUSR_trcSW_init_tmr
    BSR  __RIUSR_trcSW_init_tmr

    MOV.L #__RI_BUFCB,R1
    MOV.L #0,8[R1]

    .GLB  __RI_trcinf_SW
    .GLB  __RI_TRCVALIDPTN
    MOV.L #__RI_TRCVALIDPTN,R1
    MOV.L #__RI_trcinf_SW,R2

    RTS

    .END

```

(2) Place no effective section in an address range of 0x8007 to 0x800A at linking.

3.2 Case Where Address 0x00008007 Is Not Within Internal RAM of MCU

Do not use the task analyzer tool in the "Taking in trace chart by software trace mode" trace mode.

4. Schedule of Fixing Problem

We plan to fix this problem in the next version of the product.

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