

Note on Using Renesas Peripheral Driver Library for RX62N/RX621 Groups and Peripheral Driver Generator - -With Using Real-Time Clock (RTC) of RX62N/RX621 Groups--

When using Renesas Peripheral Driver Library for the RX62N/RX621 groups and Peripheral Driver Generator, take note of the following problem:

- With using real-time clock (RTC) of RX62N/RX621 groups
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1. Products and Versions Concerned

- RX62N, RX621 Group Renesas Peripheral Driver Library V.1.02
- Peripheral Driver Generator V.2.01 and later

2. Description

If you use the R_RTC_Create function of the above peripheral driver library or the R_PG_RTC_Start function of the above peripheral driver generator, the R64CNT register cannot be cleared.

As a result, a deviation of less than one second may arise in the counting of seconds immediately after the real-time clock (RTC) starts counting.

3. Condition

This problem may arise if you use the RTC in both the products concerned.

4. Workarounds

Ways how to avoid this problem are described below.

4.1 For Peripheral Driver Library

Clear the R64CNT register before making a call to the R_RTC_Create function. An example is as follows:

```
-----  
/* Workaround begins here */
```

```

/* Reset the RTC */
RTC.RCR2.BIT.RESET = 1;
/* Wait for the reset to complete */
while (RTC.RCR2.BIT.RESET != 0);
/* Workaround ends here */

/* Configure the clock for an alarm at 12 noon every day */
R_RTC_Create(
    PDL_RTC_ALARM_HOUR_ENABLE | PDL_RTC_ALARM_MINUTE_ENABLE |
    PDL_RTC_ALARM_SECOND_ENABLE,
    0xFF114200, // Automatic day of week; 11:42:00
    0x20100916, // 16-Sep-2010
    0x00120000, // Alarm at 12 noon
    PDL_NO_DATA,
    alarm_function,
    15,
    PDL_NO_FUNC,
    PDL_NO_DATA
);

```

4.2 For Peripheral Driver Generator

Clear the R64CNT register before making a call to the R_PG_RTC_Start function. An example is as follows:

```

-----
/* Workaround begins here */
/* Reset the RTC */
RTC.RCR2.BIT.RESET = 1;
/* Wait for the reset to complete */
while (RTC.RCR2.BIT.RESET != 0);
/* Workaround ends here */

/* Configure the RTC */
R_PG_RTC_Start();

```

5. Schedule of Fixing Problem

We plan to fix this problem in a version published later.

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