

## Note on Using the Peripheral Driver Generator

When using the Peripheral Driver Generator, take note of the following problem:

- With selecting the external clock input as the source of the main clock in MCUs of the RX630, RX631, and RX63N groups
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### 1. Product and Versions Concerned

Peripheral Driver Generator V.2.04 to V.2.09

### 2. Description

In the RX630, RX631, and RX63N groups of MCUs, when source code is generated after selecting the external clock input as the source of the main clock and setting "Main clock (EXTAL input) frequency" to 17 MHz or above, an error might occur and the source code not be generated. This problem is caused by checking for errors in the frequency comparison value of the real-time clock (RTC) relative to the main clock settings, which is executed even when the RTC is not in use.

#### 2.1 Conditions for the problem

This problem occurs when all conditions of the procedures below are satisfied.

(1) The settings below are made on the RTCa tabbed page

- a. Select the "Use realtime clock" checkbox.
- b. Select "Main clock" from the "Count source select" pull-down menu.
- c. Deselect the "Use realtime clock" checkbox.

(2) The settings below are made on the SYSTEM tabbed page

- a. Select "External clock input" from the "Main clock oscillation source" pull-down menu.
- b. Input the value of 17 MHz or above for "Main clock (EXTAL input) frequency."

(3) Execute "Generate source files" from the toolbar after executing all steps of (1) and (2) above.

## Explanation

- (1) The RTC is not in use due to step c of procedure (1) above, but the frequency comparison value of the RTC is still effective in terms of error checking in this state. Note that when conditions for errors of the frequency comparison value of the RTC are already met before step c of procedure (1), the error will continue to be indicated, although this should have stopped after step c.
- (2) Step b of procedure (2) leads to an error due to the frequency comparison value of the RTC, and an icon indicating an error is displayed for the frequency comparison value of the RTCa tabbed page, but the icon is not displayed on the RTCa tabbed page. Since an error will have already been generated due to the frequency comparison value, source code cannot be generated by procedure (3).

### 3. Workaround

Follow the procedure given below to avoid checking for errors in the frequency comparison value.

- (1) Select the RTCa tabbed page.
- (2) Select the "Use realtime clock" checkbox.
- (3) Select "Sub-clock" from "Count source select" pull-down menu.
- (4) Deselect the "Use realtime clock" checkbox.

### 4. Schedule for Fixing the Problem

This problem will be fixed in a later revision of the product.

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