RENESAS Tool News

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Note on Using Peripheral Driver Generator

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

- With specifying the open-drain output in the I/O port when using the RX610, RX62N, RX630, RX631, RX63N, RX63T, RX210, and RX220 group of MCUs

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1. Product and Versions Concerned

Peripheral Driver Generator V.2.00 or later

2. Description

When using the R_PG_IO_PORT_Set_Pm function or R_PG_IO_PORT_Set_Pmn function generated by Peripheral Driver Generator, the open drain output cannot be specified while the input has been specified for the input/output direction.

The specifications of the R_PG_IO_PORT_Set_Pm function and the R_PG_IO_PORT_Set_Pmn function are as follows:

- R_PG_IO_PORT_Set_P<port number>
- R_PG_IO_PORT_Set_P<port number><pin number>

3. Workaround

When pins are set for the open drain output and the input/output direction is not changed as the output, directly specify the open drain control register as shown in the following examples without using the R_PG_IO_PORT_Set_Pm or R_PG_IO_PORT_Set_Pmn function that has been generated.

Example 1 of Workaround:
When P01 is set to N-channel open drain in RX62N group of MCUs

```
------------------------------------------------------------
 PORT0.ODR.BIT.B1 = 1;
------------------------------------------------------------
```

Example 2 of Workaround:

When P17 is set to N-channel open drain in RX630 group of MCUs

```
------------------------------------------------------------
 PORT1.ODR1.BIT.B6 = 1;
------------------------------------------------------------
```

Example 3 of Workaround:
When PE1 is set to P-channel open drain in RX630 group of MCUs

```
------------------------------------------------------------
 PORTE.ODR0.BIT.B2 = 0;
 PORTE.ODR0.BIT.B3 = 1;
------------------------------------------------------------
```

4. Schedule for Fixing the Problem

The plan for fixing this problem has yet to be determined.
