RENESAS TECHNICAL UPDATE

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Title	Notes on using the general PWM timer (GPT)		Information Category	Technical Notification		
Applicable Product	RZ/T1 Group	Lot No.	Reference Document	RZ/T1 Group User's Manual Hardware Rev1.3 R01UH0483EJ0130 Rev.1.30		
		All lots				

We have identified some restrictions on usage of the general PWM timer (GPT) in saw-wave operation. The following describes the usage limitations and the corrections in the manual.

■Usage Limitations

1) Do not use input capture as the trigger for synchronized clearing in synchronized operation. If a PWM waveform is being output in synchronized operation, using input capture as the trigger for clearing may lead to the PWM output not being as intended. This will depend on the timing of the generation of input capture.

2) Do not change the GTPR register settings when using down-counting to obtain saw-wave operation. Moreover, do not use buffered operation to change the GTPR register. If this is done, the peripheral settings may become other than as intended.

■Corrections in the Manual

1) Page 1000 : Add the following description of the CCLR[1:0] bits (Counter Clear Source Select) in 21.2.14 General PWM timer control register (GTCR).

    When synchronized clearing is in use, the CCLR[1:0] bits of the target channel should not be set to 01b or 10b.

2) Page 1001 : Add the following description of the PR[1:0] bits (GTPR Buffer Operation) in 21.2.15 General PWM timer buffer enable register (GTBER).

    When using down-counting in saw-wave operation, set the PR[1:0] bits to 00b(Buffer operation is not performed).

3) Page 1007 : Add the following description in 21.2.21 General PWM timer cycle setting register (GTPR).

    Do not change GTPR when using down-counting in saw-wave operation.

4)   Page 1026 : Add the description in 21.3.2.1 GTPR register buffer operation.

 Setting of buffered operation is prohibited when down-counting is used in saw-wave generation.

The buffer transfer is performed on an overflow or counter clearing in saw-wave mode, and at the troughs in triangle-wave

mode.

5)   Page 1027 : Delete the figure titled "Figure 21.14 Example of GTPR Buffer Operation (Down-Counting in Saw-Wave

       Operation)".