RENESAS TECHNICAL UPDATE

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Product Category	MPU/MCU		Document No.	TN-R8C-A062A/E	Rev.	1.00
Title	Caution on using wait mode		Information Category	Technical Notification		
Applicable Product	R8C/36E, R8C/36F, R8C/36G, R8C/36H R8C/38E, R8C/38F, R8C/38G, R8C/38H R8C/36W, R8C/36X, R8C/36Y, R8C/36Z R8C/38W, R8C/38X, R8C/38Y, R8C/38Z	Lot No.	Reference Document	Latest user's Manual of applicable products		
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This caution below applies to wait mode in the above mentioned Applicable Products.

1. Description

When the CM02 bit is set to 1 (peripheral function clock stops in wait mode) and fOCO40M is selected as timer RG count source, it is not usable the timer RG interrupt as exit wait mode.

The errata for "Table. Interrupts to Exit Wait Mode and Usage Conditions" in User's Manual of the applicable products is shown below. (The contents of errata are the same for all applicable products.)

●   Interrupts to Exit Wait Mode and Usage Conditions

Correct:

Table. Interrupts to Exit Wait Mode and Usage Conditions

Interrupt	CM02 = 0	CM02 = 1
Serial interface interrupt	Usable when operating with internal or external clock	Usable when operating with external clock
Synchronous serial communication unit interrupt	Usable in all modes	(Do not use)
Key input interrupt	Usable	Usable
A/D conversion interrupt	(Do not use)	(Do not use)
Timer RA0 interrupt, Timer RA1 interrupt	Usable in all modes	Usable if there is no filter in event counter mode. Usable by selecting fOCO as count source.
Timer RB interrupt	Usable in all modes	Usable by selecting fOCO as timer RA count source and timer RA underflow as timer RB count source
Timer RC interrupt	Usable in all modes	Usable by selecting fOCO40M or fOCO-F as count source
Timer RD interrupt	Usable in all modes	Usable by selecting fOCO40M or fOCO-F as count source
Timer RE interrupt	Usable in all modes	(Do not use)
Timer RF interrupt	Usable in all modes	(Do not use)
Timer RG interrupt	Usable in all modes	**(Do not use)**
$\overline{\text{INT}}$ interrupt	Usable	Usable ($\overline{\text{INT}}0$ to $\overline{\text{INT}}4$ can be used if there is no filter.)
Voltage monitor 1 interrupt	Usable	Usable
Voltage monitor 2 interrupt	Usable	Usable
Oscillation stop detection interrupt	Usable	(Do not use)
CAN0 wakeup interrupt	Usable	Usable

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Incorrect:

Table. Interrupts to Exit Wait Mode and Usage Conditions

Interrupt	CM02 = 0	CM02 = 1
Serial interface interrupt	Usable when operating with internal or external clock	Usable when operating with external clock
Synchronous serial communication unit interrupt	Usable in all modes	(Do not use)
Key input interrupt	Usable	Usable
A/D conversion interrupt	(Do not use)	(Do not use)
Timer RA0 interrupt, Timer RA1 interrupt	Usable in all modes	Usable if there is no filter in event counter mode. Usable by selecting fOCO as count source.
Timer RB interrupt	Usable in all modes	Usable by selecting fOCO as timer RA count source and timer RA underflow as timer RB count source
Timer RC interrupt	Usable in all modes	Usable by selecting fOCO40M or fOCO-F as count source
Timer RD interrupt	Usable in all modes	Usable by selecting fOCO40M or fOCO-F as count source
Timer RE interrupt	Usable in all modes	(Do not use)
Timer RF interrupt	Usable in all modes	(Do not use)
Timer RG interrupt	Usable in all modes	**Usable by selecting fOCO40M as count source**
$\overline{\text{INT}}$ interrupt	Usable	Usable ($\overline{\text{INT}}$0 to $\overline{\text{INT}}$4 can be used if there is no filter.)
Voltage monitor 1 interrupt	Usable	Usable
Voltage monitor 2 interrupt	Usable	Usable
Oscillation stop detection interrupt	Usable	(Do not use)
CAN0 wakeup interrupt	Usable	Usable