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RENESAS TECHNICAL NEWS

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M16C/6N0, 6N1 Group Precaution When Using Oscillation Stop Detection Function

Classification Corrections and supplementary explanation of document ✓ Notes Knowhow Others	Concerned Products M16C/6N0, 6N1 Group
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1. Precautionary note

Do not enable the oscillation stop detection interrupt when using the oscillation stop detection function of the M16C/6N0, 6N1 group.

Multiple interrupt requests may be generated if the CM27 bit of the CM2 register is “1” (the oscillation stop detection interrupt is used when detecting the oscillation stop).

In this case, MCU goes out of control due to overflow of the stack.

2. Countermeasure

When using the oscillation stop detection function, set the CM27 bit of the CM2 register to “0” (An internal reset is generated when detecting the oscillation stop).

Figure 1 shows a sample program of initial set-up for the oscillation stop detection function. Figure 2 shows the structure of the oscillation stop detection register.

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                ⋮
BSET    prc0          ; protect off
BCLR    cm27          ; when oscillation stop is detected, generates an internal reset
BSET    cm20          ; start the oscillation stop detection function
BCLR    prc0          ; protect on
                ⋮
    
```

Figure 1. Sample program of initial set-up for the oscillation stop detection function

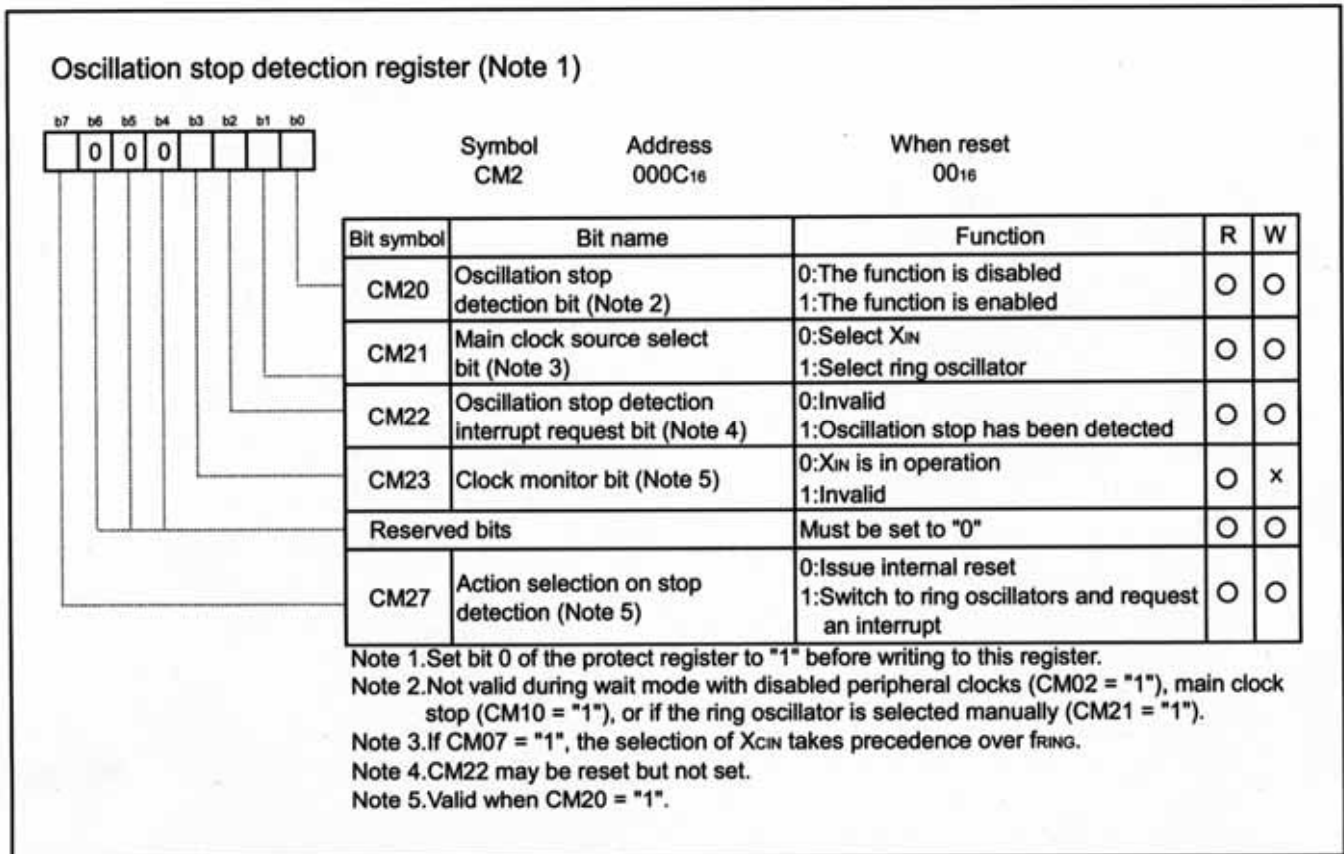


Figure 2. Structure of the oscillation stop detection register