

To our customers,

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## Old Company Name in Catalogs and Other Documents

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On April 1<sup>st</sup>, 2010, NEC Electronics Corporation merged with Renesas Technology Corporation, and Renesas Electronics Corporation took over all the business of both companies. Therefore, although the old company name remains in this document, it is a valid Renesas Electronics document. We appreciate your understanding.

Renesas Electronics website: <http://www.renesas.com>

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# MESC TECHNICAL NEWS No. M16C-25-9905

## M16C/60 , M16C/20 Series

### Precautions for Wait and Stop modes

#### 1. Related devices

M16C/60 Series , M16C/20 Series

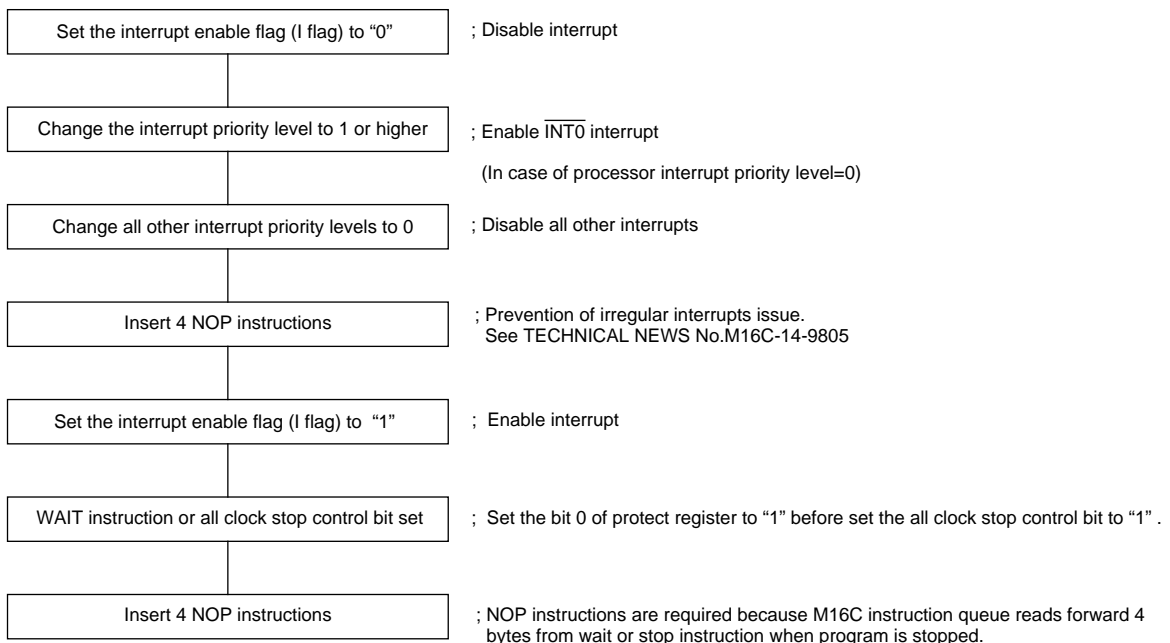
#### 2. Precautions

The M16C has both WAIT and STOP modes. These modes can be used to reduce power consumption when the CPU is not required to perform any work. To return to normal operating mode after issuing a WAIT instruction or setting the all clock stop control bit, perform a hardware reset or use an interrupt. The interrupts for canceling the WAIT and STOP modes must be enabled before entering either mode. The priority level of the interrupts not used for these modes should be set to 0 before switching into the WAIT or STOP modes. Also, if only hardware reset or  $\overline{\text{NMI}}$  interrupts are used for canceling the WAIT or STOP modes, all interrupt priority level should be set to 0 before switching into the WAIT or STOP mode.

#### 3. Examples

**3.1 Use the following algorithm to enter the WAIT or STOP modes when an interrupt is used to cancel either mode.**

- **Hardware reset,  $\overline{\text{NMI}}$  interrupt, and  $\overline{\text{INT0}}$  interrupt is used to cancel either mode**



**3.2 When using only hardware reset or  $\overline{\text{NMI}}$  interrupt to cancel the STOP or WAIT modes, use the following algorithm to enter the STOP or WAIT modes.**

