

Product Types				
TOSHIBA Microcontrollers TX03 series				
TMPM330	TMPM341	TMPM365	TMPM366	TMPM369
TMPM36B	TMPM380	TMPM384	TMPM395	

### Restrictions on Transition to the STOPx Mode

This is to inform you of restrictions on use of the STOPx Mode.  
If you need any further information, please contact your local Toshiba sales representative.

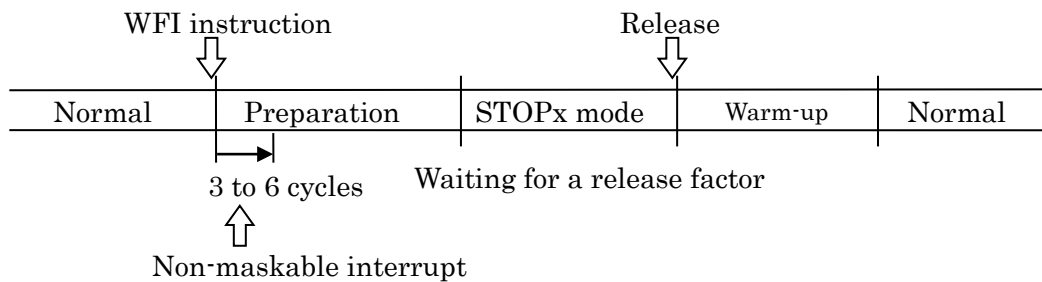
#### 1. Restrictions

If a non-maskable interrupt request for release from the STOPx occurs while the WFI instruction is being executed to enter STOPx mode, the MCU enters STOPx mode without the release process of STOPx mode

- STOPx mode: STOP, STOP1, STOP2, and BACKUPSTOP modes
- Since a non-maskable interrupt notice and the flag setting to the CPU are normal, a non-maskable interrupt processing can be performed after STOPx mode is released.
- When the MCU enters STOPx mode, release factors other than a non-maskable interrupt are accepted; however a non-maskable interrupt may not be accepted.

#### 2. Conditions

- The WFI instruction is executed to enter STOPx mode.
- A non-maskable interrupt (from the NMI pin, watchdog timer, or voltage detection circuit) occurs within 3 to 6 cycles after the WFI instruction is executed.



#### 3. Workaround

Do not use a non-maskable interrupt as a release factor for STOPx mode.  
Before the MCU enters STOPx mode, the following measures should be taken to inhibit the non-maskable interrupts:

- $\overline{\text{NMI}}$  pin: Set the external input to be fixed at "1".  
(External inputs are fixed to high level to avoid receiving the interrupt inputs.)
- Watchdog timer (WDT): Stop the watchdog timer or set the reset function.
- Voltage detection circuit (VLTD): Stop the voltage detection circuit or set the reset function.