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## RENESAS TECHNICAL UPDATE

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| Product<br>Category   | MPU/MCU   |         | Document<br>No.         | TN-16C-A245A/E                   | Rev. | 1.00 |
|-----------------------|---|---------|-------------------------|----------------------------------|------|------|
| Title                 | Precaution of using Watchdog Timer when block erase execute at EW1 mode                                 |         | Information<br>Category | Technical Notification           |      |      |
| Applicable<br>Product | M16C/26A(M16C/26A, 26B, 26T) Group<br>M16C/28 Group<br>M16C/29 Group<br>Flash Memory products of above. | Lot No. | Reference<br>Document   | User's Manual of target products |      | ts   |

A problem of the applied products is explained in the below.

## 1-1. Applied Products

M16C/26A (M16C/26A, 26B, 26T) Group, M16C/28 Group, M16C/29 Group Flash Memory products of above.

## 1-2. Precaution

It is possible that the Watchdog Timer might not stop when FMR11 bit in the FMR1 register is set to "1" (EW1 mode) and when Block Erase command is executed. When the Watchdog Timer underflows, target Block in flash memory may not read normal value because Block Erase sequence is stopped.

## 1-3. Workaround for software

To avoid this behavior, please execute following measures.

- (1) Please set WDC7 bit in the WDC register to "1" (Divided by 128) and write WDTS register before Block Erase command is executed (within 128 cycles).
- (2) Please clear FMR11 bit in the FMR1 register to "0" (EW0 mode).

Please contact Renesas sales division.

