March 2013

<u>Important Notice</u>

Thank you for your continued patronage of Toshiba microcontrollers.

This page gives you important information on using Toshiba microcontrollers. Please be sure to check each item for proper use of our products.

▶ **Datasheet Modifications: Additional cautions on use of clock multiplication circuit (PLL)** <u>(March 2013)</u>

*If your datasheet is dated 1 April 2010 or earlier, please download the latest datasheet or request it from your local Toshiba office.

Toshiba Microcontroller   TX19A/H1 series

TX19A/H1 series

   TMP19A44FDAXBG   TMP19A44F10XBG   TMP19A44FEXBG   TMP19A31CYFG

Datasheet Modifications: Additional cautions on use of clock multiplication circuit (PLL)

This is to inform you of additional cautions on use of the clock multiplication circuit (PLL) built-in TX19A/H1 series described in the datasheet.
If you need any further information, please contact your local Toshiba sales representative.

【Revised content】

Before correction

5.6 Clock Multiplication Circuit (PLL)

This circuit outputs the fpll clock that is multiplied by eight of the high-speed oscillator output clock, fosc.

This lowers the oscillator input frequency while increasing the internal clock speed.

After correction

5.6 Clock Multiplication Circuit (PLL)

This circuit outputs the fpll clock that is multiplied by eight of the high-speed oscillator output clock, fosc.

This lowers the oscillator input frequency while increasing the internal clock speed.

> (Note) When starting PLL operation, a stable time of approximately 100μs must be specified by the
> warm-up function for lock-up time.