PRODUCT NAME
TM87 ICE

TITLE
How to measure and adjust the frequency of oscillator on TM87 ICE and DEMO BOARD?

APPLICATION NOTE

In terms of the development of application programming based on TM87 ICE, if a RC oscillator is selected as the clock source, the measurement of frequencies produced by different RC values requires the use of an oscilloscope or other testing equipment. Since all trigger probes for testing equipment have existed with capacitance to ground, when a probe directly touches the input/output end of the RC oscillator, a series measurement error may occur between the measured frequency and the real frequency.

In order to obtain the accurate oscillator frequency, please refer to the following instruction as the standard of measurement.
1. the attached “TFREQ.ICE” from AP note directory and download to TM87 ICE or TM87 DEMO BOARD.
2. Change the oscillator on TM87 ICE or DEMO board the oscillator jumper to the one that needs to be measured. Then, adjust VDD voltage to the actual operating voltage. Measure the frequency through BZ or BZB pin.

This way can avoid the error resulted from the direct contact of a probe on the oscillator.