

Timing On-the-fly-NBTI(Id) version 2 release

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The initial release of the Timing On-the-fly-NBTI for EasyEXPERT software has been well accepted in semiconductor reliability users.

New improved second version is released for more accurate NBTI reliability characterization by implementing a several feedback from the previous version users.

The improvements in release 2 version are listed below;

1. **NBTI Stress timing**

Stress timing is changed to user set stress time list from the periodic interval timing of the first released version.

By eliminating the Id measurement timing only to the necessary NBTI characterization points defined by user, the dynamic recovery effect can be minimized and more accurate NBTI degradation data can be obtained.

The stress time parameter can be set in the “Stress Time List” in the lower end of the Test Parameters GUI.

The maximum time of the stress is limited in the “TotalStressTime” parameter regardless of the stress time list. Therefore the user can set only the stress time necessary in the test though you can set maximum 13 stress time in the list.

2. **Stress Timing can be monitored without oscilloscope.**

The sampling Id start timing that is equal to the end of the previous NBTI stress is shown in the Parameters window as “Stress_time_at” parameter.

The user can check the actual stress and NBTI Id measurement timing by monitoring this parameter without using an oscilloscope.

3. **Stress timing accuracy is improved.**

NBTI Stress accuracy is an important parameter for extrapolating the NBTI degradation to a use condition. The default stress timing of the software is adjusted for running the EasyEXPERT software on the B1500A. If the software is used on the Desktop EasyEXPERT software, “Stress_T_adj” parameter that can be found in far bottom of the “Test Parameters GUI window” may necessary for obtaining a better stress time accuracy.

(For using with faster PC, this time would be set shorter from the default -2.3 sec to -1 sec for Pentium 3 MHz PC, as an example)

The detail for adjustments can be seen in the information of the library.

End of readme