



Teseda Diagnostic Test System™

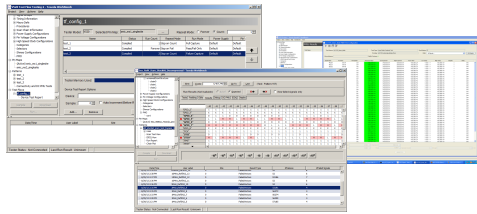
Versatile Bench Top System for Test and Failure Analysis

Teseda Diagnostic Test System™ Highlights:

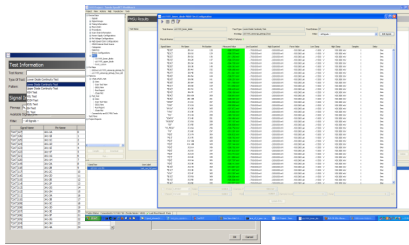
- Small, compact and mobile scan-based system focused on silicon debug, test development, and Failure Analysis
- Quickly perform the same tests run in production, but with access to the detailed failing data for precise device analysis
- Test patterns, hardware configuration setups and test results are all saved and archived in a single environment
- Multipurpose platform to run tests on the device for pre- and post-production test, at the factory or in the field
- Capture test results in pass/fail, failure capture and full capture modes of operation and display the test results graphically
- Built-in DC parametric measurement tests with access to any pin by external instrumentation
- Stimulate the device in Failure Analysis with vector looping and pause capabilities for emission or to further analyze the behavior of defect



Diagnostic Test Hardware



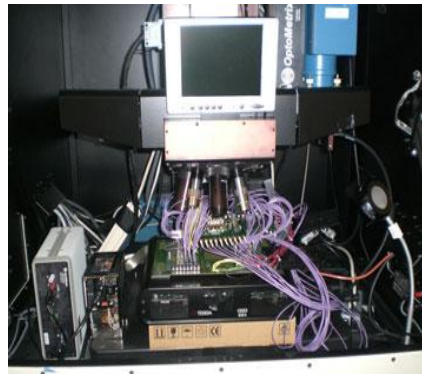
Teseda WorkBench™



DC Parametric Test

Characterize Force/Measure
Current/Voltage

Silicon bring up,
pattern debug,
scan and DC
parametric
testing



Advanced Failure Analysis using dynamic
stimulus LIVA / TIVA / OBIRCH, LADA (Light
Assisted Device Alteration), Ebeam probing

Key Benefits:

- Leverages scan to accelerate real-time interactive silicon validation, debug and failure analysis
- Run one pattern set at a time or consecutively run multiple tests on the device with complete capture of all failures in either mode
- Small and light weight footprint is ideal for device stimulus in Failure Analysis, eliminating the need for large and expensive ATE
- Effectively zero vibration
- Perform continuity and device characterization with built-in menu driven parametric testing

Interactive Scan-Based Testing, and Device Stimulus for Failure Analysis

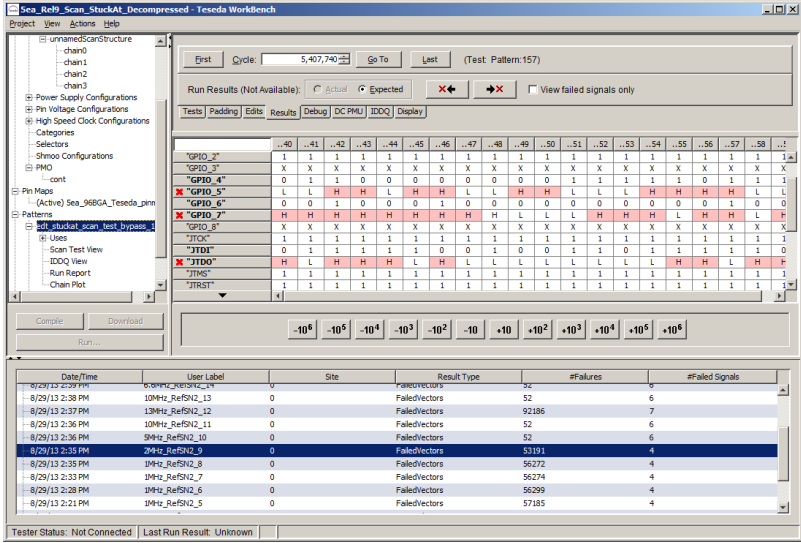
The **Teseda Diagnostic Test System™** is optimized for interactive scan-based testing to increase productivity for design and test engineering by eliminating the extra time and expense of debugging on complicated production testers. Get through silicon debug faster and validate test patterns sooner with features specifically designed to easily analyze scan test results for failing device behaviors. The **Teseda Diagnostic Test System™** provides deep pattern and capture memories enabling full data logging of device failures for accurate failure diagnosis.

The **Teseda Diagnostic Test System™** is also a portable, light weight, and very low noise diagnostic test system for ease of integration with Failure Analysis imaging or analysis systems such as emission scopes, OBIRCH, LADA, LIVA, TIVA. FA engineers can take advantage of direct access to the volume of data typically associated with failing devices. Quickly confirm failures seen on the production floor, determine the logical design location of the failures, and stimulate the device in Failure Analysis dynamic device probing techniques.

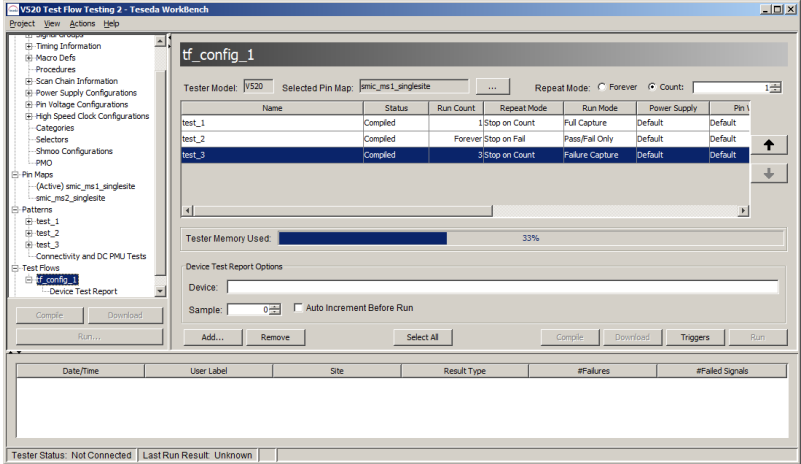
One compact solution for Device Debug, Test, Diagnostics and Failure Analysis

Teseda Diagnostic Test System™

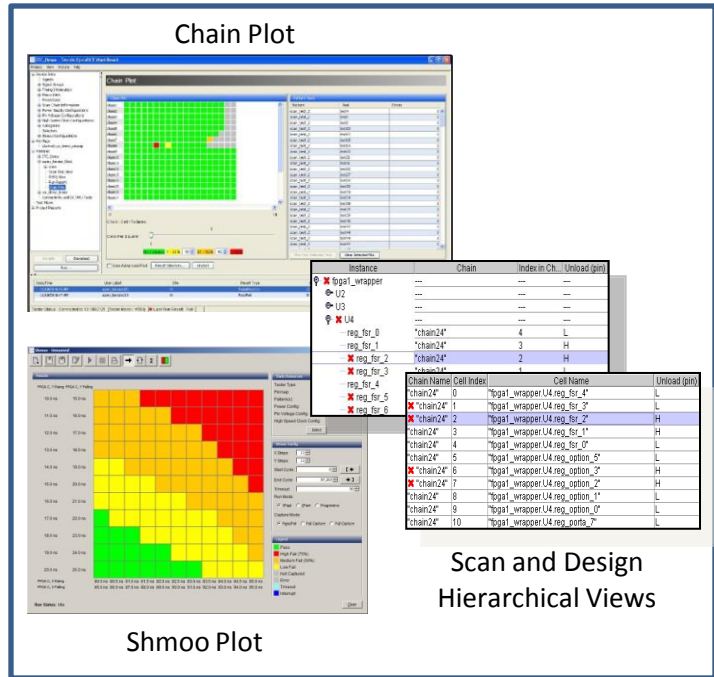
- Teseda WorkBench™ controls the Teseda Diagnostic Test Hardware to perform scan-based testing with simple navigation to quickly identify scan mismatches
- 64M per pin vector depth for high force, expect and failure capture data
- Multiple internal power supplies and optional external power supplies control capability with adjustable power-up sequence and delay time
- High reliability, small form factor, air-cooled and portable at 13.5 lbs for easy transport between office, lab and remote locations
- Reports and generates scan failure logs in EDA formats and cycle logs highlighting failing cycles
- Performs DC parametric and IDDQ test
- Shmoo plot and pattern editing of pattern data, clocks and strobe



Diagnose mismatching scan cell for defect behavior



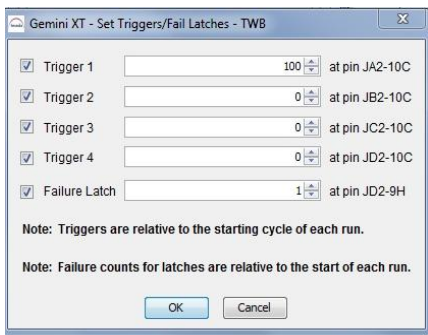
Run consecutive tests with repeat and looping capabilities



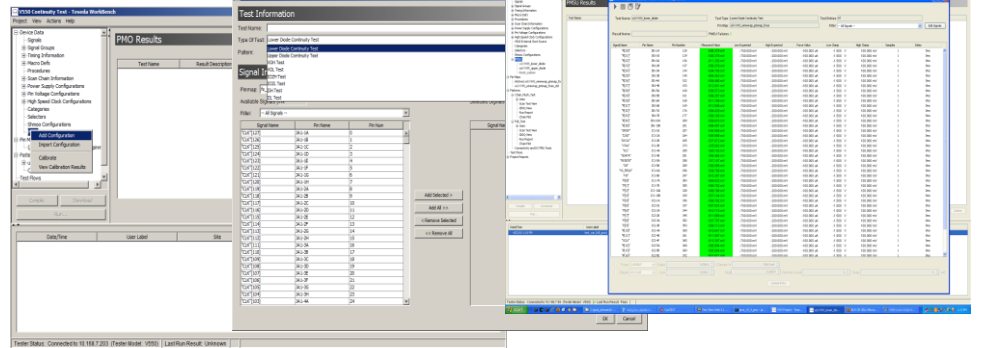
Chain Plot

Shmoo Plot

Scan and Design Hierarchical Views



Generate trigger outputs at specific pattern (cycle)



Continuity and DC Parametric Testing



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