

# Stone Pillar BenchTestManager-Hanwa Interface

## Delivering Complete ESD Test Automation

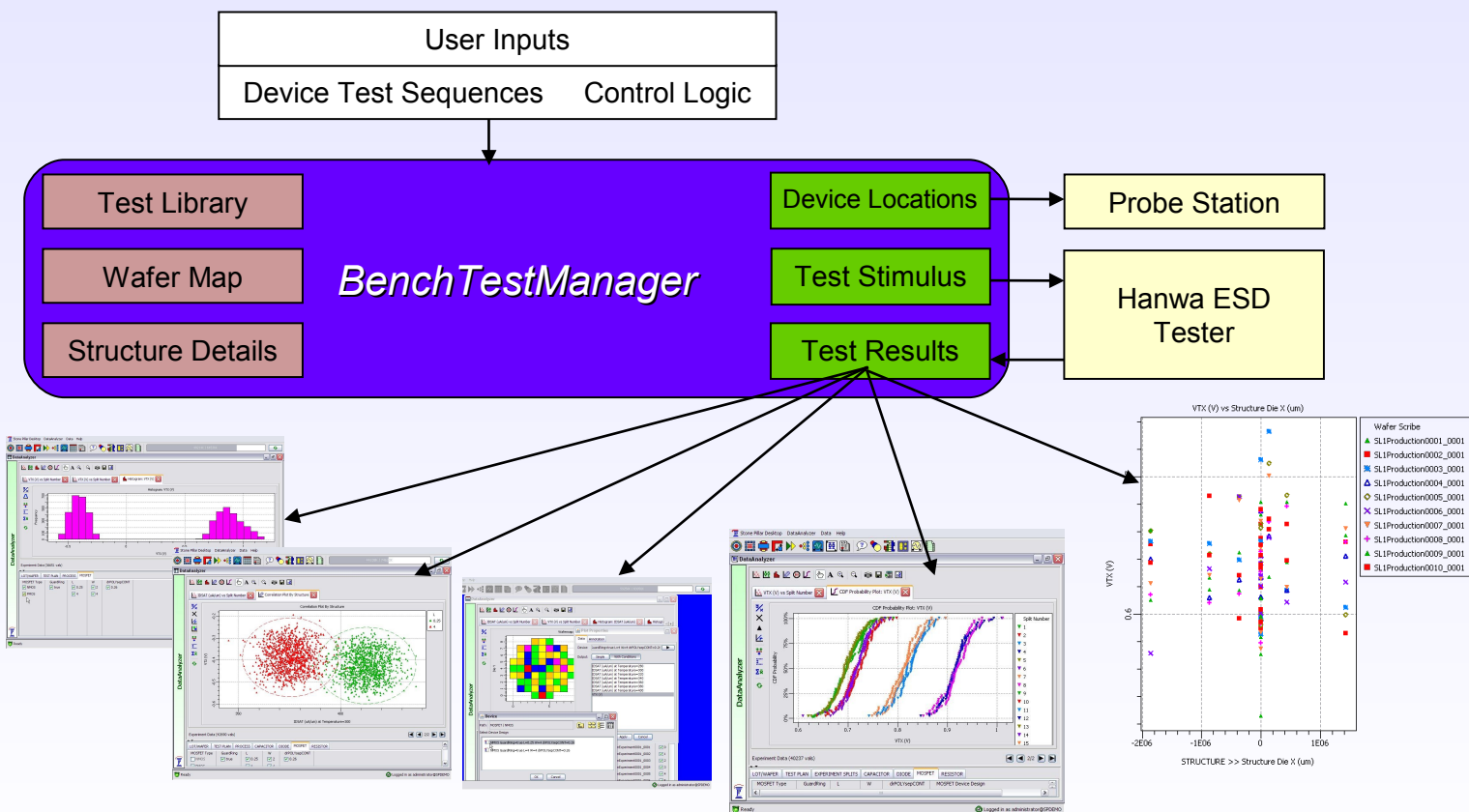
Combining the test automation capabilities of **Stone Pillar BenchTestManager** with **Hanwa ESD testers** brings an unprecedented level of automation to ESD testing.

**BenchTestManager** enables users to configure test settings, create test structure sequences, apply tests to these sequences, and set up branching based on initial test results. Creation of a complete test sequence in this way can be performed from any networked computer before ever setting up at the test bench. Once the wafer is loaded, just select the pre-defined test sequence and begin execution. As the test sequence commences, results stored in the **Stone Pillar Data Server** can be reviewed and analyzed from any networked computer.

**BenchTestManager** retains information about all tests as they are run so that you can easily select to run new test sequences using only untested die or devices or review the results and run more complete tests on particular designs.

**Stone Pillar DataAnalyzer** exploits the structure and test details so users can perform comparison of data sets from different test sessions or wafers or comparisons based on any device attribute. Use **DataAnalyzer** for rapid, complete, and easy to use data analysis including scatter plots, box plots, wafer map plots, distribution plots, cumulative distribution plots, correlation plots, basic statistics and much more, all from the comfort of your desk.

No more peering through the scope looking for untested structures! No more tying up precious bench time setting up tests or doing analysis. No more waiting at the bench while tests execute! You can even configure the test sequence to send you an email upon completion! Now ESD engineers have access to the same high volume testing and statistical analysis tools that e-test engineers have enjoyed for years!



# Capabilities

- Prepare everything except test execution from your desk before tying up test equipment
- Create sequences of die and test structures from your desk
- Easily select only previously untested devices or die
- Apply tests to structure sequences to create complete test sequences
- Run test sequences automatically using a combination of Hanwa ESD tester, a semi-automated probe station, and BenchTestManager
- Combine test sequences with control logic to create complete test plans that truncate testing of unpromising designs and test more promising ones in more detail
- Store test results along with complete structure and test details in the Stone Pillar database
- Review and compare the results of previous runs at any time, from any networked computer
- Easily manipulate test data to get detailed view of performance versus structure design attributes, wafer location, experimental split, test session, and many more details, all stored with the test results for review at your convenience using Stone Pillar DataAnalyzer
- Analyze results from multiple test sessions across multiple wafers
- Easily create various plots including:
  - Box plots
  - Scatter plots
  - Correlation plots (by individual structure or die)
  - Distribution plots
  - Cumulative distribution plots including lognormal and Weibull plots
- Easily save plots into reports or save configurations of plots for repeated analysis of key attributes with each tested wafer

TestChipBuilder	BenchTestManager	TestPlanManager	DataAnalyzer
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Stone Pillar Data Server

## About Stone Pillar Technologies

Stone Pillar Technologies provides enterprise software solutions for Process & Device Technology Development and Characterization.

*Stone Pillar Suite* provides a complete, broad-span, information management system focused on solving problems in semiconductor process & device development.

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