GALAXY OPTIMIZER

Galaxy Optimizer is a software suite that helps A5xx and Catalyst test engineers automate the task of test program optimization. Built upon optimization algorithms and SPC features, Galaxy Optimizer enables test time reduction while maintaining the desired test correlations. Its intuitive graphical user interface allows you to master the solution in just a few hours. When included in the test program development flow, Galaxy Optimizer allows you to drastically reduce test time in a couple of hours compared to the several days usually required when using the standard approach, thereby allowing test engineers to focus on more value added activities.
Galaxy Optimizer typically reduces test time by 10 to 30%.

KEY FEATURES

- Works on all analog/mixed signal device test programs developed on Teradyne A5XX, Catalyst and Tiger test systems
- Dynamically adapts to test environment changes and therefore helps optimize test guardbands
- Applies automatically to all wait statements but can apply to any test parameter such as the number of samples for an analog measurement or averaging when test program is written accordingly
- Displays statistical data and identifies unrepeatable tests
- Maintains user defined correlation criteria (sigma, CPK, mean, etc.)
- Integrates within your existing production environment
- Supports multi-site test programs
- Rapid deployment across the test floor
- Easy to maintain and upgrade
- Zero footprint
- Provides valuable process data to Test Engineers

BENEFITS

- Increase test engineers' efficiency by reducing optimization time
- Relieves test engineers from some of the tedious optimization tasks
- Drastically improves test equipment productivity therefore reduces the Cost-Of-Test

SUPPORTED CONFIGURATIONS

- Server and Workstation:

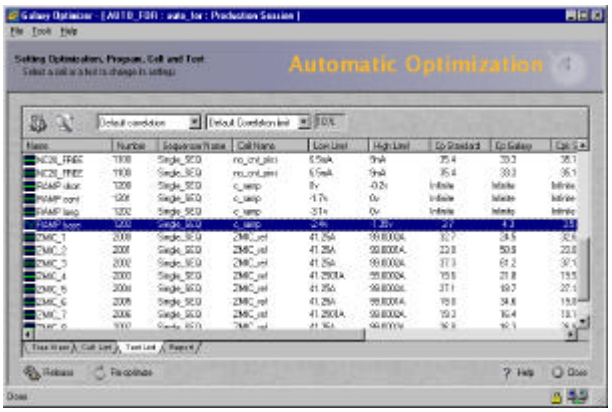
	HW	OS	Mem	HD
Galaxy Information Server	✓ Sun Ultra5 or higher ✓ Color monitor supporting 256 colors or more	✓ Solaris2. 6 or higher ✓ CDE installed ✓ X11 and Motif supported	✓ 128 Mo or higher	✓ 500 Mo or higher
Galaxy Workstation	✓ Sun Ultra5 or higher ✓ Color monitor supporting 256 colors or more	✓ Solaris 2.5.1 or higher ✓ CDE installed ✓ X11 and Motif supported	✓ 128 Mo or higher	

- Tester: All A5xx, Catalyst and Tiger running any Image version

For any additional information about Galaxy Optimizer, please write to sales@galaxysemi.com

SAMPLE OF HTML REPORT GENERATED BY GALAXY OPTIMIZER

TEST SETTINGS:



Before starting an optimization, you can change the optimizer's default correlation settings for each test. When you highlight one or multiple tests, the tool bar displays multiple fields allowing you to change the default correlation rule used to monitor these tests. You can select one of the following:

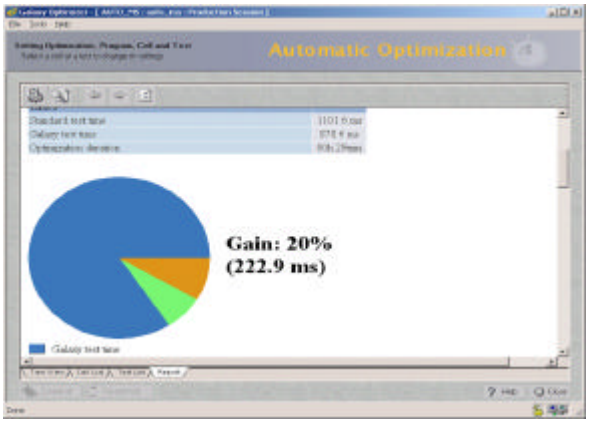
Default correlation: tests are monitored using the default correlation rules

Ignore test: Optimizer totally ignores the test, regardless of the binning result. This selection is useful for tests that do not have parametric values, but rather temperature, or testing time.

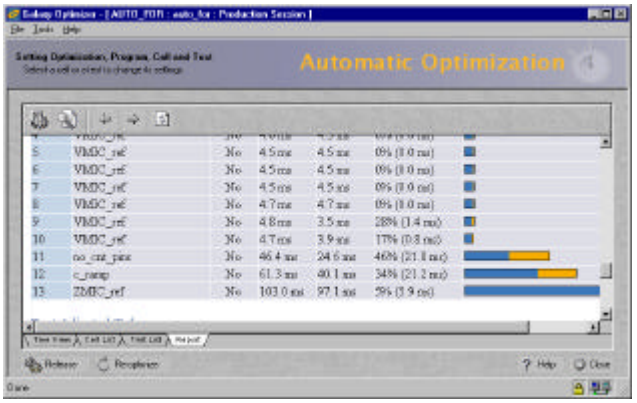
No correlation check: Optimizer ignores any test result drift as long as the test doesn't fail.

OPTIMIZATION RESULTS:

Once the optimization session is complete, or when reloading an existing optimization session, you can display the Optimizer HTML report. The pie chart shows the two gains resulting from the two phases of the Galaxy optimization process.



REPORTS:



Since Galaxy Optimizer works on individual test functions, all necessary HTML reports are generated, allowing the test engineer to easily create test program documentation such as the test profile, the specific test function correlation criteria, the statistical analysis of the test results, and all tests that have been intentionally excluded from the optimization.