

Key Features

- AUTOMATED DATA RETRIEVAL, VALIDATION AND INSERTION**
 Collects production data from anywhere in the world, validates it against user-defined criteria, and then automatically inserts it into a MySQL or Oracle database. Processes all popular test data formats, including STDF, GDF, WAT, PCM, compressed files and more.
- PROGRAMMABLE YIELD & TEST ALARMS, STATISTICAL BIN LIMITS (SBL)**
 A flexible interface lets you define yield monitoring rules that check for low yield conditions on any individual bin or combination of bins, or on specific parametric test results. Regular expressions with wild-cards as well as SBL (based on historical data) are supported.
- AUTOMATED MERGING OF RETEST DATA**
 Automatically consolidates test and retest data to provide an accurate yield assessment and avoid false alarms.
- MANAGEMENT KPI DASHBOARDS**
 With interactive Web-based Semiconductor Intelligence Dashboards, operations and business unit executives can have near real-time access to yield, throughput, cost and other key performance indicators (KPIs) from any Web browser.
- AUTOMATED REPORT CENTER**
 Automatically generates management-level reports, including: raw yield, consolidated yield by product(s), subcons(s), tester(s), etc. Easy to configure reports and split lots across a broad range of criteria.
- DIE TRACE**
 Correlates final test issues to geographical and wafer-specific issues. Interactive drill-down from final test data to exact (x,y) die location.
- GENEALOGY REPORTS**
 Correlates probe test yield with E-test parameters, providing lot traceability across the supply chain.
- INTERACTIVE DRILL-DOWN DATA ANALYSIS**
 With the Examiner-Pro™ interactive mode, you can zoom into histograms, trend, scatter plots and wafer maps to examine and compare specific tests for in-depth root cause analysis.

Yield-Man™

Automated Production Test Yield Management



Web-based Semiconductor Intelligence Dashboards provide a customized, interactive view of yield, volume and other KPIs on any device.

Automated Monitoring, Alerting & Reporting + Root-cause Analysis

Galaxy Yield-Man™ is an enterprise yield management solution that helps fabless companies, IDMs and test subcons automate the management of production test yields across the supply chain. Yield-Man automates the data collection and analysis processes to create an unattended yield monitoring solution with flexible, scheduled report generation and email alerting. Yield-Man effectively acts as a silent sentry, monitoring yield for all device types across all your test subcons, and enabling you to manage by exception. When the overall yield or results for specific parts or tests fall outside of the expected range Yield-Man will alert you via email that there is a problem that may require your attention. Then, you can use the full power of Examiner-Pro's data analysis capabilities to drill down into the test data for detailed root-cause analysis.

As companies scale up IC production, their wafer sort and final test data can easily grow into Gigabytes—even Terabytes of data, making yield management and reporting a cumbersome process. What's more, there are many stakeholders interested in the yield information—each requiring a different view of the data.

Yield-Man employs a relational database to act as a central repository for all of your test data, enabling long-term trend analysis, correlation across multiple test steps, and fast report generation—even for huge datasets. It consolidates the data from all of your subcons and products into concise Silicon Intelligence Dashboards that provide the “big picture” view of yield, throughput and other KPIs that management needs to see. At the same time it tracks yields for individual part-types and tests that are of special interest to particular product and test engineers. By reporting and alerting against specific criteria, Yield-Man enables you and your colleagues to “manage by exception”, and avoid hours of tedious work, poring through multiple yield reports.

System Requirements

- Minimum: 1.5GHz multi-core processor
- 16 GB min of RAM
- 50Mbytes of hard disk space (for software installation only)
- 1 TB minimum disk storage, but will vary based on amount of data to be stored

PC/WINDOWS

- Windows 2008 64-bit
- Windows 7 64-bit

Linux

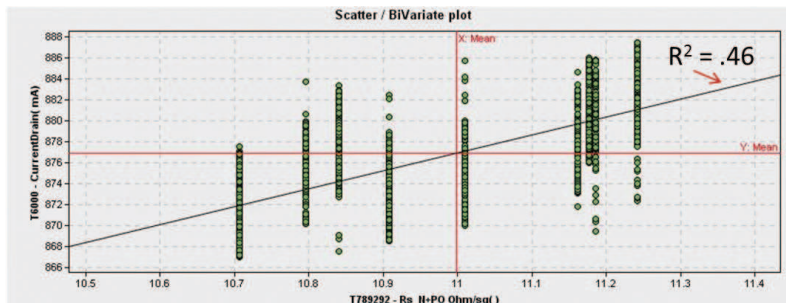
- RedHat Enterprise 6.0 RHEL 5.4 or greater
- Ubuntu 8.0.4 LTS or greater
- Fedora 9 or greater
- Debian 5.0 or greater

Relational Database Requirements

- MySQL version 5.5 or higher
- Oracle Enterprise 10 w/ Partitioning (Advanced Compression Optional)

Genealogy Reports

Yield-Man's Genealogy Reports trace yield by lot number across the supply chain from E-test to wafer sort, identifying correlation between electrical test and wafer test parameters for each region of the wafer, and thereby helping to reduce process problems that impact yield.



Example of a genealogy report showing correlation between wafer sort and E-test.

Yield-Man Benefits for the Fabless and IDMs:

Product & Test Engineering: Increased engineering productivity

With Yield-Man you'll eliminate repetitive manual data processing and save days of engineering effort every month. By managing yields on an exception basis you can focus your attention on yield improvement and other high value activities. If and when the product yield, Cpk, or specific test values drop below expectations you have the full power of Examiner-Pro to perform detailed data analysis and quickly identify the root cause.

Supply Chain Management: Improved vendor quality

Yield-Man constantly monitors the yields from your subcontractors and traces lots across the entire supply chain, enabling you to spot problems early and compare yields across vendors and products. You'll be able to identify the cause of excessive failures such as marginal test programs, load boards, probers and test systems, and feed back the information to your suppliers.

Executives: Improved operational efficiency, reduced costs

With tailored Web-based dashboards and email alerts, operations and business unit executives can have timely access to yield, volume, cost and other KPI data at the "big picture" level- e.g. what is the trend in overall yield this quarter and how does it compare to prior periods. With this data they'll be better able to make accurate cost projections and monitor/improve your operational efficiency. That ultimately translates into decreased device costs and improved profit margins.

Yield-Man Benefits for OSATs

Subcons can monitor yields by customer, product, tester and tester-site to spot problems like site-to-site variation early before they become costly crises. They also benefit by being able to manage by exception and drill into the test data for rapid diagnosis of yield excursions. Finally, subcons can use Yield-Man to provide their customers with professional-looking customized reports and interactive dashboards on a regular basis, helping them differentiate their services.

Contact Galaxy at sales@galaxysemi.com or 781.891.1128 to evaluate Yield-Man

About Galaxy

Galaxy Semiconductor Solutions is the de facto standard for test data analysis, IC yield management and quality enhancement solutions for the semiconductor industry. Our tools provide engineers and managers with "semiconductor intelligence" that enables better decision making and process improvement.