Semiconductor Intelligence, Delivered

In order to be competitive in today’s fast-moving markets, semiconductor companies need to accelerate the production ramp for new products and reduce costs while improving quality and engineering productivity. The key to accomplishing these often contradictory goals is to mine the mountains of data produced in the manufacturing/test process and use it to drive continuous improvement activities and facilitate decision making. Much as “Business Intelligence” (BI) software has helped many enterprises improve their competitiveness, Quantix tools provide actionable “semiconductor intelligence” that helps chip companies improve their operations while making engineers more productive.

The Quantix Total Lifecycle Solution

The Quantix suite of products can be used from initial devices characterization to automated yield and quality management of large-scale production to RMA analysis. The products are all based on a common architecture and use model derived from Examinator-Pro, which makes it easy to scale up your data management as your business grows.

Examinator-Pro

The de facto industry standard, Examinator-Pro offers product and test engineers everything they need to characterize new ICs and test programs, quickly ramp up production at OSATs and identify and diagnose yield excursions. Examinator-Pro turns standard test data files into comprehensive reports, and enables you to drill down into the data interactively for root cause analysis. Coupled with the Test Data Repository (TDR) option, Examinator-Pro offers powerful productivity features, including the multi-variable characterization wizard for corner-case analysis, genealogy/die trace for correlation between etest, wafer sort and final test, and fast, flexible queries and reports on huge data sets stored in the TDR. Examinator-Pro also serves as a client for Yield-Man, providing the same user interface for file-based and TDR-based analysis.

Yield-Man™

Automated Yield Management

- High volume production
- Relational database powered
- Data warehouse & query engine
- Deep root-cause analysis

Key Features:

- Automated data collection
- Automated consolidation of retest data
- Programmable alarms, SYA
- Customizable reporting
- Interactive drill-down data analysis
- Genealogy reports etest/sort

PAT-Man™

DPM Reduction via Intelligent Automatic Outlier Removal

- Supports DPAT, Multi-Variate PAT, GDBN, NNR, SYA and other techniques
- Fast recipe creation and yield estimation
- Auto-adaptive rules for lowest yield impact
- PAT yield monitoring and reporting drives yield improvement programs
- Integrates easily with manufacturing process at wafer sort or final test
Yield-Man
Yield-Man™ is a comprehensive enterprise yield management solution that helps fabless companies, IDMs and test subcons automate the management of production test yield data. Yield-Man™ automates the data analysis process to create an unattended yield monitoring solution with flexible, scheduled report generation and email alerting.

PAT-Man
PAT-Man an end-to-end solution for PAT (Part Average Testing) and other DPM reduction techniques that manages the entire outlier removal process from initial wafer lot characterization to final-test yield monitoring. PAT-Man is used in production by major IDMs and fabless companies around the world to help improve the quality of devices used in safety-critical and high volume consumer applications such as automotive, medical and smartphones. With PAT-Man’s intelligent auto-adaptive outlier algorithms and detailed outlier analysis, cost-conscious manufacturers are not only able to minimize PAT yield loss, they are often able to actually improve yields by using outlier data to better control the manufacturing process.

Semiconductor Intelligence for Executives
With interactive Web-based SI 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. For executives, the data can be presented at the “big picture” level, e.g. what is the trend in overall yield this quarter and how does it compare to prior periods. But by simply clicking on the chart managers can drill down to investigate which products, OSATs or testers had the greatest impact on key metrics. With this data your management will be better able to make accurate cost projections and monitor/improve your operational efficiency.

For the latest product information, call us or visit: www.mentor.com/test-analytics

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Quantix offers powerful visualization for semiconductor data from detailed gage R&R studies to high-level management dashboards, which can be viewed on any web browser.