

## Test Floor Management Software

### ••• Raise the bar for overall test effectiveness (OTE).

- See the variables that are impacting your test operation.
- Make informed corrective action decisions using customizable analytical tools.
- Connect equipment and test floor management tools to server.
- Link maps and equipment events to generate reports.
- Continuously optimize throughput, yield, overall equipment effectiveness.
- Customize your applications – no programming experience necessary.

### ••• Control and share your test operations locally and globally.

- Web-based “Best-in-Class” SPC graphical reporting engine to visualize, analyze, and control your test operations.
- Enable enterprise-wide access to data and reports.
- Enhance collaboration by all team members.
- Harness your company's most valuable asset – intellectual property.

### ••• Fits seamlessly into your existing infrastructure.

- Flexibility to integrate with and enhance your existing test process and software solutions.
- Consolidate information from a wide range of database and file types into a single application.

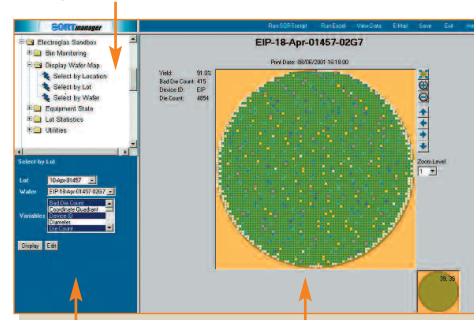
### ••• Expand your capabilities with SORTware

- Suite of value-added, higher-level test floor management applications and application modules.

### Automated Map Management

- High-performance automated map repository system for verifying, analyzing, moving, converting, and managing maps.
- Map Manager provides the back-end map management and data integrity for automated, off-line inking, inkless, and map delivery to and from other systems.
- Semi E142 compliant

### Navigation Frame



Control Frame

Result Frame

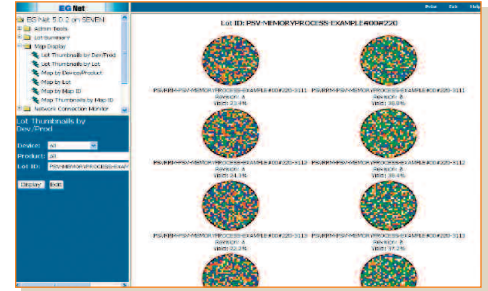
### Web browser-based Interface

- Enables full and easy access to test operation globally
- Internet and LAN / WAN connections
- Login/password protection and Internet security protocols
- Users can launch various applications through a Web browser to easily analyze issues on the test floor

Icon	Name	Description
Category	Category	Categories are used to organize information available within SORTmanager. Categories may contain published reports, dynamic reports, links to information and other applications.
Notification "Bubble"	Notification "Bubble"	Report summaries provide you with quick access to all of the published reports that have a specific status, regardless of whether they are located in the main interface. If report summaries are displayed, they are the first items in the menu. You can optionally switch report summaries as displayed in the menu by clicking the user profile.
Category containing report	Category containing report	For categories that contain published reports, the word status of any of the published reports indicated on the category. The status does not "bubble up" to parent categories.
Report Pages	Report Pages	Open the Report menu page in the Control Frame. The selected page in this icon indicates the status of the report. A red "X" indicates that all the data in the report was not saved. A red question mark indicates that the report is empty (i.e., no pages have been added).
Micros	Micros	A micros is indicated by a green lightning bolt in the lower right corner of the report icon. A blue lightning bolt indicates a micros is available in the action and administration menus.
Display Content - Live	Display Content - Live	Display the associated URL. The icon changes from green to yellow when it is selected.
Administration Category	Administration Category	For users who have been given permission to change their user password, the category contains an item that opens the password form.
Action	Action	This is always the last item in the tree structure. Click on this icon to display the SORTmanager Login page in the frame. You can select a new login name and password.

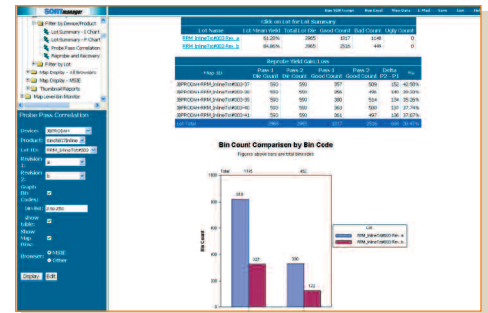
### Executive Dashboard

- Canned reports to create multiple web pages with automatic table of contents



### Map Analyzer

- Analyzes maps from multiple test passes with multiple maps displays and composites
- Speeds the identification of yield shortfalls
- Lot comparator and summary analysis reports



### Lot Summary

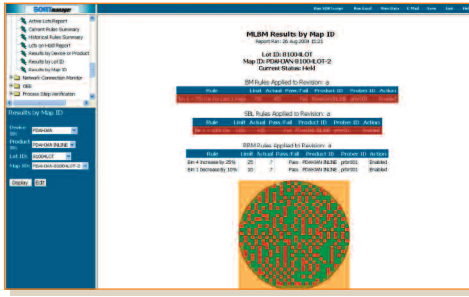
- Detailed yield reports with bin results, charts and graphs out-of-control points
- Clickable data points open maps and key underlying data

Product Name	Date	Status
Product 1	2008-01-01	OK
Product 2	2008-01-02	OK
Product 3	2008-01-03	OK
Product 4	2008-01-04	OK
Product 5	2008-01-05	OK
Product 6	2008-01-06	OK
Product 7	2008-01-07	OK
Product 8	2008-01-08	OK
Product 9	2008-01-09	OK
Product 10	2008-01-10	OK

### Product File Management (PFM)

- Central repository for recipes
- Ensures consistency and accuracy in manufacturing operation
- Historical revision control with comment display
- Product file changes report

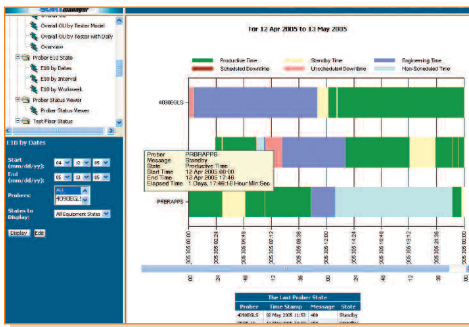
### Statistical Bin Monitoring and Statistical Bin Limits



### Map Level Bin Monitor (MLBM)

- Statistical Process Control
- Allows process experts to implement process rules
- Triggers built-in messaging to notify process owner when rule is violated.
- Reduces test processed-induced yield loss and retest throughput loss
- Raises confidence in first pass test results

### Overall Equipment Effectiveness



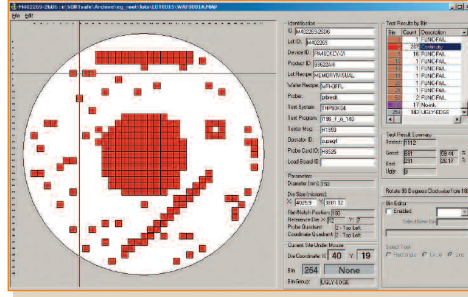
### Overall Equipment Effectiveness (OEE)

- Quickly detect and correct problems that impact productivity and profitability with real-time test floor status viewer
- Semi E10 reports & graphs
- Records and measure test floor equipment reliability and availability
- Optimizes processes, throughput and utilization

### Process Step Verification (PSV)

- Ensures wafers and lots will not be tested or processed until they have completed the previous step in the process
- Designed to be flexible such that it can be adapted to accommodate virtually
- Based on the use of maps at each process step
  - Maps are generated at the first test or visual inspection step
  - Subsequent process steps utilize the updated result map to process only good die
  - If a process step is missed the equipment and process owner are notified
  - Subsequent process step will not follow or process a map that does not have the correct information

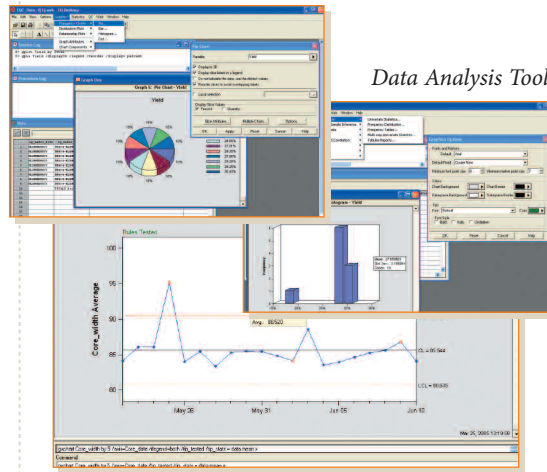
### Map Viewer & Editing



### Map Editor

- Die, map, and lot-level viewing and editing capabilities
- Easily integrated with other TFMS applications

### Data Analysis Tools



### EG Desktop

- Desktop analysis station
- Complete, robust SPC and graphical reporting engine
- Scripting language for easy custom report generation

### Electroglas is Focused on Advancing Innovative Technologies to Meet Evolving Challenges in Semiconductor Test.

Test is all about ensuring device quality and manufacturing performance. In the high-volume manufacturing environment of our customers, our innovative products provide substantial value and help lower the overall cost of test.

Electroglas delivers high-speed tools for wafer probing and package test that are reliable, accurate and production proven. Today, we are focused on overcoming our customers' evolving test challenges, partnering with them to develop solid solutions for wafer probing, prober-based test handling, and test management that will drive greater efficiencies in their wafer and device testing processes. Our customers have rapid, direct access to our worldwide team of experts for service and advice.

### Wafer Probers for Any Test Environment; With Shipments of Over 15,000 Systems

Electroglas' probers have been meeting a variety of probing needs for more than 40 years. These automated systems consistently deliver accurate, reliable wafer probing for high volume, low cost manufacturing, as well as leading edge, multi-die, bumped wafer, in-line parametric test and fine-pitch probing applications.

### Prober-Based Test Handlers for Today's Latest Packaging Technologies

Electroglas' test handlers are built upon proven prober technology to give chip-makers a fast, flexible handling solution for today's final test challenges. Strip test handlers deliver unprecedented throughput for testing a wide variety of popular package types in panel or leadframe format. Filmframe handlers have unique capabilities for testing Wafer Level Packages (WLP), Known Good Die (KGD) on diced wafers, Microelectro-mechanical Systems (MEMS), and ultra-thin wafers.

### Test Floor Management Software for Web-Based Process Analysis and Control

Electroglas test floor management software provides a unique, networked solution to connect wafer probers and test handlers to the broader testing infrastructure, allowing the chipmaker to better manage overall test effectiveness with accurate and efficient tools for monitoring, analyzing and improving important processes.

### All Products Backed by Global Service for Fastest Response

Electroglas' customer service centers are located worldwide for rapid-response field service and local spare parts support. Electroglas demonstrates its commitment to total customer satisfaction through service excellence backed by factory-based technical support, applications development and training.

