

Odyssey

Production-centric Yield Management for Wafer Manufacturing

Overview

Odyssey satisfies the requirements of today's modern semiconductor fabs. Odyssey Defect is a production-proven defect data management solution that delivers real-time lot dispositioning, SPC alarming and a complete set of defect analysis tools to help fab engineers resolve both random and systematic yield issues.

Odyssey Defect has an open and vendor-neutral architecture that supports all inspection, review and classification tools with a full range of interactive charting, wafer mapping and reporting capabilities. A true 24x7 system, Odyssey Defect delivers results efficiently and reliably, leveraging error-correcting processes to assure users of maximum up time.

Benefits

- Easy to use Odyssey GUI enables high productivity
- Supports wide range of inspection and review tools. Automates in-line defect analysis to reduce diagnosis cycle time
- Real time server-based defect source analysis (DSA), SPC functions and automatic wafer sampling productivity through automated analysis
- Interactive spreadsheets and maps to arrive at root cause in minimal time
- High reliability with low maintenance, suitable for 24x7 fab operations
- Integrated automation features allow users to collaborate faster and address root cause analysis in minutes

Odyssey Yield Management Solution

Odyssey YMS is a complete yield management solution which combines the following modules and allows correlation between them.

- Defect
- Bin Sort
- Bit Fail (memory)
- Metrology
- Parametric
- WIP (MES)



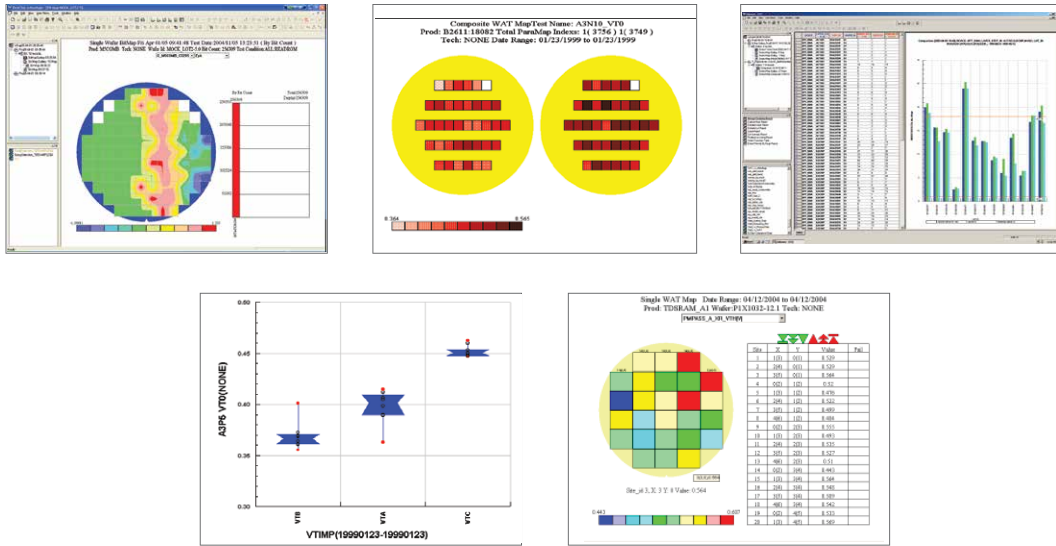


Figure 1: Odyssey's interactive user interface and easy to create correlation plots across modules

Additional Modules

Additional modules integrate and manage critical manufacturing data to improve yields. These are:

- StatTool (statistical analysis and charting package)
- Real-time Kill Ratio engine (populates database at load time)

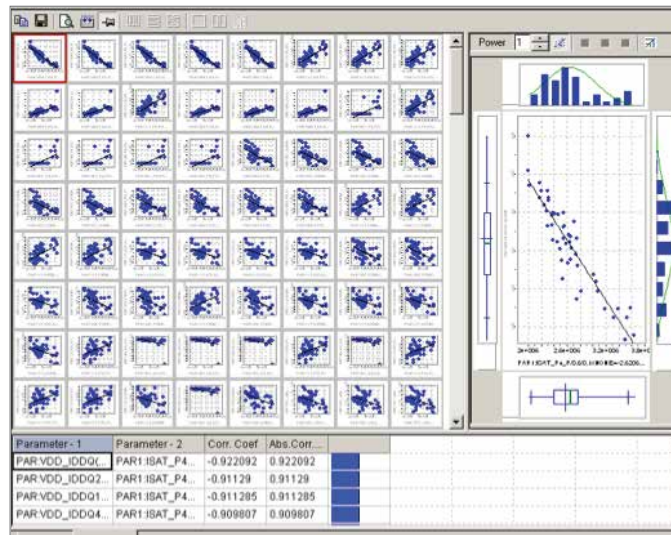


Figure 2: StatTool performs multi-parameter correlation analysis to identify yield limiters