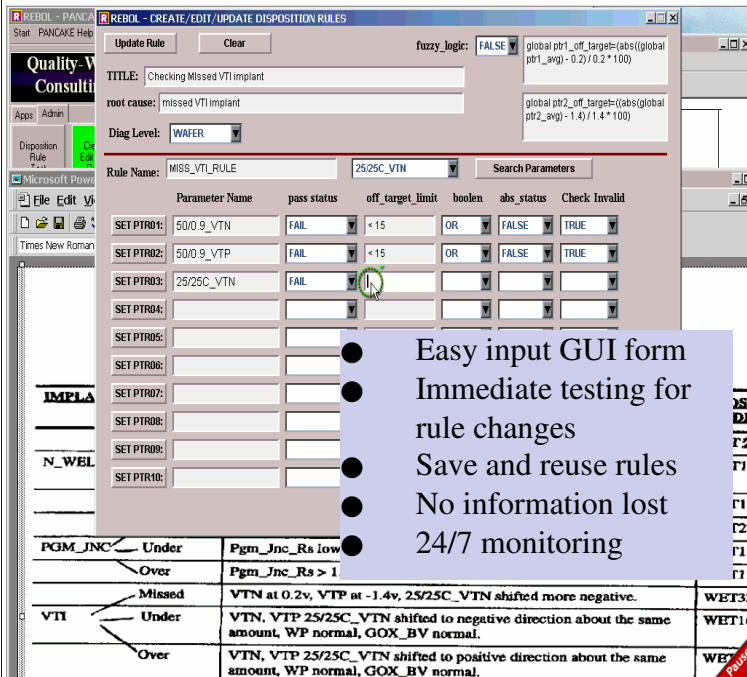




# FAKS

## A Wafer Electrical Test Knowledge-Based Diagnostic System

Quality Wise Knowledge Solutions



- “Customerized” diagnostic report to your specifications
- Emailed to engineers and management
- Easy to read report structure
- Consistent format
- Capable of supporting multiple processing technologies by invoking different diagnostic rule systems.

**1) 2H568500dat;1 WAT Fail Root Causes Summary**

Symptoms	Wafer IDs
DVTXL16 uniformity problem	1
Unknown RC-PMOS root causes 1	

Report Root Causes symptoms in a tabular format.

Failed Wafers ID	Passed Wafers ID	Good Wafers ID
1	13	6,18,25

Out of Spec WAT Parameters

Failed Wafers ID	Failed WAT Parameters
1	RSP, IRL16, DVTXL16, RCM1P, RCM1BD, RCM1N,

WE Rules (1 OR 5) Violation WAT Parameters

WE(M)	Parameters
Out of Control WAT Parameters	ID10G0N055, VPTN055, BVJN055, ID10G0N06, VPTNW06, BVJNW06, VTN110, VPTNFTP95, VTNWFTP95, ID10G0PD65, VPTPD065, BVJPD065, VTPDFTP21, VTPDFTP21, RSN, RSP, VTL16, IBB4G0L16, DVTXL16, BVDGOXN, RCM1P, RCM1BD, RCM1N, RCM1M2, BRM1, BRM2, BRPL3_ARY, VTN110, RSP, RCM1P, RCM1BD, RCM1N,

WE(S)

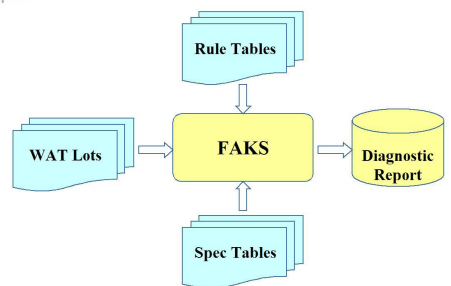
Lot ID: 2H568500DAT;1 --> THERE ARE NO PROBLEMS FOUND IN THIS LOT. SHIP THE LOT.

- Our patented product is the first Knowledge Management system for semiconductor manufacturing. With our easy to use GUI, FAB WAT engineers can easily enter the WAT disposition rules into the system to generate real time detailed diagnostic report with root causes for failure symptoms and mechanisms.
- Our product provides a “Customerized” Knowledge Management System for semiconductor manufacturing to obtain, utilize, store and share WET disposition knowledge and information.
- Results are Emailed to engineers and management for collaboration and corrective action.
- Disposition knowledge is retained.

Increase Your Knowledge At Work!™



### FAKS System Flow Diagram



Contact us today to start having the QWiKS FAKS system do the work so you can enjoy higher yields and customer satisfaction.

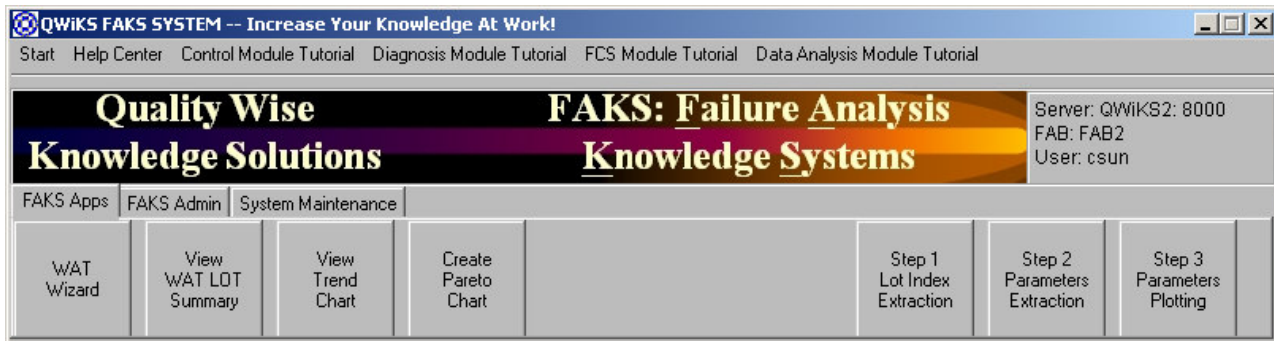
Quality Wise Knowledge Solutions

5210 Terner Way Suite 143  
 San Jose, CA 95136  
 TEL: 707.849.4985  
 FAX: 408.273.6364  
 e-mail: sales@qwiksinc.com  
 WEB: http://www.qwiksinc.com



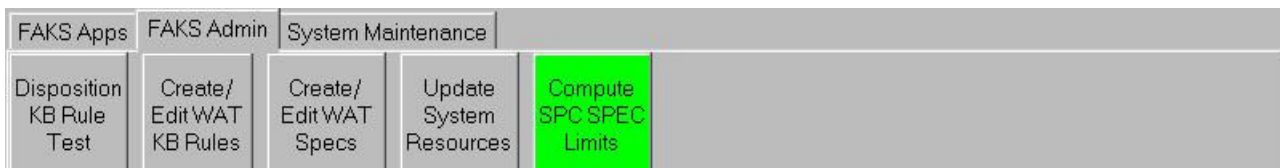
# FAKS

## System Functions



### (1) FAKS Application Panel:

- (I) WET Wizard: Click this button to generate WAT diagnostic disposition summary report.
- (II) View WET LOT Summary: Click this button to enter Lot Summary and Data Analysis Graphic system to generate boxplot, trend chart, probability plot and wafer maps.
- (III) View Trend Chart: Click this button to view the pre-saved Product Trend charts.
- (IV) Create Pareto Chart: Click this button to generate weekly or quarterly pareto charts.
- (V) Use the last three buttons to generate Lot Trend charts for WAT parameters.



### (2) FAKS Administration Panel:

- (I) Disposition Rule Test: Click this button to select the lot and rule to test and adjust the disposition rule attributes such as the range of off target limits for the WAT parameters. Boolean logic relationship between primary and secondary WAT key parameters specified in the rule table.
- (II) Create/Edit WET Rules: Click this button to build WAT disposition rules by filling a simple form.
- (III) Create/Edit WET Specs: Click this button to add new device and device's spec limits into the system.
- (IV) Update System Resources: Click this button to update/synchronize system tables, knowledge base system and spec tables to other FAKS servers specified in the System Resource table.
- (V) Compute SPC SPEC Limits: Click this button to generate the required specs limits (i.e. valid low/high limits, spec low/high limits and control low/high limits) for automatic WAT disposition.



### (3) FAKS System Maintenance Panel:

- (I) System FTP Source Setup: Click this button to setup the username and password required for FAKS server farm synchronization.
- (II) Data FTP Source Setup: Click this button to define the Data source such as data server host name, data directory name, username and password to retrieve the data.
- (III) Spec File FTP Source Setup: Click this button to define the Device's spec file source such as computer host name, spec file directory name, username and password to retrieve the device spec file.
- (IV) System Resource Setup: Click this button to enter the FAKS server farm system information for server to server database synchronization.
- (V) Object Explorer: This function provides equivalent or similar capabilities of file management under Window operating system. Use this function to transfer/retrieve tables or directories to/from other servers.
- (VI) Database Admin: This function provides database synchronization, add or delete data records from the database.
- (VII) Setup Remote FAKS servers: Use this function to update/synchronize a new or existing FAKS server system.
- (VIII) Shutdown Remote FAKS servers: Use this function to shutdown remote FAKS servers.

Increase Your Knowledge At Work!<sup>TM</sup>

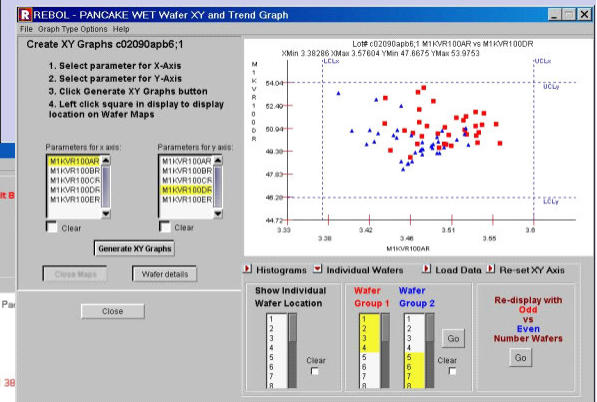
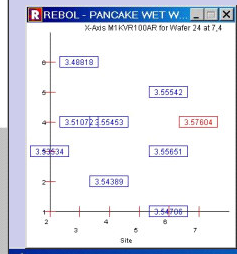
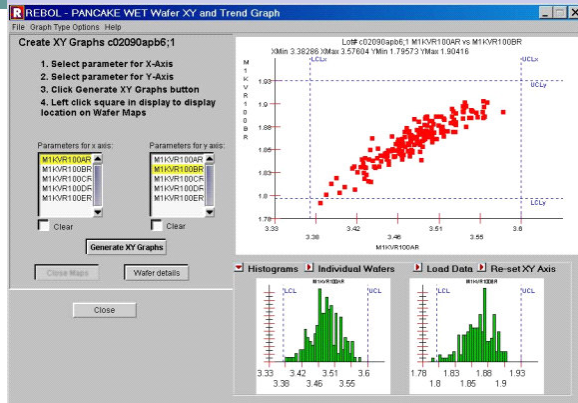


5210 Turner Way Suite 143  
San Jose, CA 95136

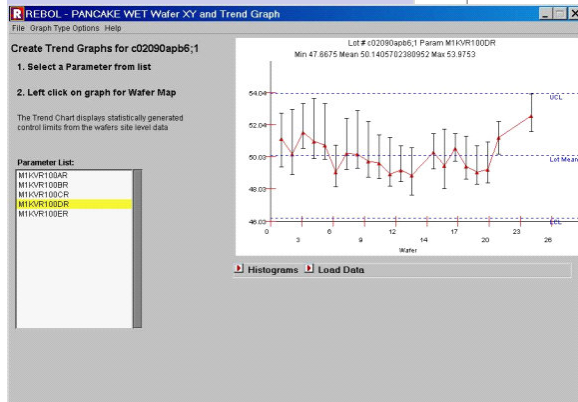
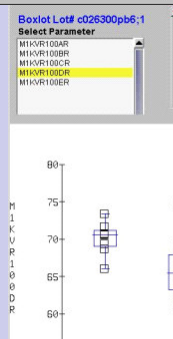


# FAKS Graphics Package

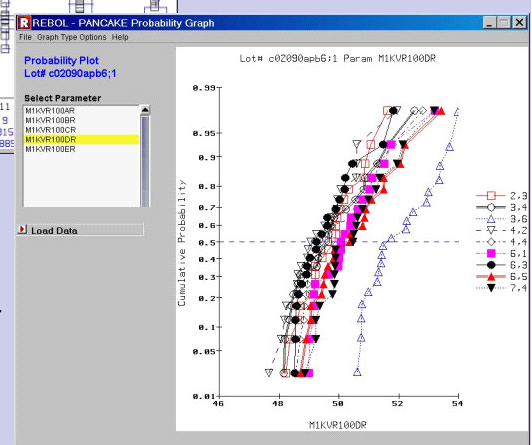
An addition to the patented diagnostic tool and the FCS system, FAKS Graphics Package will allow to visualize your WET data in several familiar formats. Scatterplot with histograms, wafer grouping and WET wafer maps built in. Trend Charts, Probability Plots and Boxplots round out



the suite of visual aids that FAKS provides. Load other WET lots data from any of the graph windows. You can save any of the graphs for viewing later and retain full drilldown capability. Just point and click data



points for additional graphs and tables. WET wafer maps show the wafer location of the data point selected. The wafer details option shows you by site location



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5210 Terner Way Suite 143  
 San Jose, CA 95136  
 TEL: 707.849.4985  
 FAX: 408.273.6364  
 e-mail: sales@qwiksync.com  
 WEB: http://www.qwiksync.com



Visualize your data today.  
 Contact QWiKS at:  
 sales@qwiksync.com

It's your data and you need to see it.  
 Increase Your Knowledge At Work!<sup>TM</sup>