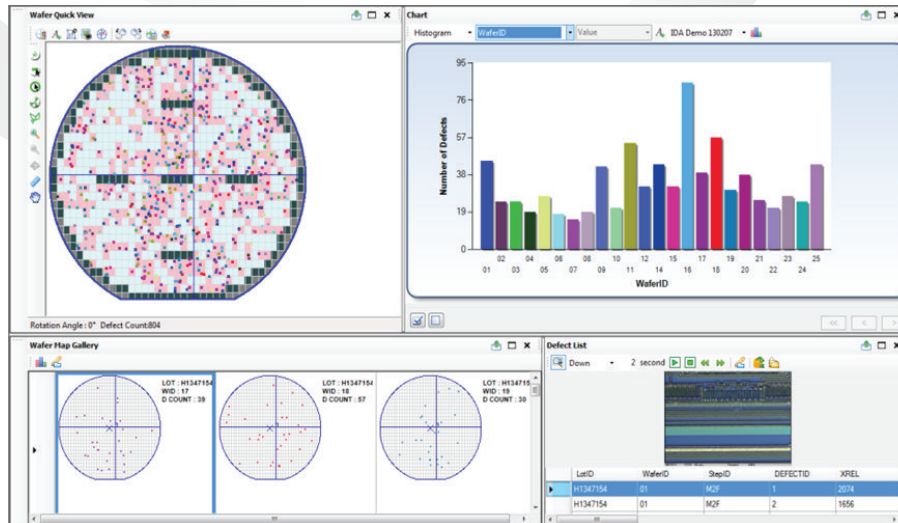


SDN DATA SHEET

SiGlaz Defect Navigator (SDN) is a software application that has been designed to meet the defect and yield analysis needs of semiconductor fabs with low-to-medium volumes. SDN provides the yield engineer with a range of functions to review and display defect inspection data and images generated by inline inspection and review systems. SDN operates on a Windows based PC or Server.



SiGlaz Defect Navigator Multiple Window User Interface

SDN FEATURES

Multiple Window User Interface. SDN allows the user to display various views of a selected data set (e.g., wafer map, drill down chart, wafer gallery, defect list) simultaneously. The SDN function windows may be moved, resized and un-docked for multiple monitors. The image above shows four views of the SDN data set: stacked wafer map (upper left); bar chart of defects by Wafer ID (upper right); wafer gallery (lower left) and defect list with image (lower right).

Load/Query Data. SDN allows users to automatically load inspection data and images to the SDN Database (MS SQL) using the Job Control function. The user may query the database by KLARF attributes (e.g., Lot ID, Device ID, and Step ID) to open and display a data set.

Stacked Wafer Map Analysis. SDN provides a wafer map displaying the location of each defect in the selected data set. The defects are color coded according to user-defined attributes and synchronized with the Drill Down Chart and Defect List. The user may use the zoom feature to enlarge a selected area on the wafer map. The user may also display all defects in the data set in a single die stack.

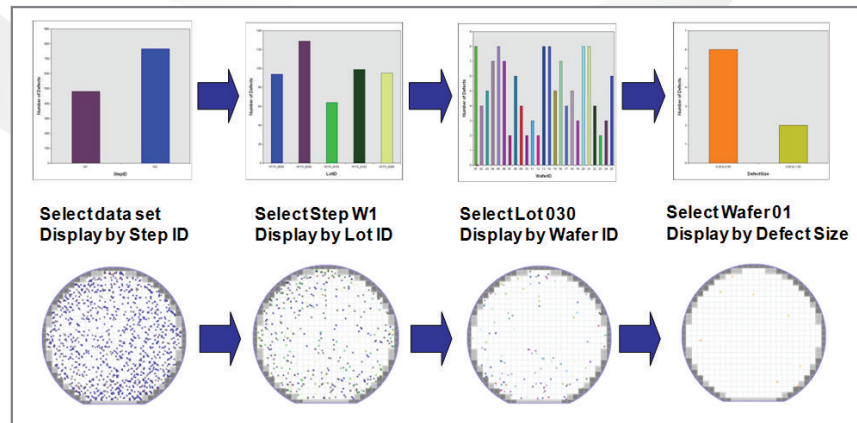
Generate SPC Chart. The user may select a data set consisting of wafers with the same Device ID and Step ID and display the results as an SPC chart with user-defined control limits. The user may select certain points on the chart and display them on the wafer map. The user may also annotate individual chart data points with production information.

Rapid Classify feature allows the user to sequence through all defects with images and manually re-classify them after viewing the defect image. The user enters the new classification number and hits "Enter;" the Rapid Classify function assigns the new class number and steps to the next defect with an image. Re-classified defects may then be stored to the DB, overwriting the previous DB records.

Reticle Repeater Analyzer automatically identifies and classifies defects at the same relative location in multiple dies or reticles.

SDN DATA SHEET

Drill Down Chart allows the user to select and display a subset of the data set, based on various defect attributes (e.g., defect size and class number) or wafer attributes (e.g., Lot ID and Step ID). The user may graphically select one or more bars of the chart to generate a new chart that displays only the selected data (data subset). The wafer map and defect list are simultaneously updated to display only the selected data. See figure below.



SiGlaz Defect Navigator Drill Down Analysis

Defect Adder Analysis (DAA) identifies defects that are proliferated to subsequent process steps. These “common” defects are characterized by the step on which they originate. The user may use the Drill Down Chart to select the defects that originate in any step to create and display a data subset.

Correlate defect data with SORT data. SDN allows the user to automatically load electrical test data into the SDN database where it is linked to the defect inspection data for the wafer. The user may correlate dies that fail electrical test with defective dies and Step ID.

Die Zone Analyzer (DZA) allows the user to define regions of interest within a die and to classify defects that are located within those regions.

Cluster Analyzer identifies and classifies defect clusters based on user-defined clustering rules.

Support for SEM Review functions. The SDN Defect Sampling function selects defects from an input KLARF based upon a user-defined sampling rule, which may be saved to a lookup table. The sampled KLARF may then be exported to SEM Review. When SEM Review is complete, SDN automatically reads the KLARF generated by the SEM Review Tool and loads associated SEM images to the DB.

CONTACT INFORMATION

Corporate Headquarters

SiGlaz

Stanford Financial Square
2600 El Camino Real, Suite 414
Palo Alto, CA 94306
Tel: 408-850-1493
Fax: 650-424-8429
Email: sales@SiGlaz.com
Website: www.siglaz.com

Research and Development Center

SiGlaz Viet Nam Ltd.

9th Floor, e.town Building
364 Cong Hoa, Ward 13, Tan Binh District
Ho Chi Minh City, Viet Nam
Tel: 84-8-3812-2040
Fax: 84-8-3812-2039