

Service : Statistics, Quality Assurance

Purpose

Processing and analysis of test data for

- Yield statistics
- CPk and Histogram reports
- Acceptance procedures - MSA - Gauge R&R Studies
- Post Processing: What-If Simulations , PAT (Part average testing)
- parametric wafer maps
- and many other reports

Bluetest Expertise

We know the tools know how to interpret the results.

The generated reports are comprehensive and means adapted to the end of achieving quality objectives. In this context they will be used as base of various decisions concerning complaints, improvements, approvals etc..

Activities

Participants

Test, Product Support, Test Support

Requirements, Input

Test data in stdf-format

1. from electrical series test
 2. from measurement series
- or
3. from repeatability and stability/reproducibility measurements during acceptance procedures

Requirements, Input

Identify and open dataset of interest.

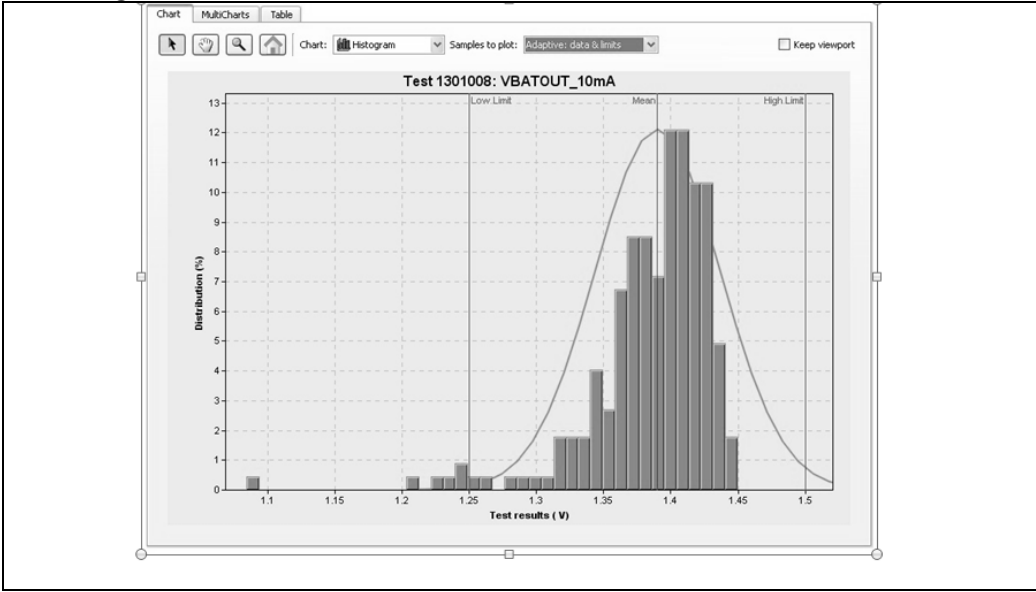
Analysis and report generation using Galaxy Examiner Software

Result, Output

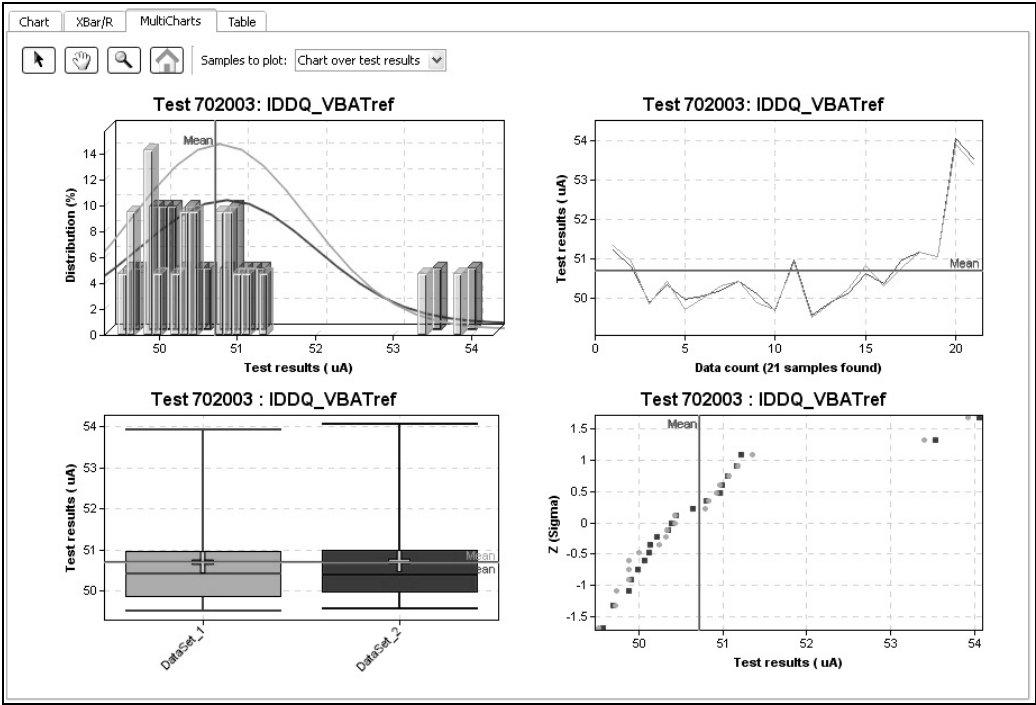
Reports and graphical presentations in MS-office, pdf or graphical formats

Below some selected reports from numerous possibilities:

1. Histogram



2. repeatability und reproducibility (R&R Study)

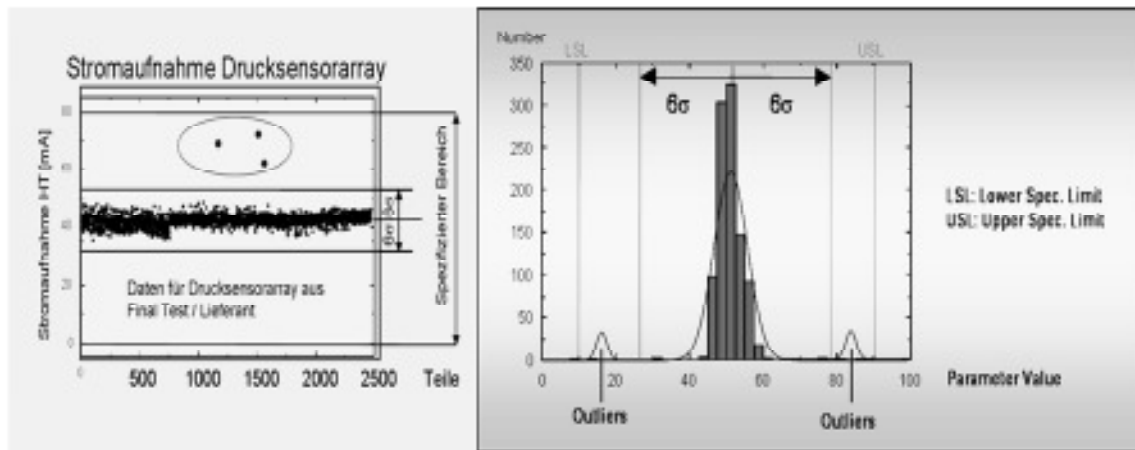


3. Distribution of a selcted parameter across one wafer



4. Part Average testing

“Part Average Testing” is a standard industry algorithm for outlier detection which captures every die with a parametric characteristic falling outside of a statistically calculated boundary.”



The method of part average testing is supported on wafer level. After postprocessing the test data it will result in a certain number of parts (outliers) that will be marked as fails in addition to the regular fails. A comparable approach for packaged parts is more complex as it would require a unique identification of each device.

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