

## **Service : Final Test**

*Note: find description of test equipment at end of this file*

### **Purpose**

Electrical test of bare dies on wafer level  
Test data recording  
Marking of failing devices

### **Benefits**

Omitting the wafer test will produce a certain amount of defect devices which will be detected during final test. But the cost of package and packaging is wasted.

Devices that need test at high and low temperatures could be tested on wafer level at one temperature and at packaged level at the other.

If a traceability of test data down to lot / wafer / location on wafer is required wafer test is mandatory.

### **Bluetest Expertise**

Electrical test of semiconductor devices on wafer and packaged level is core competence of Bluetest, based on experience from 30 years in test. Our infrastructure and equipment (lab, handling systems, wafer prober, test system) and also our organisation are focussed on high quality and high throughput at small test time.

### **Activities**

#### **Participants**

Test, Operator

#### **Requirements, Input**

Wafers  
Test program, test hardware, test instructions

**Performance**

Correct setup of equipment and identification of the right test program are specified in test instructions which are part of our intranet based QM-Documentation.

They contain also stop and alarm limits for test yield and reaction plans in case of troubles.

Testing is performed using automatic wafer prober inside a laminar flow box (clean room class 6 )

**Result, Output**

Drawing: results from wafer test

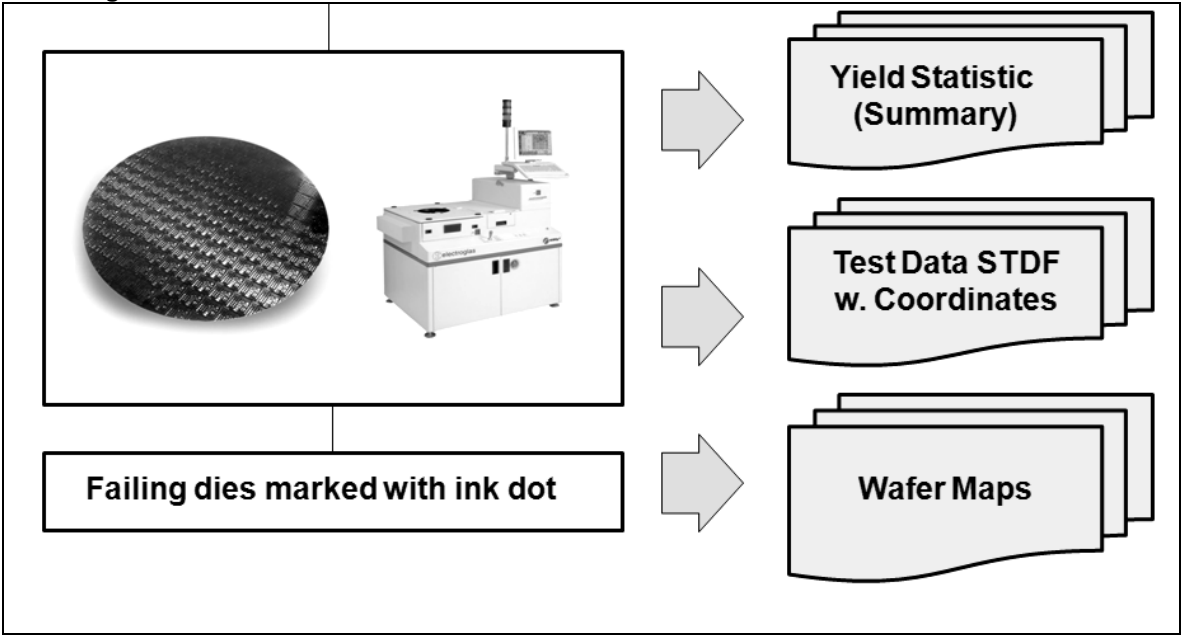
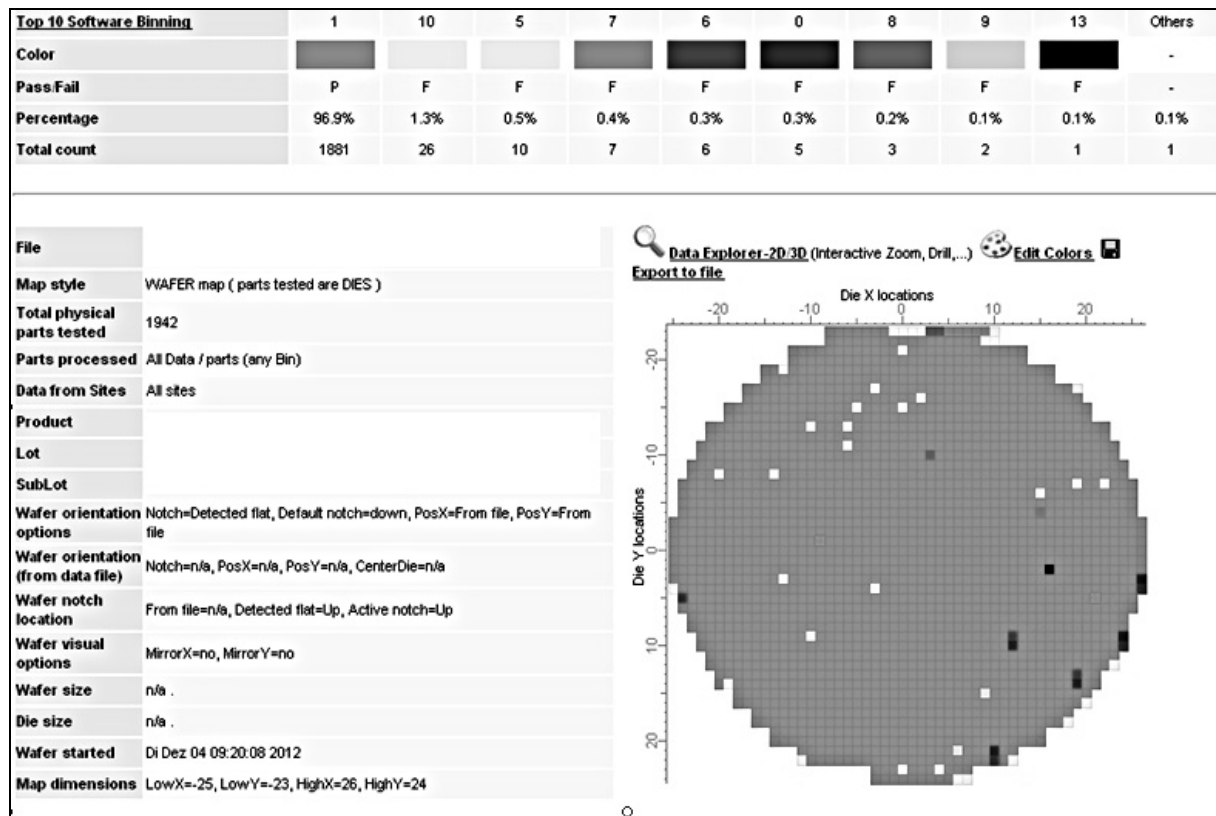


Image : Wafermap (pass / fail Dies)



## Wafer test equipment:

### Mixed Signal Test system - LTX-Credence D10

- \* 192 digital channels
- \* 16MB Vector memory
- \* APG, SCAN
- \* 16 4-Quadrant VI sources
- \* Multiwave with 4 arbitrary waveform generators and 4 digitizer
- \* Easy integration of external measurement equipment

### Wafer prober

Electroglass 4080 , 8" wafer, room and hot temperature (max 130°C)