Technology Electronic Solutions
Component Engineering Laboratory
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CONTACT LAB REVIEW

Name:
Technology Electronic Solutions S.A.
Component Engineering Laboratory

Location/Contact:
TES – CNES Bpi 1414
Component Engineering Laboratory
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Specialities:
Our laboratory offers IC analysis services to assist industries in resolving their design validation and debug problems, fabrication issues and customer returns. Our main activity is in electrical characterization, front-side and backside IC contactless analysis, design debug, technological analysis, FIB processes, contamination, passive component and interconnect and wiring engineering.

Company statement:
Technology Electronic Solutions S.A. operates the Component Engineering Laboratory in partnership with the French Space Agency.

Number of employees:
14 in the C.E.L laboratory

Equipment/ Services provided in house:

Electrical characterization
- Electrical testing (Logic and analog ICs, smart power devices, DC-DC converter, operational amplifiers)
- ESD and latch-up testing
- THB, Thermal cycling, Dry oven, HAST & PCT, Dynamic life test & endurance
- Electrical stimulation

Defect localization and Design debug
- Micro-probing
- Ebeam probing
- Voltage contrast
- Emission microscopy
- Time Resolved Emission (PICA and single point PICA)
- Static Laser Stimulation (TIVA/OBIRCH and LIVA)
- Dynamic Laser Stimulation (LSDL / LADA)

Sample preparation
- Chemical decapuslation
- Backside sample preparation (parallel polishing, selective area polishing, CNC milling and laser ablation)

FIB processes
- FIB – Sample preparation and modification
- FIB – Design modification (Platinum and Oxide deposition)
- FIB – Technological preparation
- FIB – Backside edit

Physical analysis
- Optical microscopy (visible, UV and IR)
- Wet chemical deprocessing
- Plasma deprocessing
- Cross-section preparation
- FESEM
- EDS
- EBIC
- AFM

Package analysis
- Wiring characterization tools
- Pin test
- Leak test
- XRAY
- CSAM (subcontract)

Contamination

- FTIR spectrophotometry
- UV – Vis – NIR spectrophotometry
- Chemical functions analysis
- Molecular analysis (gaz, liquid and solid samples)
- Thermogravimetric analyses (« Outgassing Kinetics » facility, « Deposition Kinetics » facility)