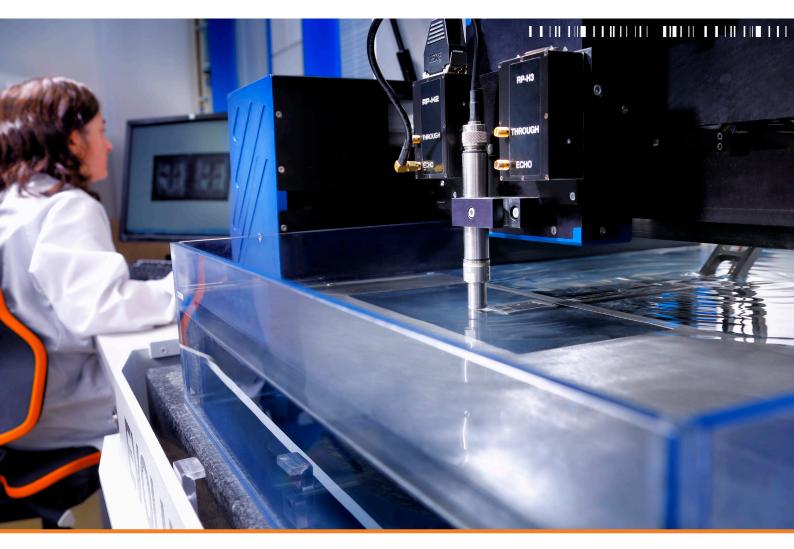


MASER



NON-DESTRUCTIVE ANALYSIS SERVICE

- FIRST STEP IN FAILURE ANALYSIS
- SAMPLES ARE UNAFFECTED BY THE ANALYSIS METHOD
- EXPERIENCED TEAM FOR AN OPTIMISED ANALYSIS FLOW
- FAST TURNAROUND TIMES

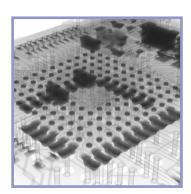


NON-DESTRUCTIVE ANALYSIS SERVICE



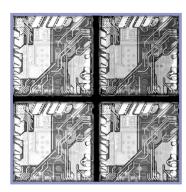
OPTICAL MICROSCOPY

- Wide range of optical microscopes available
- High resolution digital cameras
- Bright Field / Dark Field optical microscopy
- 3D wide field optical microscopy
- From low magnification up to 2000x magnification



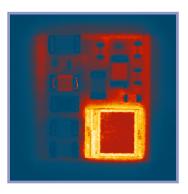
X-RAY INSPECTION

- BGA and CSP solder joint inspection (70° oblique view)
- PCB and assembly related failures
- Package related failures
- Details <0,3 μm visible
- · High dynamic range digital detector
- 2D and 3D computed tomography
- Avizo 3D imaging software with free customer viewing license



SCANNING ACOUSTIC MICROSCOPY (SAM)

- Locate delamination, cracks, flakes and voids within IC packages
- Wide range of transducers available for optimum results (10Mhz .. 175Mhz)
- HF-SAM dedicated for CSP devices
- Several reflective scan and through scan modes possible
- Large scanning area (520 mm x 380 mm)
- Tray-scan option available for high throughput



LOCK-IN THERMOGRAPHY (LIT)

- Locate low-ohmic and resistive defects within packages, modules and PCBs
- High sensitive MWIR camera (640 x 512 pixels)
- 200mm high stability thermal chuck
- Lock-In mode for >1μW spot detection
- Back side probe possibilities for 3D localization
- Thermal mapping with an accuracy up to 1°C