



NON DESTRUCTIVE ANALYSIS SERVICE

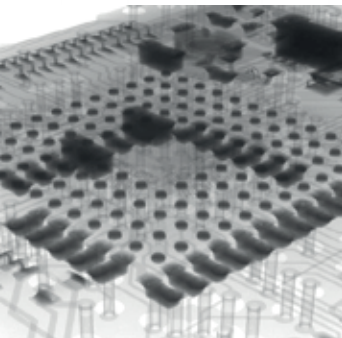
- THE FIRST STEP IN FAILURE ANALYSIS
- THE SAMPLES ARE UNAFFECTED BY THE ANALYSIS METHOD
- EXPERIENCED TEAM FOR AN OPTIMISED ANALYSIS FLOW
- SHORT TURN-AROUND TIMES

NON DESTRUCTIVE ANALYSIS SERVICE



OPTICAL MICROSCOPY

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



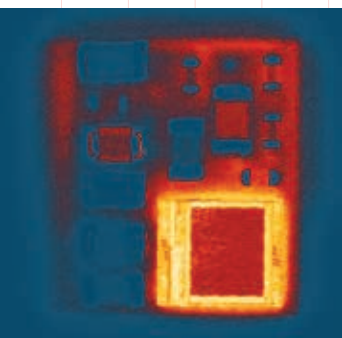
X-RAY INSPECTION

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



SCANNING ACOUSTIC MICROSCOPY (SAM)

- Locate delamination, cracks, flakes & voids within IC packages
- Wide range of transducers available for optimum results (10Mhz .. 175Mhz)
- HF-SAM dedicated for CSP devices
- Several reflective scan & 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 & 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