

Overview of the analysis options

Non-destructive analyses:

- Optical and digital microscopy 2D/3D
- AOI (automatic optical inspection) 2D/3D
- 3D SPI (solder paste inspection)
- 2D/2.5D X-ray inspection, CT computer tomography for synthesis images
- Heat profiling / temperature measurement technology
- X-ray fluorescence analysis XRF and IR spectroscopy for material composition
Material composition as well as contamination and layer thickness measurement
- SAM ultrasonic analysis
- SIR surface resistance measurement
- Climate test

Destructive analyses:

- Cross-section preparation, images and metallographic analyses
- SEM Scanning electron microscopy (e.g. for determining the intermetallic phase of solder joints)
- EDX energy-dispersive X-ray spectroscopy for material analyses
- Solderability and surface analysis with ionography
- Various mechanical tests (tensile, shear, drop, adhesive force, etc.)