

Contract Lab Services

Let Dr. SAM evaluate your packages!



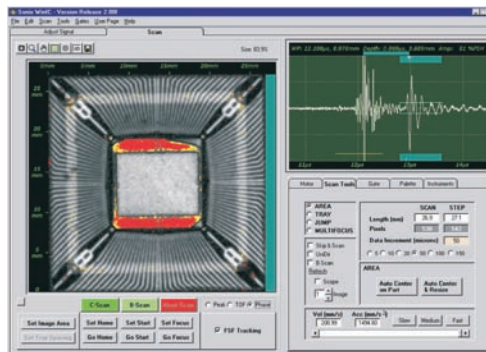
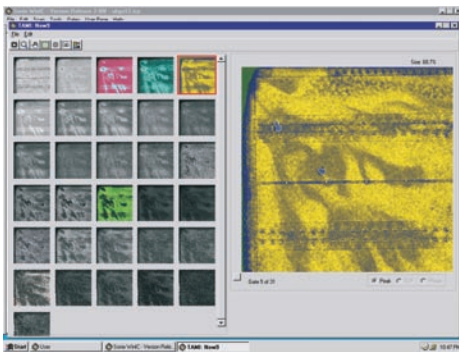
Acoustic Microscopy is unparalleled in its ability to detect delaminations, voids, cracks and other anomalies in packages non-destructively. Let the Sonix' Applications Lab evaluate your packages and provide you with detailed applications reports that diagnose your package problems.

The Sonix' Applications Laboratory is a full service contract lab which provides acoustic microscopy inspection services. The lab employs state-of-the-art scanning acoustic microscopes (SAM) and utilizes advanced diagnostic techniques, such as ICEBERG™ and TAMI Imaging™, to non-destructively view internal anomalies in microelectronic packages.

The contract lab services are performed by highly skilled applications engineers who diagnose internal defects in packages. Detailed reports are generated that display ultrasonic images, identify the package's failure mode(s), internal bond characteristics and internal package defects. The applications report also provides ultrasonic theory, a summary of the scanning techniques used, and parameter files.

The contract lab services include failure analysis, new package qualification, production sampling and more. The lab diagnoses a variety of packages including:

- Plastic IC packages
- Ceramic packages
- Material Analysis
- Muti-Chip Modules
- Flip chips
- Medical devices
- Capacitors
- Ball Grid Arrays



Application reports detail the results of the inspection. The reports identify package failure mode(s) and include high resolution images.

Contract Lab Services

- Full Service Contract Lab Testing
- Leading Edge Equipment
- Highly Skilled Application Engineers
- Detailed Application Reports
- Advanced Diagnostic Capabilities

Applications

Plastic and Ceramic Packages

- Die Cracking
- Popcorn Cracking
- Die Top Delamination
- Die Tilting
- Die Attach Voiding

Hybrids and MCMs

- Solder Voiding
- Lid Seal Integrity

Flip Chips and CSPs

- Underfill Voiding
- Solderball Opens
- Solderball Voids
- Underfill Separation
- Excess Flux

Capacitors

- Dielectric Voiding
- Dielectric Cracks

BGAs

- Die Cracking
- Popcorn Cracking
- Die Top Delamination
- Die Tilting
- Die Attach Voiding

Material Analysis

- Hardness measurement
- Density analysis
- Acoustic impedance

Advanced Techniques

- TAMI Imaging
- ICEBERG