Product Engineering Services

Acoustical Services

Electonic Fail Analysis Services

EMC Services

Enviromental Installation Services

Industrial Design Services

Interconnect Services

Material Services

Mechanical Services

Mechanical Packaging Services

Packaging Services

Power Services

Product Cooling Services

Project Managment Services

Electronic Assembly Failure Analysis

Characterization, Physical Analysis, and Expert Interpretations

Today, many companies do not have in-house physical analysis and characterization capabilities for their electronic card assemblies. They must rely on the supplier of that assembly to find root cause of failures. This often results in misdiagnosis of failures, ineffective root cause identification and incorrect application of effective corrective actions.

IBM has experts and state of the art failure analysis labs to quickly identify issues during advanced technology qualifications thru problems encountered with products failing in the field. We provide an independent and higher level analysis often required to resolve complex and multi-variable failures found in today's systems.

Services

- GE/Phoenix Computed Tomography 3D XRAY for nondestructive characterization or failure analysis of electronic assemblies.
- CSAM / Scanning Acoustic Microscopy: Analysis of Reflected (Pulse/Echo) or Transmitted Ultrasonic Pulse scanned over a device surface in order to characterize internal structure. (nondestructive)
- Foresite C3 Ionic Contamination tester capable of nondestructive assessment of flux contamination risk on electronic assemblies.

- Coordinate Measurement System to validate positional tolerance, distortion, or conformance to print for critical features on electronic assemblies using optical or laser imaging techniques.
- Confocal Scanning IR Laser Microscope for the optical inspection of chip metallization layers using focused infrared illumination. (nondestructive)
- Laser Scanning Microscope: (Keyence) Laser / Optical inspection of a wide variety of electronic package features and surfaces. (nondestructive)
- Shadow Moire and DIC (Akrometrix): White Light Interferometry characterization of thermomechanical distortion of components or electronic assemblies.
- Cross Polarized Optical Inspection Microscope for cross sectional analysis.
- BGA and Angled Inspection Microscopes (Hirox) for optical inspections.
- Mechanical Test Systems (Instron)
- Wide Area 3D Measurement Systems (Keyence)

For more information

For more information about IBM electronic failure analysis, visit: ibm.com/it-infrastructure/services/product-engineering

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