IEC Electronics Analysis & Testing Laboratory has solutions for your most complex design or supply chain challenges. From one-time testing to fully integrated turn-key supply chain management, we provide services to solve challenges, minimize risk, and deliver solutions customized to your needs.

Solve Challenges

**Electronics Manufacturing Experience**
Unique analysis due to end use application knowledge

**Multi-disciplinary Approach**
On-site engineering and supply chain expertise

**Forensic-style Investigation**
Methodical and detailed approach to finding the right solution

Minimize Risk

**High-quality Testing Standards**
Only EMS with on-site lab approved by the DLA for their QTSL program

**Tailored Testing Plan**
State-of-the-art equipment to develop a custom approach to your specific needs

**Expert Team**
Staff members with over 25 years of counterfeit component risk mitigation and methodology experience

Deliver Solutions

**Quick Turnaround Time**
Dedicated staff to respond to your urgent needs

**Flexible Solutions**
Services available for electronic components, integrated circuits, or printed circuit boards

**Seamless Integration with Manufacturing**
Lab on-site with 72,000 square foot EMS facility

Root-Cause Failure Analysis

Identify the source of quality and reliability issues.
Solutions for:
- Product Design Failure, Low Yields, Poor Performance, Degradation

Inspection & Authenticity Testing

Validate quality and integrity of components against approved devices and minimize risk to your supply chain.
Capabilities:
- Counterfeit Component Detection,
- Lot Acceptance, Construction Analysis,
- Obsolescence Management

Reliability & Qualification Services

Ensure the fitness of a device for use in the field.
Capabilities:
- Up-screening, Destructive Physical Analysis (DPA),
- Environmental & Accelerated Life Testing,
- Burn-In, Construction Analysis

www.iec-electronics.com info@iec-electronics.com 505.345.5591
Laboratory Accreditations

ISO/IEC 17025:2005
DLA QTSL Services
IPC Validation Certified
ANSI/ESD S20.20:2007

Non Destructive Testing

TESTING PROCEDURE
- Up-screening
- Optical Inspection
- X-Ray Inspection
- Scanning Acoustic Microscopy
- X-Ray Fluorescence
- Seal Testing
- Scanning Electron Microscope/EDS
- Particle Impact Noise Detection
- FTIR Spectroscopy
- Solderability Testing
- Thermal Cycling
- Electrical Testing
- HAST
- Reflow Profiling

APPLICABLE METHODS
- MIL-STD-202
- MIL-STD-883, 750, AS6081
- MIL-STD-883, 750, 202
- IPC/JEDEC J-STD-005
- AS6081, JEDS213, IPC-4552
- MIL-STD-883, 750, 202
- MIL-STD-883, 750
- MIL-STD-883, 750
- ASTM E 334, ASTM E 1131
- J-STD
- MIL-STD-883, 750
- AS6081, MIL-STD-883
- Customized per Application
- Customized per Application
- IDEA 1010, AS6081/6171
- IDEA 1010, AS6081/6171
- ASTM E 334, ASTM E 1131

Destructive Testing

TESTING PROCEDURE
- Cross-section Analysis
- Mechanical Decapsulation
- Chemical Decapsulation
- Wire Bond Pull
- Die Shear
- Dye Penetrant
- Resistance to Solvents
- Black Top Evaluation
- TGA Analysis
- Coupon Testing
- Die Cross-section
- Component removal from board

APPLICABLE METHODS
- Customized per Application
- Customized per Application
- MIL-STD-883, 750, AS6081/6171
- MIL-STD-883, 750, AS6081/6171
- Customized per Application
- Customized per Application
- IDEA 1010, AS6081/6171
- IDEA 1010, AS6081/6171
- ASTM E 334, ASTM E 1131
- Customized per Application
- Customized per Application
- Customized per Application