

FAILURE ANALYSIS TESTING

UNBIASED ANALYSIS FROM AN ACCREDITED TEST LABORATORY

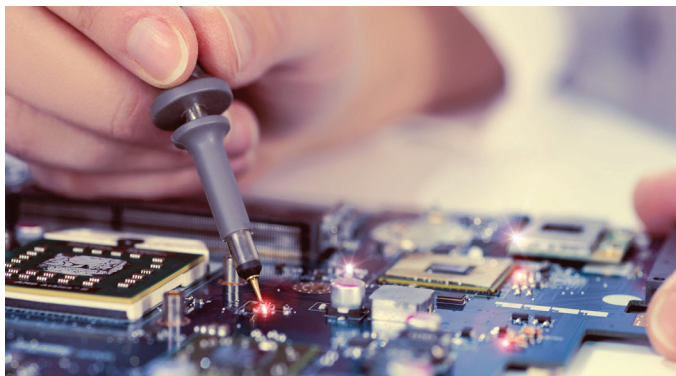
The Electronics Failure Analysis (F/A) capabilities NTS offers can be utilized to improve yield, determine root cause of failure, extrapolate life expectancy and improve reliability, and increase performance on integrated circuits (ICs), printed circuit boards (PCBs), and passive surface mount devices as well as materials and assemblies.

Electronics Failure analysis can provide detailed information regarding the performance of materials and devices in their intended end-use application. When a device or material does not meet its performance expectations, a failure analysis should be performed to identify the root cause of failure.

The information presented in the root cause failure analysis will allow the product designer, manager, test and process engineers, or end-user to identify design, selection, test, and process deficiencies.

Recommendations for corrective actions from the failure analysis report can then be evaluated and implemented to enhance product reliability and performance.

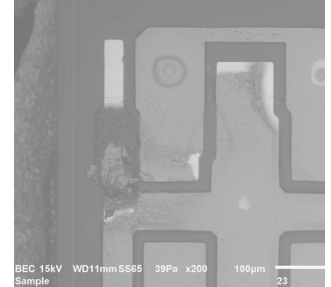
By having an unbiased failure analysis performed by an independent test laboratory, the liability of a failed device or material can be converted into an asset, resulting in production of higher quality products.



We can recommend corrective actions for a higher quality product



increase performance of your product or component



Identify design, selection, test and process deficiencies

TEST CAPABILITIES

- Ball Shear and Die Shear
- Curve Trace
- Decapsulation (De-Cap)
- Design of Experiments (DOE)
- Differential Scanning Calorimetry (DSC)
- Dynamic Mechanical Analysis (DMA)
- Electrical Characterization
- Fourier Transform Interferometry (FTIR)
- Fracture Evaluation
- Level I Analysis
- Material Characterization
- Microsectional Analysis
- Optical Inspection
- External Package Analysis
- Scanning Acoustic Microscopy (CSAM)
- Scanning Electron Microscopy (SEM/EDS)
- Solderability
- Thermal Gravimetric Analysis (TGA)
- Thermal Mechanical Analysis (TMA)
- Wire bond pull testing
- X-Ray (Live-time, non-destructive inspection of package)
- X-Ray Fluorescence (XRF)

ABOUT NTS

Since opening our doors in 1961, NTS has become one of the largest commercial test laboratory networks in North America. Services span environmental, EMC, wireless, dynamic, product safety, materials and much more. Client partners in Aerospace, Defense, Telecom and Energy rely on NTS to deliver quality products to market quickly and efficiently, and so can you.