

# NTS FACILITY SPOTLIGHT

## BALTIMORE, MARYLAND

### ABOUT NTS BALTIMORE

NTS Baltimore is an internationally accredited, world-renowned, full-service failure analysis testing facility specializing in materials testing in accordance with numerous industry standards including ASTM, IPC and MIL-Specs. If you have technical questions or require help designing a test plan, you will work one-on-one with our technical experts, many who chair industry standards writing committees including ASTM, IPC, SAE, and SMTA.

### ADVANCED ANALYTICAL

- Decapsulation
- Differential Scanning Calorimetry (DSC)
- Dynamic X-Ray
- Dynamic Mechanical Analysis (DMA)
- Energy Dispersive X-Ray Spectroscopy
- Fourier Transform Infrared Spectroscopy (FTIR)
- Ion Chromatography (IC)
- Scanning Electron Microscopy (SEM)
- Surface Tension/Contact Angle
- Thermal Conductivity
- Thermogravimetric Analysis (TGA)
- Thermomechanical Analysis (TMA)
- X-Ray Fluorescence (XRF)

### CHEMICAL TESTING

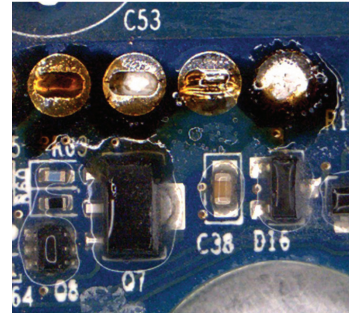
- Alloy Composition
- Chemical Resistance
- Cleanliness/Ionic Impurities
- Compatibility
- Composition
- Contamination Analysis
- Corrosion
- Density/Specific Gravity
- Flammability
- Hazardous Substance Analysis
- Heavy Metals/Lead Content
- Porosity
- Resistivity of Solvent Extract (ROSE)
- Restriction of Hazardous Substances (ROHS)
- Solderability
- Viscosity

### ELECTRICAL TESTING

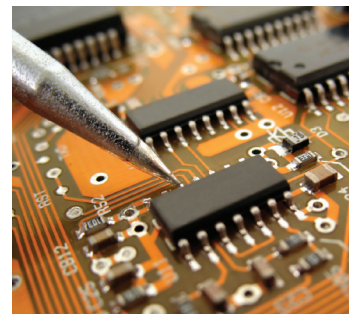
- Arc Resistance
- Capacitance
- Conductivity
- Contact Resistance
- Continuity
- Data Acquisition
- Dielectric Breakdown/Constant/Strength/Withstanding Voltage (DWV)
- Dissipation Factor
- Electrical Overstress/Properties
- HiPot
- Leakage
- Life Testing
- Resistance/Resistivity
- Temperature Coefficient

### ENVIRONMENTAL TESTING

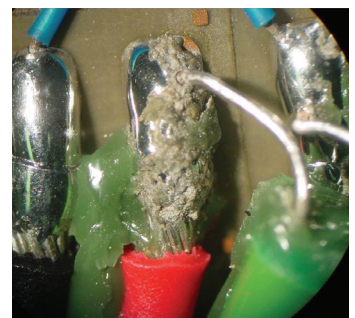
- Accelerated Aging
- Altitude
- Autoclave/Pressure Pot
- Chemical Resistance
- Cold Impact
- Conductive Anodic Filament Growth
- Corrosion Resistance
- Electromigration
- Environmental Stress Screening (ESS)
- Field Simulation
- Flammability
- Fluid Resistance



Contaminant material on a printed circuit assembly identified by Fourier Transform Infrared Spectroscopy (FTIR)



Full service printed circuit board and assembly testing and analysis



World-renowned failure analysis test laboratory



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800.270.2516  
[sales@nts.com](mailto:sales@nts.com)

## ENVIRONMENTAL TESTING (CONTINUED)

- Fungus Resistance
- Hydrolytic Stability
- Immersion
- Moisture and Insulation Resistance (MIR)
- NEMA
- Outgassing
- Steam Aging
- Surface Insulation Resistance (SIR)
- Temperature/Humidity
- Thermal Aging (UL)
- Thermal Cycling
- Thermal Shock
- Thermal Stress
- Time to Delamination
- Tin Whisker Testing
- UV Exposure
- Water Spray
- Water Testing (Drinking/Waste)
- Water Vapor Transmission
- Xenon Arc Weathering

## MECHANICAL TESTING

- Abrasion
- Adhesion
- Bend Testing
- Bond Strength
- Brittleness
- Climbing Drum Peel
- Coating Thickness
- Coefficient of Friction (CoF)
- Cross-section Analysis
- Cure (Tg)
- Deflection Under Load
- Dimensional Stability
- Ductility
- Fatigue Life
- Flexibility Endurance
- Flexural Properties
- Hardness
- Lap Shear Strength
- Mechanical Strength
- Microhardness
- Microsectioning
- Peel Strength
- Plating Thickness
- Rework Simulation
- Shear Properties
- Tear Strength
- Tensile Properties & Elongation

## TESTING PROGRAMS

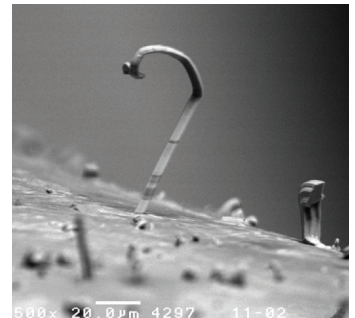
- Assembly Process Validation
- Component Authenticity Verification
- Consultation
- Contamination Analysis
- Counterfeit Component Analysis
- Failure Analysis
- First Article Inspection
- Hazardous Substances Analysis
- IPC Products and Training
- Lead-Free Quality and Reliability Testing
- Printed Circuit Board Analysis
- Qualification, Acceptance & Conformance Testing
- Reliability/Durability Testing
- RoHS Analysis
- Supplier Surveillance Testing
- Tin Whisker Analysis

## ABOUT NTS

As one of the largest commercial test laboratory networks in North America, NTS offers test, inspection and certification services for environmental, dynamics, EMC, wireless, product safety, materials, ballistics and much more. Our client partners rely on NTS to bring quality products to market quickly and efficiently, and so can you.



Verify the operating conditions of your product with our wide range of electrical test equipment



Tin Whisker analysis to JEDEC standards or a custom test plan



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