TESTING SERVICES

- Electrical
- Environmental
- Mechanical
- Thermography

256-461-9191
www.stielectronicsinc.com
STI offers a variety of electrical test services from component-level testing/characterization to system-level testing. Electrical testing is offered to validate values in accordance with component manufacturer's performance specifications or customer's test specification, as well as standard test methods.

• Analog and Digital Designs
• High Frequency RF Layouts
• Controlled Impedance Designs
  - Design Attributes
  - Rules Management
• Design Library Generation
  - Part, Package, and Electrical Symbols
  - Full Forward/Back Annotation
Environmental Test Services

All electronic hardware is susceptible to the damaging effects of moisture, temperature, and contaminants. STI understands the criticality of reliability testing and test-to-failure. Improper selection of assembly materials and manufacturing processes can result in field failure returns which can lead to high warranty reserves thus affecting long-term profitability. STI’s environmental testing capabilities include replicating environments such as Humidity/Moisture Resistance, Thermal Shock/Thermal Cycle, Steam Aging and Vibration/Shock testing. Coupled with the ability to perform in-situ electrical testing as well as a full range of post-test analysis of samples, these tools allow for rapid “aging” of components and prediction of operational life of hardware.

- Thermal Shock
- Temperature Cycling
- Moisture Resistance
- Humidity Cycling
- Shelf Life
- Accelerated Aging
- Vibration Testing
- Mechanical Shock Testing

Mechanical Test Services

STI offers an assortment of mechanical test services to characterize assembly materials and evaluate manufacturing process parameters. Mechanical testing capabilities include first-level interconnects, such as bond wire pull testing and die shear, in addition to second-level interconnects, such as SMD shear strength and solder bump shear strength for BGAs, CSPs, and WSPs.

- Wiring Diagram
- Box Build Documentation
- Full Assembly Drawings
  - Workmanship Standards Referencing
- Mechanical Detail
  - Dimensioning
  - Tolerance Stack Up Analysis
- Material Compatibility Review
- Thermal Interface Material Selection
For more information contact:

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