

# SCI TEST CAPABILITIES



- In-Circuit & Functional-test
- Testing for Printed Circuit Board Assembly (PCBA)
- Automated Optical Inspection (AOI), Hi-Pot
- Flying Probe
- Qualification Testing
  - Mil-Std-810, RTCA/DO-160 (Commercial Aviation) Requirements
  - Temperature, Temperature Shock, Temperature and Altitude, Humidity, Vibration, Shock, Gunfire Shock, Crash Safety, Acceleration, Immersion, Waterproofness, HALT/HASS
  - MIL-STD-461 EMI Requirements
  - Conducted Emissions, Conducted Susceptibility, Radiated Emissions, Radiated Susceptibility
- Environment Stress Screening (ESS)
  - 29 chambers, 30 Degree C / Min ramp
  - -73C to +177C
  - 8 chambers w/ vibration tables (single axis, random vibration to 6,000 f-lbs, sine to 5,400 f-lbs)
  - Humidity chamber (from -20C to +177C at 95% RH)
- Vibration
  - Up to 15,000 force lbs.
  - Velocities up to 70 in/sec
  - Frequencies: 5 to 3kHz
  - Displacement up to 2.5 inches
  - Armatures size up to 33.5 inches
  - Random, Sine, Sine on Random, Random on Random
- Highly Accelerated Life Test (HALT)/Highly Accelerated Stress Screening (HASS)
  - Qualmark TYPHOON 4
  - 70°C/minute ramp rate
  - -100°C to +200°C temp range
  - 50 Grms from 2 to 10 kHz
- Thermotron AST-35-LN2
  - 70°C/minute ramp rate
  - -100°C to +200°C temp range
  - 50 Grms from 2 to 10 kHz
  - 29" x 29" platform

(More on next page)

- EMI
  - Conducted Emissions
    - Power Line
  - Conducted Susceptibility
    - Power Line, Modulated, Transient
  - Radiated Emissions
    - Magnetic Field, Electric Field
  - Radiated Susceptibility
    - Magnetic Field Electro-Magnetic Interference (excluding 200 V/M and Lightning)
- Failure Analysis
  - SEM/EDS (Scanning Electron Microscopy/Energy Dispersive Spectroscopy) — Cambridge S200 and PGT IMIX
  - High power microscopy (Zeiss Universal) — upright / bright-field, DIC, hotspot detection to x1024
  - Digital capabilities for macro- and micro-imaging (including Canon A620 camera)
  - InterTest 1014 Leak Test Pressurization System
  - Varian 938-41 Fine leak (helium) detector
  - LFE plasma systems 104 Barrel plasma etch system
  - Destructive Physical Analysis
  - X-Ray
  - X-Ray Florescent
  - Electrical test
    - Curve Tracer
    - Scopes
    - Pulse/Function Generator
    - Counters
    - Impedance Analyzers
    - Hi-Pot Tester
  - Particle Impact EM/Noise Detection

## FURTHER INFORMATION

For additional information, please email us at [DAS@SCI.com](mailto:DAS@SCI.com).

To learn more about all of our products and services, visit us online at [www.SCI.com](http://www.SCI.com).

