



## EMS Test Capabilities

ControlTek's custom test strategies ensure your product is fully functional before it is delivered, reducing the risk of product defects without adding significant cost to the manufacturing process.

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### P.C. Based Systems

ControlTek's universal test equipment (C.U.T.E.) with PC programming helps test engineers create custom test programs to verify part functionality. A VBNet program captures and documents data to provide quality reporting that meets your industry requirements. Our in-house 3D printing offers additional flexibility to create functional test fixtures that help you save you time and money.

### Boundary Scan

The Boundary Scan reduces testing time and lowers costs by testing interconnects without the expense and complexity of a bed-of-nails fixture. It is also an excellent choice for debugging, allowing us to watch circuit pin states, and analyze sub-blocks inside an integrated circuit.

### ► Flying Probe System

Keep your production costs low by testing low volume and prototype circuit assemblies without the added cost of a test fixture.

## ADDITIONAL TESTING CAPABILITIES

### AC Power Analysis

- IEC61000-4-11 Voltage dips, Short Interruptions and Voltage Variations

### Battery Systems

- Emulate Battery Performance from Full Charge to Total Discharge
- Simulate any Type of Battery
- Measure Device Load Currents with 0.05% Accuracy and 10nA Sensitivity

### Embedded Design & Debug

- Integrated Digital Tools

### Immunity Tests

- IEC61000-4-13 Harmonics and Interharmonics Tests
- Avionics Electrical Power Quality Testing
- Boeing 787B3-0147 A/B/C
- Airbus AMD24 C
- RTCA/DO 160 E/F/G
- MIL-STD 704 A/B/C/D/E/F
- Airbus ADB100.1.8 D/E
- Airbus ADB100.1.8.1 B/C

### Miscellaneous

- ASTM Standard ESD Testing
- Light Level Measurements
- Hi-Pot Testing
- Leakage Current Testing – Human Body Model
- Milliohm Measurements
- Tachometer Measurements
- Vibration Testing
- Ground Continuity Testing
- PCB Flex/Strain Measurement & Analysis

### RF Analysis

- 6GHZ Real-Time Spectrum Analysis
- 100MHZ-2.5GHZ Vector Signal Generation
- 10HZ-4.4GHZ Tracking Generation
- Radiated Emissions Baselines via Shielded Screen Room
- VNA for RF Cable Characterization up to 42GHz

### Standard 1399 Section 300A, and up to 400 Harmonics

- Debugging Active Power Factor Correction Circuits

### Switching Power Supply Analysis

- Power Loss Measurements at Switching Device
- Characterization of Power Semiconductor Devices
- Optimal Drive Characterization of Synchronous Rectifiers
- Measurement and Analysis of Ripple and Noise
- Pre-Compliance Testing to IEC Standard EN61000 3-2
- Class A, Class A, MIL-STD

### Additional Test Services

- Temperature/Humidity Testing
- Thermal Imaging

