

# B i b t e s t 5 5 X L

Burn-in Board Test System

## Key Features

### Technology

- 256 basic channels
- Expandable to 2048 Channels
- 4 wire Kelvin measurements
- Windows based software

### Program

- Edge, pin and leakage netlists
- Zoned board programming
- Learn of known good board
- Universal edge adapter
- Windows editing commands

### Testing

- Board Map or scroll test option
- Autotest or manual test modes
- Socket pass/fail indication
- History of pass/fail data
- Built in database for BIB log
- Integrated faultfinding tools

## System Overview

■ The Bibtest55XL is the market leading burn-in board test system. The system is extremely accurate and is designed to electrically test any style or configuration of burn-in board. Using 4-wire technology the system will fully test a burn-in circuit, including resistance, capacitance, diodes, transistors, shorts, opens and leakage paths.



■ The basic system has 256 channels, which can easily be expanded to a maximum of 2048 channels, using 'plug and play' expansion modules. Each channel which can be programmed on the fly as force, sense, leakage, stimulus or driven guard. The test system includes an integrated PC and features a windows based operating software with an on-line database.

■ The Bibtest55XL also features built-in enhancements including Autocalibration module, Tone Ohm fault diagnostic tool, Integrated DMM and Self test utilities.

## System Highlights

- Universal Burn-in Board test system with up to 2048 test channels
- Increased test speeds - up to 100 components /sec
- Active voltage stimulus for transistor and Mosfet testing
- Windows based spreadsheets for fast programming
- SPC data gathering to record and analyse component drift *New!!*
- Pass/Fail Status of each socket pin during test *New!!*
- Enhanced leakage test measurements *New!!*
- New board zoning program menus *New!!*
- Meets all MIL and automotive requirements for testing

## Summary System Specifications

### ■ Resistance Measurement

Range	Accuracy	Resolution
100uR - 24R	0.01%	1.0uR
24R - 240R	0.01%	10uR
240R - 2.4K	0.01%	100uR
2.4K - 24K	0.01%	1.0mR
24K - 240K	0.01%	10mR
240K - 2.4M	0.02%	100mR
2.4M - 24M	0.12%	100R
24M - 240M	0.80%	1.0K
240M - 10G	0.40%	1.0M

### ■ Capacitance Measurement

Range	Accuracy	Resolution
10pf - 12nf	5.00%	1.0pf
12nf - 120nf	1.00%	100pf
120nf - 12uf	1.00%	1.0nf
12uf - 120uf	1.00%	10nf
120uf - 1.2mf	1.20%	100nf
1.2mf - 12mf	2.00%	1.0uf

### ■ Inductance Measurement (Direct on DMM only)

Range	Accuracy	Resolution
10uH - 24mH	5.00%	1.0uH
24mH - 240mH	5.00%	10uH
240mH - 2.4H	5.00%	100uH

### ■ Leakage Measurement

Range	Accuracy	Resolution
0.1pA - 240nA	0.15%	0.1pA
240nA - 2.4nA	0.10%	1.0pA
2.4nA - 24uA	0.12%	10pA

### ■ Diode Measurement (Standard and Zener)

Range	Accuracy	Resolution
0-19 volts	0.005%	1.0uV

### ■ User Defined Part (UDP)

Range	Accuracy	Resolution
0-9 volts	0.1-5%	± 0.1 v

### ■ Stimulus Voltage

Range	Accuracy	Resolution
0-8 volts	1.0%	1mV

### ■ Tone Ohm

Range	Accuracy	Resolution
0.2R-20k	1.0%	1.0%

### ■ Measurement Limits

Range	Accuracy
Short Circuits	0 - 50 R
Open Circuits	1K - 10G
Lower Cap	10pf - 50nf

### ■ Hardware Features

#### Channel Configuration

256 basic channels on entry level system  
 128 block channel 'plug and play' upgrades  
 Maximum number of channels 2048

#### Programming

Edge to Pin for standard testing  
 Edge to Edge for edge verification  
 Pin to Pin for internal connections  
 Pin to Edge for bi-directional testing  
 Leakage test for open circuit verification

#### Utilities

4-wire Kelvin measurements  
 Test speed up to 100 components per second

### ■ Software Features

#### Programming

Window based spreadsheet programming  
 5 net-list options for comprehensive testing  
 Each channel can be programmed force or sense  
 Driven guard on every channel  
 Each channel can be a stimulus voltage  
 Look up table for edge and pin labelling  
 Autolearn of known good circuit or board  
 Up to 5000 netlist entries

#### Testing

Board map or scroll test options  
 1st socket test for common components  
 Zone board testing capability  
 Database for test result storage  
 Tone Ohm BIB fault diagnostic tool

### ■ System Configuration

#### Measurement Currents

10mA, 1mA, 0.1mA, 0.01mA and 0.50uA

#### Installed PC

2.5Ghz processor, 10Gb HD,  
 17" LCD display, Windows XP

#### Power Requirements

110/220 volts, 50/60Hz, single phase, 5amps.



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