

High Pin Count Backplane Analog ICT Test

*Testronics Bridges the Gap between Continuity Test & In-Circuit Test
for Complex Loaded Backplanes*

Model 401



Features

- High Pin Count Capability – In excess of 100,000 test points
- Level IV Testing – 6-wire Guarding, Component Level Testing, Vectorless IC Verification
- High Throughput Clamshell Double Access Fixturing
- Quick Product Change – Simple Fixture Mechanical Engagement
- High Speed – 10,000 points tested in less than 60 seconds
- Industry Standard PC Controlled with Win 95/98 Testronics Software
- IEEE and Power-Up Options Available

Fault Coverage

- Isolation testing exceeding Bellcore standards
- SMT opens
- Missing & Bent Pins
- Connector Orientation
- Capacitors
- Inductors
- Resistors
- Diodes, LED's, Zeners
- Transistors
- Complex Impedances
- Programmable Sources
- HP Test Jet

High Pin Count Backplane Clamshell Fixtures

Features

- Test Point Counts typically ranging from 2,000 to 20,000 points
- Ruggedized Fixture with hinged upper assembly for ease of board access
- Linear Bearings for Alignment accuracy & smooth compression
 - Hardened Registration Points
 - Convenient Handles

Low Cost Fixturing & Testing

Testronics also has available the low cost Model 406LV Backplane Tester. This tester is typically configured for but not limited to 1500 to 10,000 test points and is designed to be used with paddle card fixturing, stand alone vacuum fixtures, or simple cable and connector interfaces.



Model 406LV High Pin Count Level IV Backplane Tester

The 406LV is identical in capability and flexibility to the other 400 series testers. The 3 main differences are that the electronics are mounted in a 19" cabinet that can sit on a table top, there is unlimited test point expansion capability, and the output to the unit under test is 64-pin connectors. Mating cables can then terminate in any type of application specific interface, including connectors, paddle cards, stand alone vacuum or mechanical fixturing. Typical system sizes range from 2,048 points to 10,240 points, although there is no limit on the number of points that can be implemented on this platform.



401/406LV Specifications

DC Voltage & Current	Programmable 16-bit Range	Accuracy	AC Voltage & Current	Programmable 16 Bit Range	Accuracy
Voltage Source	25mV–10.0V	+/-0.5%F.S. +/-0.5% Value	Voltage Source	25mV–10.0V	+/-0.1%F.S. +/-0.1% Value
Voltage Meter	2.5mV–10.0V	+/-0.5%F.S. +/-0.5% Value	Voltage Meter	10mV–10.0V	+/-0.5%F.S. +/-0.5% Value
Current Source	250nA–10mA	+/-0.5%F.S. +/-0.5% Value	Current Source	25uA–10mA	+/-0.5%F.S. +/-0.5% Value
Current Meter	250nA–10mA	+/-0.5%F.S. +/-0.5% Value	Current Meter	25uA–10mA	+/-0.5%F.S. +/-0.5% Value
Guard Voltage Source	25mV– 10.0V	+/-0.5%F.S. +/-0.5% Value	Component Measurement Capability		
Guard Voltage Meter	2.5mV–10.0V	+/-0.5%F.S. +/-0.5% Value	Resistive Range	.01Ω – 100 MΩ	+/-1% F.S. +/-1% Value
Guard Current Source	250nA–100mA	+/-0.5%F.S. +/-0.5% Value	Capacitance Range	10pF – 5F	+/-2% F.S. +/-2% Value
Guard Current Meter	250nA–100mA	+/-0.5%F.S. +/-0.5% Value	Inductive Range	10uH – 10H	+/-2% F.S. +/-2% Value
Power-up Card Specifications			Option Card Specifications		
6-wire Power Up Relay Cards	0 – 50V 0 – 1.5A		Hybrid Cards - Combination 10V switch matrix / Isolation Relay		
3-wire Power Up Relay Cards	0 – 50V 0 – 1.5A		Instrument Matrix Card – 64 external lines x 6 input matrix		
Measurement Matrix	6 Lines by n pins		24 Channel Relay Driver – 24 N/O programmable relay contacts, 8 digital TTL input bits, also configurable for 24 digital TTL bits		
Auxiliary Matrix	10 Lines by n pins				

Base System Advanced Features

- Standard PC operates tester from parallel port
- Up to 20,000 fully bi-directional test points, larger pin counts available with other receivers
- Multiple board panel auto-programming and testing
- Unlimited guard points with true 6-wire Kelvin measurements
- Pure pin non-multiplexed matrix for simple programming
- Vectorless IC testing – Automatic IC signature learn for detection of open SMT solder joints, reversed IC's, solder bridging, and wrong IC's
- Scan pins feature speaks the test point number when external probe is used on fixture or uut.
- Custom .exe programs for advanced applications can be executed from WinTos and variables returned: pass, fail, abort, integer values, and message strings
- High throughput bed of nails double access fixturing, & low cost paddle card fixturing
- Unlimited test steps with branching, looping, & mathematical operations on user defined variables

Options

- Graphical Failure Viewer
- HP Test Jet Technology
- Diagnostic & Calibration Fixture
- Turn Key Programming & Fixturing
- International Training & Service
- Spare Board Kit
- Win 98 software provides quick programming
- Multilevel Password protection
- No charge software updates, No charge training
- No Software Licensing Fees
- CAD translation software
- Continuous process control & data logging
- LCR Quadrature measurements for parallel circuits
- All pins have parallel drive and sense capability
- Automatic test program generation
- Bar code compatible
- RS232 software controllable
- Vacuum, press down, dual well, double sided access, & fine pitch fixturing
- IEEE Control Card & Software
- Power-Up Relay Cards
- Functional Instrumentation Card