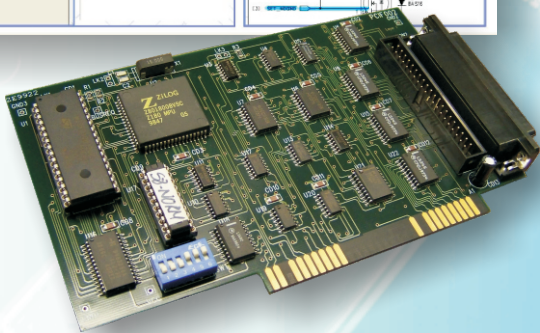
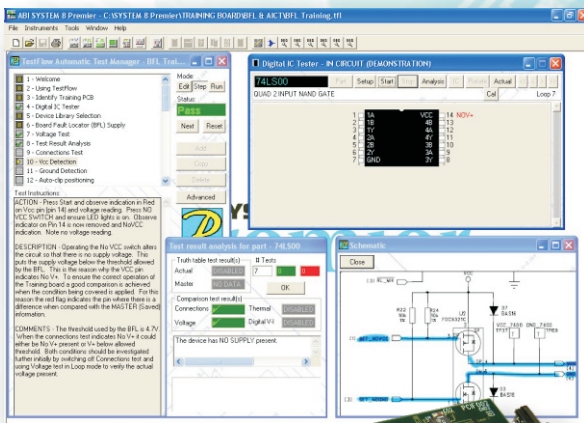


THE ULTIMATE IN DIAGNOSTICS TOOLS



- Component and board level testing
- Digital & analogue functional tests
- Power on and power off tests
- Single point measurements
- Automated test procedures
- Configurable software
- QA reporting facility

The SYSTEM 8 Range

The ABI SYSTEM 8 range of fault-finding, component test and measurement equipment provides unrivalled capabilities.

Whether your task is design verification, production test, semiconductor device testing, production repair or general maintenance, and whether your boards are analogue, digital or both, the SYSTEM 8 range provides the ultimate in diagnostic tools.



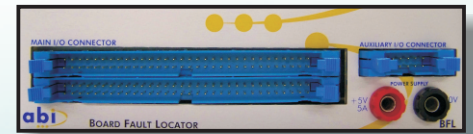
www.abielectronics.co.uk

Perfect solutions for all your test requirements...

The SYSTEM 8 range is made up of modules which can be combined to suit a variety of test applications. Modules require a PC to work with the System8 Premier software and can be integrated in a spare CD/DVD drive bay with a PCI interface. Alternatively, modules can be fitted into an external case with a USB interface. The modules available are:

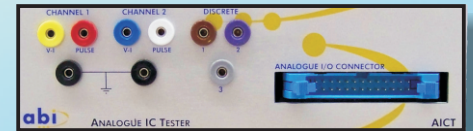
Board Fault Locator Module (BFL)

This is an entry level system, designed for digital IC testing. With 64 test channels, it provides comprehensive fault diagnosis capability and includes functional testing of digital ICs (in-circuit / out-of-circuit), IC connections status and voltage acquisition together with a V-I Curve function which allows testing of components with no need to apply power to the board. Up to 4 modules can be combined together to offer 256 test channels.



Analogue IC Tester Module (AICT)

The Analogue IC Tester allows in-circuit functional testing of analogue ICs and discrete components. All common analogue devices can be tested as they are configured on the PCB, without programming or the need to refer to circuit diagrams. The AICT also includes a fully configurable V-I tester for detection of faults on un-powered boards through clear and easy to understand graphical results.



Analogue Test Station Module (ATS)

For users requiring the identification and testing of analogue devices without the need for functional testing, the Analogue Test Station module is a cost-effective option with an analogue V-I tester. The ATS module offers 24 channels plus 2 discrete channels for ICs and discrete components. For advanced testing, Matrix mode and pulse outputs are also available.

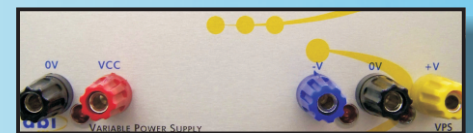


Multiple Instrument Station Module (MIS)

The Multiple Instrument Station provides no less than 8 high specification test and measurement instruments in one compact module. Ideal for design, education or for general purpose workbench use, the MIS offers a Frequency Counter, Digital Storage Oscilloscope, Function Generator, Digital Floating Multimeter, Auxiliary PSU and Universal I/O. For optimised utilisation, standard instruments can be customised or new ones can be designed to suit applications.

Variable Power Supply Module (VPS)

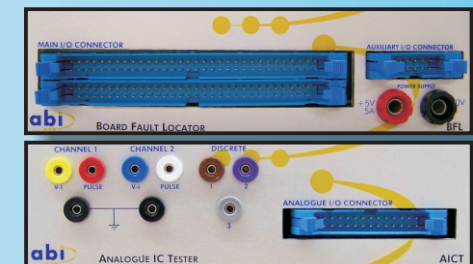
The Variable Power Supply provides the necessary supply voltages to the unit under test.



Popular Combinations

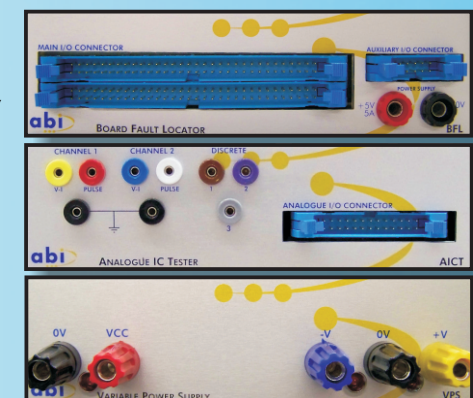
Diagnostic Solution

The SYSTEM 8 Diagnostic Solution is the answer to board fault-finding problems. Equally at home with analogue or digital PCBs, the system's 64 digital and 24 analogue test channels provide a variety of fault-finding techniques to track down the most elusive faults. The in-circuit IC functional test is the heart of the system - look into an IC and check that it functions correctly, look outside and confirm that it is correctly wired. Use the analogue V-I tester, with selectable test frequencies, impedance and voltages, to check analogue components. Compare the results with a known good board, automate fault-finding procedures with the test sequence generator (TestFlow) and fault diagnosis becomes truly effortless!



Diagnostic Solution PLUS

Add to the SYSTEM 8 Diagnostic Solution an integrated power supply for diagnostic testing and you have the SYSTEM 8 Diagnostic Solution PLUS. This provides the necessary supply voltages to the unit under test with three variable output voltages.



Custom solution, BFL module in single bay MultiLink case.

Standard Accessories

Board Fault Locator Cable and Probe Set

- 1 x 64 way test cable
- 1 x 64 way split test cable
- 1 x BDO cable assembly
- 1 x short locator cable assembly
- 1 x ground clip
- 1 x PSU lead set
- 1 x V-I probe assembly
- 1 x 20 pin (0.3") test clip

Multiple Instrument Station Cable and Probe Set

- 2 x DSO probes
- 1 x yellow probe and cable
- 1 x blue probe and cable
- 1 x black probe and cable

Variable Power Supply Cable Set

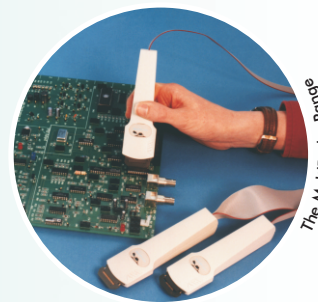
- 1 x logic cable
- 2 x ground cables
- 1 x +V cable
- 1 x -V cable

Analogue IC Tester Cable and Probe Set

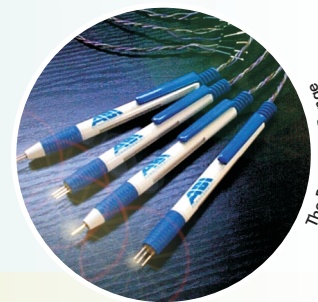
- 1 x 24 way test cable
- 1 x 24 pin test clip
- 1 x yellow probe and cable
- 1 x blue probe and cable
- 2 x pulse leads
- 2 x ground leads
- 3 x discrete leads

Analogue Test Station Cable Set

- 1 x 24 way test cable
- 1 x 24 pin test clip
- 2 x pulse leads
- 2 x ground leads
- 1 x yellow probe and cable
- 1 x blue probe and cable
- 1 x SMT tweezer set



The MultiProbe Range



The PenProbe Range



A full range of clips and cables are available

Optional Accessories

MultiProbe Range

0.050" pitch 10 pin (SOIC and PLCC) and 0.100" pitch 8 pin (DIL).

PenProbe 4-piece Set

Type 1 (3 pin transistors, SOT23 and similar), type 2 (3 pin transistors, TO72 and similar), type 3 (3 pin transistors, TO220 and similar), type 4 (3 pin transistors, TO92 and similar)

SOIC test clip and cable set

8, 14, 16 pin narrow and 20, 24, 28 pin wide

PLCC test clip and cable assembly

20, 28, 44, 52, 68 and 84 pin

QFP test clip and cable assembly

100, 144, 160, 208 pin

Choosing the right system

	Diagnostic Solution PLUS	Diagnostic Solution	Board Fault Locator	Analogue IC Tester	Analogue Test Station	Multiple Instrument Station	Variable Power Supply
Channels per instrument (Analogue in brackets)	64 (24)	64 (24)	64 ‡	(24)	(24)	4 (4)	N/A
Power supplies	2-7V ±24V	5V	5V			5V ±9V	2-7V ±24V
Discrete testing	●	●		●	●		
Analogue impedance test	●	●		●	●		
Digital impedance test	●	●	●				
Logic supplies	●	●	●			●	●
Measurement *						●	
Short locator	●	●	●				
Unknown IC search	●	●	●				
Out-of-circuit	○	○	○				
In-circuit	●	●	●	●	●	●	●
Analogue test	●	●		●	●		
Digital test	●	●	●				
IC functional test	●	●	●	●			
Test Generator	●	●	●				
PremierLink Software	●	●	●	●			

* DSO, Function Generator, Frequency Counter, Digital Floating Multimeter, Universal I/O

‡ Upgrade options: 128, 192, 256 channels

Premier Software

The software SYSTEM 8 Premier is designed for seamless interaction with the hardware whilst still providing state of the art test algorithms. Advanced control to the system is provided through intuitive windows including :

- User access manager
- TestFlow automatic test manager
- Instrument design manager
- Instrument menu manager
- Custom calculator functions
- Flexible data logger

At the heart of SYSTEM 8 Premier is the concept of TestFlow, an approach to testing and fault finding that not only speeds up operation - and thus turnover - but also allows the system to be used by semi-skilled operators.

TestFlow transforms fault finding into a methodical, step by step procedure that reduces the risk of inaccurate measurements by recording all the parameters of a test. Technicians can write a test procedure, or TestFlow, for a particular PCB by setting up each stage of the process and recording the results. They may also include their knowledge of the board through schematics, bitmap images or even notes and instructions to assist with the task. Semi-skilled operators need only follow the instructions on-screen to carry out an extensive test sequence on even the most complicated equipment.

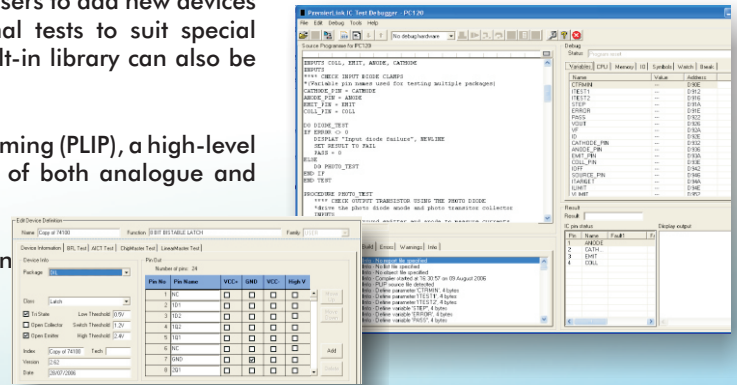
The TestFlow Automatic Test Manager provides automatically documented fault-finding reports by comparing good and bad boards. Test points, test methods, operator instructions and reported results with statistical functions are all available on-screen in an easy to follow format. With TestFlow, knowledge and experience of a PCB does not belong to only

PremierLink Software (Optional)

PremierLink is an optional PC based software package that allows users to add new devices to the library, select a variety of tests and create new functional tests to suit special applications. Test routines for devices included in the System8 built-in library can also be viewed (ASM).

New IC functional tests can be created using PremierLink IC Programming (PLIP), a high-level descriptive test programming language optimised for generation of both analogue and digital IC test programmes.

- Library development manager for IC configuration and test selection
- PLIP programming for full generation of new IC functional tests
- Access to test routines for System8 built-in library devices
- Compiler, debugger and active help integrated



Applications and Training

With customers ranging from a manufacturer of flight simulators to an aluminium company, from an IC manufacturer to universities and technical colleges, the SYSTEM 8 range demonstrates its versatility everyday, in every technical field available and in every corner of the world. Many repair centres are equipped with SYSTEM 8 to offer the best fault coverage and maintenance capabilities to their wide range of customers including telecommunications, transportation and even consumer goods. Thanks to a strong network of partners, SYSTEM 8 is also the instrument of choice for many land forces, air force and navy organisations around the globe.

It is common knowledge that a trained operator works more efficiently than a novice. At ABI Electronics, we also understand that, in order to get the best out of your equipment, it is crucial to be aware of all its capabilities. With that attitude in mind, ABI Electronics has developed a complete training package for new and advanced users.

A training PCB was specially designed as a platform for the SYSTEM 8 range. Through PIC-controlled fault conditions, operators approach digital and analogue electronics principles and gain knowledge of repair techniques. A complete guide is also provided in the form of a TestFlow with detailed instructions and explanations.

The training package is widely used in the industry as it allows new users to train on their own and at their own pace, thus freeing advanced users for other tasks. It is also part of many educational courses in universities and technical colleges around the world.

Specifications for SYSTEM 8 range

Digital IC Test

64 test channels. 4 bus disable outputs. 5V/5A power supply. Truth table (functional), voltage, connections, thermal & V-I tests. Logic trace mode. EPROM verifier. IC Identifier. Adjustable logic thresholds. Auto clip positioning and circuit compensation. Can be upgraded up to 256 channels or used for live comparison with two BFL modules.

Analogue IC Test

24 channels plus 3 discrete. Library driven tests for op amps, comparators, optos, transistors, diodes and special function devices. Functional, connections and voltage tests. Auto clip positioning and circuit compensation.

Digital V-I Test

64 test channels. Variable voltage range. Optimised for digital components. Can be upgraded to 256 channels.

Analogue V-I Test

24 channels plus 2 probes. Variable frequency, impedance, voltage and waveforms. 2 adjustable pulse outputs. Automatic calibration. V-I, V-T and I-T display. Optional out-of-circuit adapter available.

Matrix V-I

24 channels with rotating reference. Multi-plot display with single waveform zoom. Mean percentage comparison for each pin with audible and visual indication.

Graphical Test Generator

64 channels. Graphically programmable sequences for inputs, outputs and bidirectional channels. Responses can be learnt, vectors can be saved, loaded and compared.

Floating Digital Multimeter

2 auto-ranging channels. DC and AC volts measurements up to 400V. DC and AC current measurements up to 2A. Resistance

Universal I/O

4 analogue channels and 4 digital channels. Analogue channels can output and measure voltages from -9V to +9V, as well as sinking and sourcing currents up to 20mA. Digital channels can output and read back TTL compatible logic levels.

Short Locator

3 resistance ranges. Audible and visual indication of proximity to short. Audible continuity checker.

Auxiliary Power Supply

5V output at 0.5A, +9V output at 100mA and -9V output at 100mA. Current monitoring on all three outputs.

Variable Power Supply

2.5V to 6V variable logic supply with over voltage protection. Variable positive and negative supplies to 24V with variable current up to 1A.



ABI Electronics Ltd
Dodworth Business Park
Barnsley S75 3SP
South Yorkshire
United Kingdom

Tel: +44 (0) 1226 207420
Fax: +44 (0) 1226 207620
www.abielectronics.co.uk