ABI Electronics

Test & Measurement Systems

EXTENDING THE LIFE OF YOUR PCBs SINCE 1983

WELCOME TO ABI

ABI Electronics offers unique time-saving and flexible products which are used by companies operating in a wide range of sectors. ABI's fully integrated hardware and software solutions allow our customers to take control over their electronic maintenance requirements, automate quality tests on new products and generate schematics for legacy equipment.
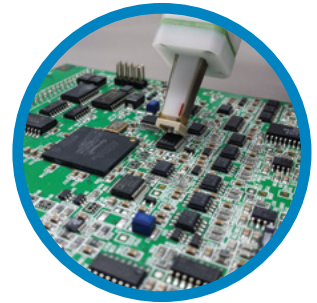
MANUFACTURING

MASS TRANSIT

ARMED FORCES

MAINTENANCE

AEROSPACE

OIL & GAS

AUTOMOTIVE

EDUCATION

ABOUT US

ABI Electronics has designed and manufactured high quality test, diagnostic and measurement instrumentation in the UK since 1983. ABI's range of products are commonly used in the test and maintenance of highly complex systems across a variety of industries and applications worldwide. Customers choose ABI products for their flexibility, affordability and time-saving features.

The company founders developed the world's first low cost test solution for integrated circuits that turned into a great success amongst engineers in the UK and abroad.

ABI has now over 40 years experience of developing the highest quality testing and fault-finding equipment, backed by a global reputation for quality and service. It is also certified in accordance with ISO 9001-2018.

Over all these years, ABI has remained loyal to its principle of full design and build high quality products in the UK.

CHANGING VALUES & BEHAVIOUR IN THE INDUSTRY

Created in 2015, ABI's initiative '**Repair, don't waste**' has become a global movement aimed at increasing awareness to the benefits of industrial electronics repair over replace across the business spectrum. The "Repair, don't waste" movement has reduced waste, downtime and created quality job opportunities around the world.

WHAT CUSTOMERS SAY

"We are proud to join the #RepairDontWaste community." The whole world stands to profit massively from industrial electronics being kept going for longer.

Join the **#RepairDontWaste** community and keep up to date with our latest news.

Find out more at **RepairDontWaste.com**

SYSTEM 8 | **BOARD FAULT LOCATOR (BFL)**

## FUNCTIONAL TEST DIGITAL ICs IN AND OUT-OF-CIRCUIT

The SYSTEM 8 Board Fault Locator provides the user with the ability to functionally test all common digital ICs in and out-of-circuit. A combination of industry recognised test techniques provides a high level of fault coverage. Additional tools are provided by the SYSTEM 8 software to further enhance the unit's wide range of applications.

KEY FEATURES

- IN-CIRCUIT AND OUT-OF-CIRCUIT (TLL OR CMOS)

- THROUGH HOLE OR SMT (DIL, SOIC, PLCC, QFP)

- LIBRARY RANGE FROM NAND GATES TO CPUS

- STANDARD OR CUSTOM LOGIC (GRAPHICAL TEST GENERATOR)

- DIGITAL V-I TESTER

- DIGITAL IC IDENTIFIER

- EPROM VERIFIER

- SHORT LOCATOR

The Digital IC Identifier test allows unknown ICs to be identified without typing in a part number, helping the user in those cases where the part number is illegible
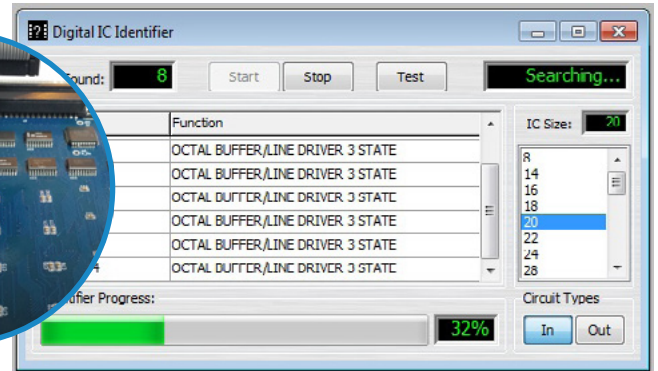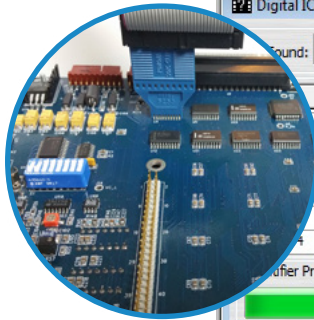
CLOSE-UP VIEW.
IC Identification.

CLOSE-UP VIEW.
Logic Test Generator.
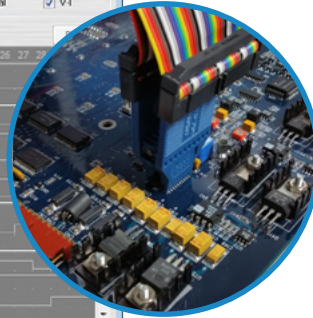
The BFL can be upgraded to include up to 256 channels (in 64 channels steps) which enables live comparison of good and bad boards.

SPECIFICATIONS

- 1x SYSTEM 8 64 channel Board Fault Locator module

- 1x Board Fault Locator cable set

- 1x Automatic out-of-circuit adapter

- DIL Test Clips:
  20 pin (0.3") and 40 pin (0.6")

- SYSTEM 8 software on USB

Digital IC test capability

Number of I/O channels:	64-256
Number of guard outputs:	4 or 8
Live comparison:	64 x 2, 128 x 2 with additional modules
Drive output voltage:	Device dependent Typical H-L 80mA @ 0.6V Typical L-H 200mA @ 2V Max. 400mA
Drive slew rate:	>100V/µs
Receive input:	+/-10V
Input impedance:	10k
Termination:	Programmable for tri-state/ open collector
Drive states:	Low, high, tri-state
Over voltage protection:	<0.5V, >5.5V
Test time:	Dependent on device
Circuit modes:	In-circuit. Out-of-circuit (with adapter)

Power supply for board under test

Automatic power supply:	1 x 5V @ 5A fixed (2 x 5V @ 5A fixed for 128 channels)
Over voltage protection:	7V
Short circuit current:	7A

Test modes

Single:	Single test
Loop:	Unconditional, loop while good, loop while bad
Auto:	Find tightest valid thresholds

TECHNICAL DATASHEET

Test thresholds

Resolution:	100mV
Low levels:	4 TTL 0.1V to 1.1V CMOS 0.1V to 1.5V
Switching levels:	TTL 1.0V to 2.3V CMOS 1.0V to 3.0V
High levels:	TTL 1.9V to 4.9V CMOS 1.9V to 4.9V
Swept low levels:	TTL 0.1V to 1.1V CMOS 0.1V to 1.5V
Swept switching levels:	TTL 1.2V CMOS 2.5V
Swept high levels:	TTL 1.9V to 4.9V CMOS 1.9V to 4.9V

Test types

Truth table (functional):	Library based functional test
Connections (MDA):	Short circuit detection Floating input detection Open circuit detection Linked pin detection
Voltage:	Resolution 10mV Range +/-10V Logic state detection
VI:	Number of channels 64 - 256 Sweep ranges -10V to +10V (programmable) Maximum test current 1mA Multi-plot with single waveform zoom
Thermal:	Indication of pin temperature

Test libraries

Library classes:	TTL 54/74 logic, CMOS, Memory, Interface, LSI, Microprocessor, PAL/EPLD, Linear, Package, Special and user defined
Package types:	DIL, SOIC, PLCC, QFP

Accessories

Standard:	Automatic out-of-circuit adapter 1 x 64 way test cable 1 x 64 way split test cable 1 x V-I probe assembly 1 x BDO cable 1 x Short locator cable 1 x Ground clip 1 x PSU lead set

*The ABI development team strive continually to improve their products for the benefit of the customer.
The specification of current products may therefore vary from that described in this flyer.

OUR
CLIENTS

ABI products are used all over the world by companies operating from railway, automotive, aerospace and heavy industry to armed forces, industrial maintenance and education.

SUPPORT

We are here to help!

Customer service is part of our commitment to continued quality and product development. We always strive to provide quick and efficient support to our customers worldwide. Service, maintenance and upgrades are available for our range of products as well as customised solutions to suit special requirements.

Tech Support

Direct access available to technical support from ABI's engineering team based in the UK and from our global distributors.

Upgrades

Stay current with free upgrades to software and maintenance releases.

Global reputation for quality and service

ABI Electronics is certified in accordance with ISO 9001-2018. The system is based on an ongoing commitment to quality, professional fulfillment of duties and constant expansion and development.

Certificate nº: 3133

ABI Training and Certification

We are also committed to meeting every customer's training needs. We offer a range of training courses, complete with hands-on opportunities, which can be delivered in house or on-site.

CONTACT US!

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