



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.



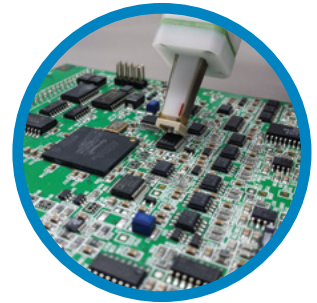
MANUFACTURING



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 | ANALOGUE IC TESTER (AICT)

THE IDEAL SOLUTION TO FIND FAULTS ON ANALOGUE PCBS



KEY FEATURES

- In-circuit functional testing of analogue ICs
- In-circuit functional testing of discrete components
- Connections and voltage tests
- V-I signature tests
- Matrix V-I tests
- Dynamic tests for gate-activated devices

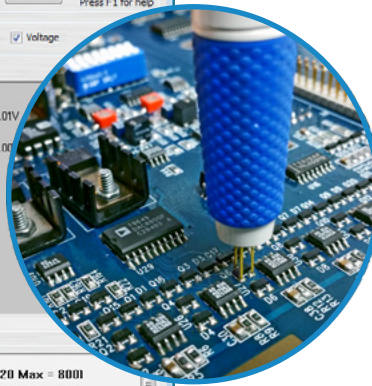
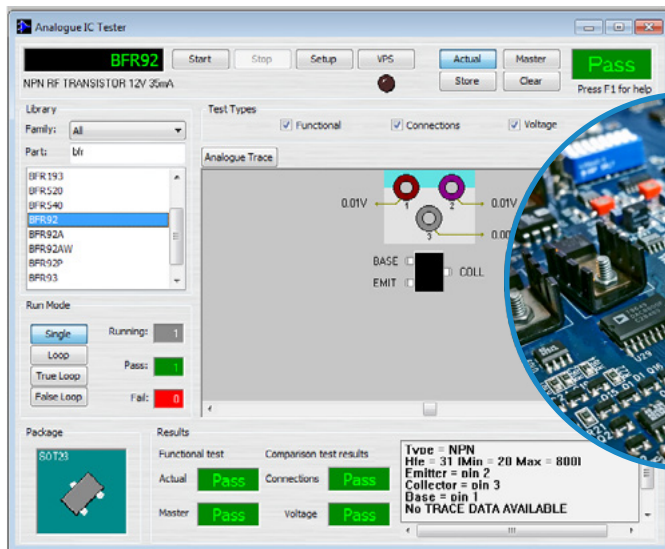
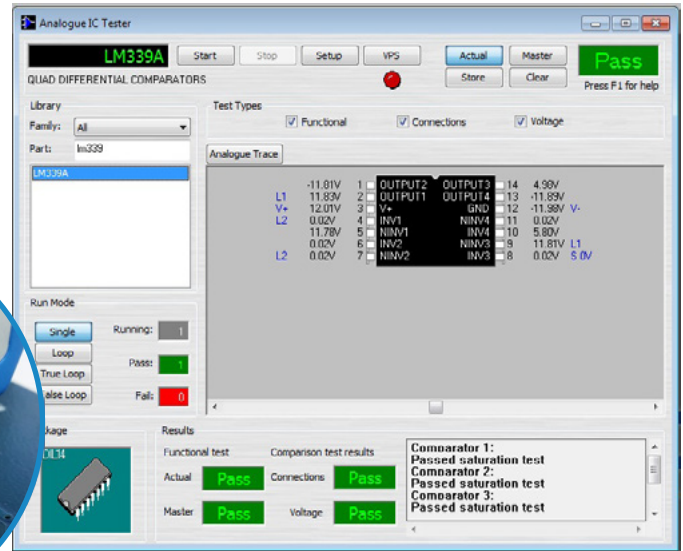
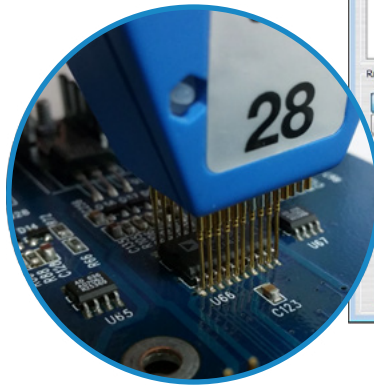


COMBINE POWER-ON & POWER-OFF TESTS

The SYSTEM 8 Analogue IC Tester can be used to efficiently diagnose faults on analogue PCBs down to component level, or for functionally testing ICs. No other product offers such comprehensive test and fault diagnosis facilities at such a low price.

The AICT 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. The AICT also includes a fully configurable V/I tester equipped with a pulse generator to test gate-activated devices.

CLOSE-UP VIEW.
Analogue Functional Test.



CLOSE-UP VIEW.
Discrete Functional Test.

TECHNICAL DATASHEET

V-I test capability

Number of test channels	24 + 2 probes and references
Test voltage	2 V to 50 V peak to peak
Voltage resolution	8 to 12 bits
Test frequency	37.5 Hz to 12 kHz
Test current	1 μ A to 150 mA
Source impedance	100 Ohm to 1 M
Test waveforms	Sine, triangle, ramp
Waveform modes	V-I, V-T, I-T
Waveform display	Multi-plot with single waveform zoom
Waveform comparison	Automatic comparison algorithm for good and bad boards using live probes or disk
V-I comparison tolerance	50 mV to 500 mV with 50 mV resolution
Package support	DIL, SOIC, PLCC, QFP and variants with MultiProbes
Pulse output	Positive, negative or bipolar for thyristors/triacs
Pulse amplitude	Adjustable to +/-10 V
Calibration	Can be calibrated by user
Pulse amplitude	Adjustable to +/-10 V

Analogue functional test capability

Number of I/O channels	24 independent + 3 special discrete channels
Driver voltage	-12 V to +12 V
Driver voltage resolution	10 bit
Driver output current	200 mA max sink or source
Driver states	Voltage source, current source, off
Discrete source current	10 μ A - 150 mA. (driving a load returned to 0V)
Driver source impedance	34 Ohm (34 Ohm, 1 k or 10 k on discrete channels)
Sensor input voltage	+/- 24 V
Sensor voltage protection	+/- 50 V
Sensor input impedance	2 M
Sensor voltage resolution	12 bit
Restrict voltage	-10 V to +10 V
Restrict voltage resolution	8 bit
Sensor current measurement	1 mA to 150 mA (10 nA to 150 mA on discrete channels)
Sensor current resolution	12 bit
Sensor current input impedance	50 Ohm (50 Ohm, 1 k, 10 k or 1 M on discrete channels)

Short detection threshold	<10 Ohm
Link detection threshold	<4 Ohm
Test modes	Single, unconditional loop, pass loop, fail loop
Test clip positioning	Automatically adjusts for clip orientation
Circuit compensation	Automatically modifies test for IC/PCB connections
Test trace	Test waveforms and voltages displayed
Test analysis	Displays test parameters such as gain, hfe, feedback
IC test capability	Op-amps, comparators, DACs, ADCs, switches and special function analogue ICs in-circuit
Discrete test capability	Transistors, FETs, thyristors, triacs in- or out-of-circuit
IC test libraries	Analogue, discrete, package, user
Result comparison	Results can be saved for good/bad board comparison
Package support	DIL, SOIC, PLCC and variants with MultiProbe kits
PLIP test programming	Structured programming language for library additions

Other specifications

Electrical input	(typical) +12 V, 1 A (max) (typical) -5 V, 750 mA (typical) -12 V, 100 mA
Dimensions	147 x 202 x 42 mm
Weight	1 kg

Accessories

Standard	<ul style="list-style-type: none"> 1 x SMD test tweezer set and adapters 1 x 24 way test clip and cable assembly 1 x Blue V-I probes and adapter 1 x Yellow V-I probes and adapter 2 x Pulse leads 2 x Ground leads 3 x Discrete leads
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*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.



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 n°: 3133



Upgrades

Stay current with free upgrades to software and maintenance releases.



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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