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.
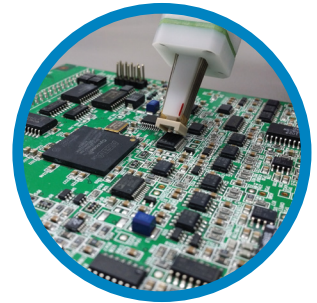
MANUFACTURING

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.

Collins Aerospace

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

Find out more at **RepairDontWaste.com**

THE
EQUIPMENT | SENTRY Counterfeit IC Detector

A unique solution for the quick detection of counterfeit and non conforming components. SENTRY is an ideal addition to existing anti-counterfeiting measures run by component suppliers and electronics manufacturers.

SENTRY also includes a reporting facility to allow users to produce test reports and to provide evidence as well as traceability of data. This report can be customised and includes the following options:

+Component details
+Comparison tolerances
+Overall result
+Images (reference and under test)
+Component overview
+Pin summary
+Pin details

DID YOU KNOW...

It is estimated that the yearly export of counterfeit ICs accounts for more than 8% of the global component trade, equivalent to a financial loss of over US$10 billion.

WATCH VIDEO

HOW DOES
SENTRY WORK?

The fundamental principle of SENTRY is to acquire the PinPrints of a reference device, to store this information and to compare these PinPrints with another device under test.

The PinPrints of a device are the electrical characteristics of each of its pins when submitted to a dynamic stimulus. The response from each of the pins is directly related to the nature of the device, its internal structure and the manufacturing processes it was subjected to.

The set of PinPrints thus acquired by SENTRY become the unique identification card for this device. PinPrints can be viewed in details (picture, left) along with the comparison mask used to determine the validity of the component.

It is an easy to use instrument with a dual purpose:

• To check components as they are received by the stores department and ensure that they are valid. Staff from a goods inwards department can use the system with no knowledge of electronics.

• To review potentially fake components and analyse the test data with suppliers. Advanced users can use the full report to determine the origin of failure.
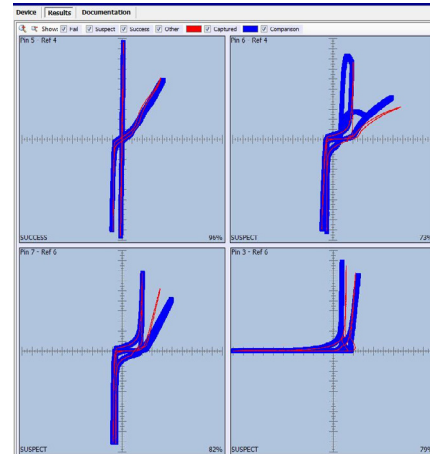
Should a reference device not be available, users are presented with two options:

· Obtain the reference PinPrints from another user, thanks to the database import and export functions.

· Pick one device from a batch and use it as the reference device in order to check for consistency with the other devices in the batch.

Features
· Suitable for digital and analogue components
· Compatible with all packages using adapters
· Minimal knowledge of electronics required
· Flexible software with report generator

SENTRY is designed to accommodate all types of components, from simple two-pin devices to more complex packages such as :

• Dual In-Line (DIL)
• Small Outline Integrated Component (SOIC)
• Small Outline Package (SSOP, TSOP)
• Plastic Leadless Chip Carrier (PLCC)
• Quad Flat Pack (TQFP, PQFP, LQFP)
• Ball Grid Array (BGA)

ABI Electronics offers a range of adapters for all packages, from standard sockets to customised solutions.
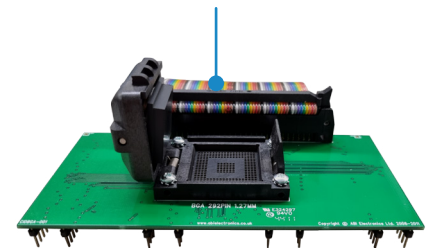
SENTRY ADAPTERS

Universal PLCC adapter
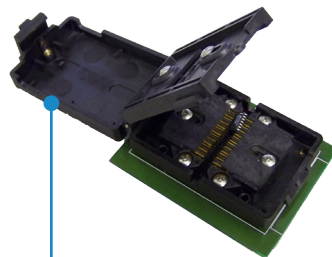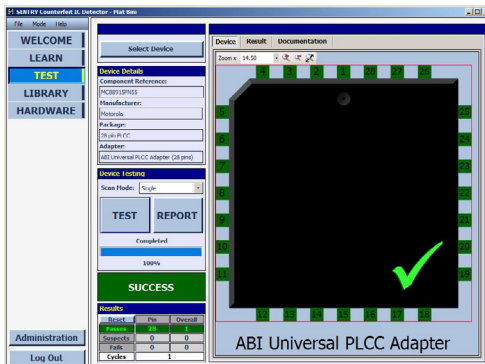One adapter to test devices with 20, 28, 32, 44, 52, 68 and 84 pins

BGA adapter
292 pins, 1.27mm pitch

Tweezers
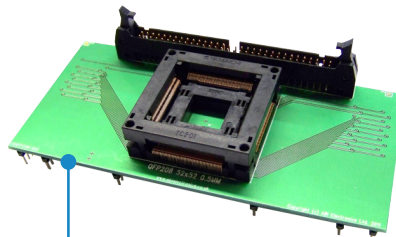Suitable for 2-pin discrete components

QFP adapter
100 pins, 0.65mm pitch

Universal SOIC adapter
One adapter to test devices up to 44 pins with body widths from 0.150" to 0.6"

BGA adapter
456 pins, 1.00mm pitch
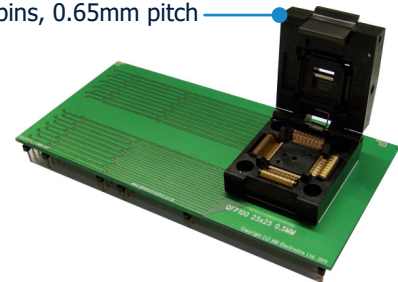
Electrical requirements

Operating voltage	85 - 264 VAC
Operating frequency	47 - 63 Hz
Power consumption	150 VA max
CE approved & RoHS compliant	

Environmental requirements

Operating temperature	10°C to 30°C
Humidity	20 to 80%

Other specifications

Dimensions	27 x 25 x 9 cm
Weight	3.5 Kg

Accessories

Standard	User Manual USB cable Software CD (Including drivers and manual) Calibration kit (Optional) Range of adapters available

TECHNICAL
DATASHEET

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.

WCS
ISO 9001
CERTIFICATION
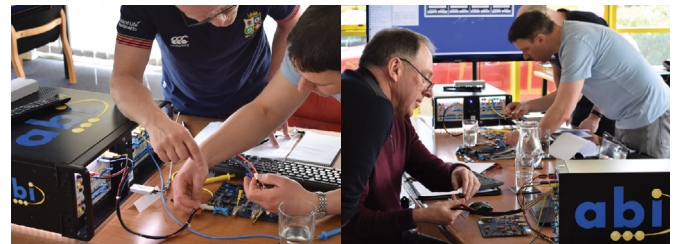
UKAS
MANAGEMENT
SYSTEMS
0060

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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