24 channel Analogue IC Tester Module

24 + 2 probes and references

Multi-plot with single waveform zoom

and bad boards using live probes or disk

50 mV to 500 mV with 50 mV resolution

Automatic comparison algorithm for good

DIL, SOIC, PLCC, QFP and variants with

Positive, negative or bipolar for thyristors/

2 V to 50 V peak to peak

8 to 12 bits 37.5 Hz to 12 kHz

V-I, V-T, I-T

MultiProbes

Adjustable to +/-10 V

Can be calibrated by user

triacs

1 µA to 150 mA

100 Ohm to 1 M Sine, triangle, ramp

V-I test capability

Number of test channels: Test voltage: Voltage resolution: Test frequency: Test current: Source impedance: Test waveforms: Waveform modes: Waveform display: Waveform comparison:

V-I comparison tolerance: Package support:

Pulse output:

Pulse amplitude: Calibration:

Analogue functional test capability

Number of I/O channels: 24 independent + 3 special discrete channels -12 V to +12 V Driver voltage: 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 µA - 150 mA. (driving a load returned to 0 V) 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: <4 Ohm Link detection threshold: <10 Ohm Test modes: Single, unconditional loop, pass loop, fail loop Test clip positioning: Automatically adjusts for clip orientation Automatically modifies test for IC/PCB Circuit compensation: connections Test waveforms and voltages displayed Test trace: 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 Structured programming language for PLIP test programming: library additions

Other specifications Electrical input:

Dimensions: Weight:

Accessories

Standard

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

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

Options Internal fitting

External fitting

PCI interface MultiLink case (cost option) with USB. External case (cost option) which can hold up to 5 SYSTEM 8 modules (USB interface).

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 brochure.



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