

Underside Test Interface - 160 pin, 100 Thou, Sales Part No. CLIP 41-1110

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Introduction

This Test Interface is a hand held test clip, designed to probe simultaneously the leads of an assembled IC from underside the PCB. Terminated with seven 25 way male "D" type connectors, the interface makes temporary electrical contact with the leads of the device, in a two step action as follows:

- the interface is positioned over the device leads (from underside the PCB) to be tested (lining up the test interface pins with the leads of the device that protrude through the PCB)
- by pushing the handle further, reliable contact should be made with the device under test.

Operation

Align the test clip probes with all contacts of the 160 pin device from underneath. When fully aligned, push further until contact is made and hold until all tests are completed.

Specification

- Current rating, with all contacts loaded (maximum continuous current, non inductive): 0.5A /channel;
- Contact resistance (average): 80 m Ω /channel;
- Insulation resistance: 5MΩ Min.
- Volume resistivity of plastic parts: $10^{15} \Omega$ -cm @ 50%RH.
- Fatigue life of probes: Min. 100,000 cycles;
- Working distance (normal stroke): 6.35mm;
- Probe force at point of contact : 1.1N



Features

- achieves the best combination of reliability, repeatability, serviceability and user-friendliness;
- concave probe tips shipped as standard to assist in location and positioning of test interface with device;
- high reliability and long life interchangeable probes, various tip styles available upon request, supplied with concave variant;
- sweeping action gold plated contacts, for reliable contact and low ohmic resistance of interconnections;
- high current rating (for single channel, in ambient air with 70°F [20°C]) : 1.5A
- impact, solvent and temperature resistant plastics, with low friction;
- wide range of operating temperatures (commercial): [0°C to +70°C]
- clear markings on the body, indicating Pin 1 of IC being tested, to prevent probing the wrong way round;
- packaged in a hard wearing, high resistance to damage Polypropylene case with foam insets, the Test Interface can whitstanding high impact in transit.
- case can be used for safe storage when the Test Interface is not in use, and subsequent transport.
- very flexible harnessing to assist in positioning of Test Interface;

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liagnosys Test Sys device pitches of 0.4mm and above



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Connections Table

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Pin tables for this clip are available electronically:

- for DiagnoSYS employee's goto the R&D section on the DiagnoSYS intranet.
- for customers please contact DiagnoSYS sales.



VIEW ON UNDERSIDE OF DEVICE



Maintenance

The Test Interface Head is maintenance free. Immersion in water or contact between microprobes and any liquids should be avoided, as this could severely reduce the working life of the probes.

Contamination is the primary cause of probe contact problems. This is generally caused by flux left as a residue on circuit boards. Other probe contaminants such as dust, fluff, oil and grime can also cause problems in other areas. Light brushing of the tips of the probes with nylon, bristle or soft metal brushes will dislodge most contaminants.

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