

## 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 eight 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 78 pin device from underneath.  
 When fully aligned, push further until contact is made and hold until all tests are completed.

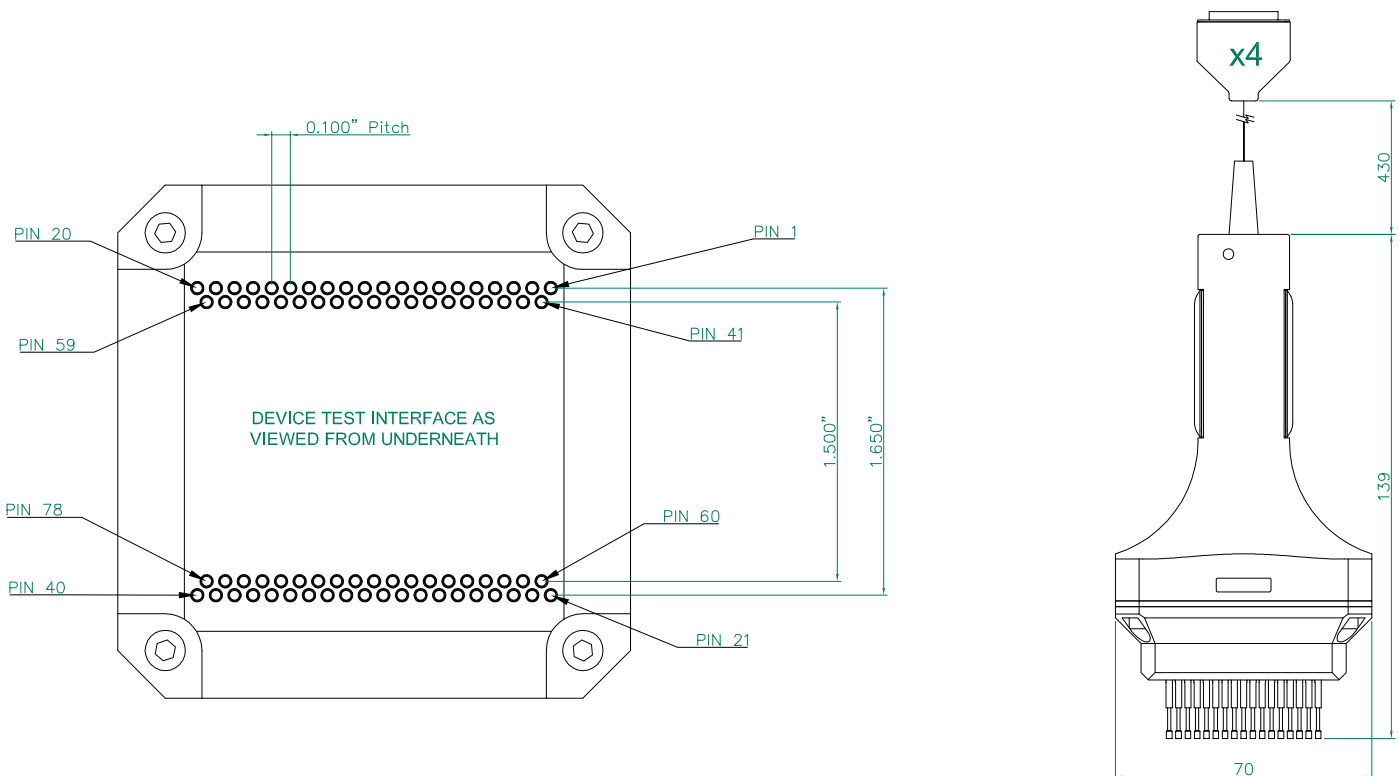
## Features

- achieves the best combination of reliability, repeatability, and user-friendliness;
- enhanced serviceability due to the modular design and quick change harnessing;
- high reliability and long life interchangeable probes;
- 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,



## Specification

- It will make simultaneous contact with all pins of a DUAL DIP Device as shown below.
- Current rating, with all contacts loaded (maximum continuous current, non inductive): 0.5A /channel;
- Contact resistance (average):  $80 \text{ m}\Omega_{15}$  /channel;
- Insulation resistance:  $5 \text{ M}\Omega$  Min.
- Volume resistivity of plastic parts :  $10 \text{ }\Omega\text{-cm}$  @ 50%RH.
- Fatigue life of probes: Min. 100,000 cycles;
- Working distance (normal stroke): 6.35mm;
- Probe force at point of contact : 1.1N



## NOTES

- 1) All dimensions in mm, unless otherwise specified.
- 2) Pin 1 of IC marked in red on probe body.

## Maintenance

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

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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Diagnosys can provide a full range of test clips to meet individual requirements. Any common device packaging styles can be accommodated, or custom designed clips manufactured, for device pitches of 0.4mm and above.