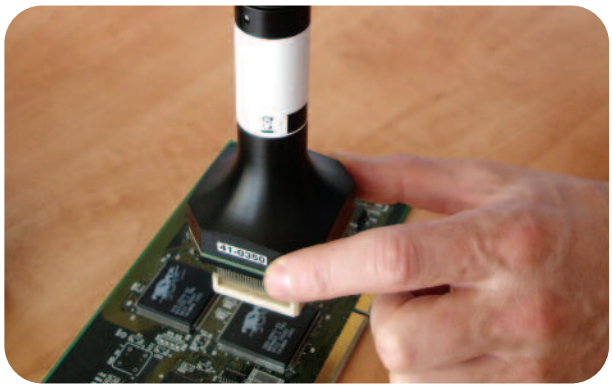
Device Test Interfaces

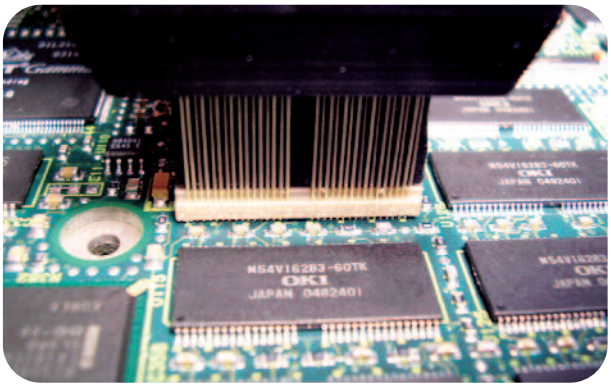
DTI - Standard & Custom designs

Designed for use in demanding test environments and to cater for custom devices, Diagnosys has a comprehensive range of DTIs (Device Test Interfaces).

The Diagnosys DTI range is purposely designed for use in demanding test environments. They provide the physical electrical interface between the pin electronics of the test system and the device being tested.

These interfaces are constructed from a special material that is precision milled and drilled, delivering a hard-wearing finish that will provide years of use.





DTI Range

Large and robust range of Interfaces.

A critical requirement for testing components in-circuit is to ensure good electrical contact with the pins of the device being tested. Although there are many commercially available test clips, they are often fragile and limited to the more common device package types.

Diagnosys has designed and developed an extensive range of robust DTIs for use in the test environment. This range includes DTIs for fine pitch devices, through hole devices and underside probing. In addition to this standard range, custom DTIs can be provided to accommodate the many varied and diverse package designs you may encounter.

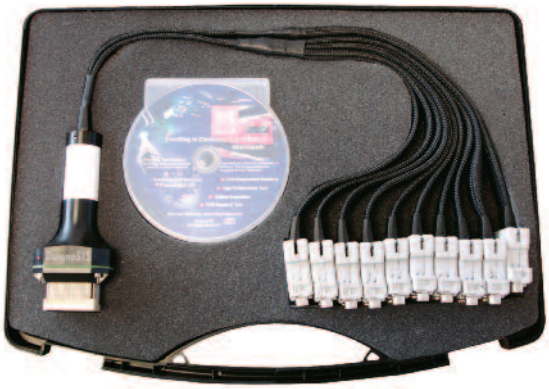
Diagnosys DTIs use sharp pointed probes that greatly increase the contact reliability due to the high pressure at the probe tips. The resulting disruption of the oxide and flux that might cover the contact areas allows the tips to make “contaminate free” connections. The latest in our range of DTIs are 0.4mm designs that are used for the most complex components.

While all test interfaces will eventually see some wear and tear, the Diagnosys DTIs are also designed to be repaired, not thrown away!

DTI Specifications

Mechanical

- Probe contact material: Heat-treated BeCu/plated gold over nickel tips
- Microprobe force at point of contact (normal stroke): 0.3N
- Microprobe pressure at point of contact (normal stroke): 40 MPa
- Typical working distance / normal stroke: 1 to 1.5mm
- Typical positional tolerance 30 Microns (probe tip to IC pin, where applicable)
- Fatigue life of probes: Min. 1,000,000 cycles at normal stroke
- 0.4mm pitch and upwards available



Electrical

- Peak current rating (for single channel, in ambient air with 70°F [20°C]) : 1.5A /1s
- Current rating, with all contacts loaded (max continuous current, non inductive, de-rated further for higher numbers of pins): 0.5A /channel
- Typical resistance: Less than 1Ω/ channel
- Insulation resistance: 5MΩ Min
- DTI package styles include: SSOP, TSOP, TSSOP, TSOP1, QVSOP, QFP, PQFP, TQFP, TSOP2 (Underside) PGA, ZIP, PLCC, SIL, DIP

For your local office details please visit our web site: www.diagnosys.com

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