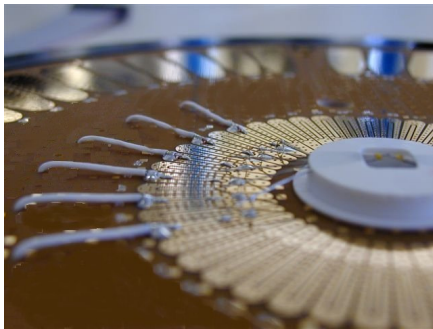


AGILENT'S 4073-4083 ULTRA LOW LEAKAGE PROBE CARDS DATA SHEET

For many years now Synergie CAD Group have developed and improved parametric probing. Improvement has made to reach new limits in terms of low leakage. With the support of Agilent, a new probing solution for 4073-4083 testers is now available. with Ultra Low Leakage probe cards.

An Ultra Low Leakage probe card manufactured and maintained by Synergie CAD Group, is the best way to enable all the capabilities of the tester while ensuring an ideal interface between the wafer and the test head.

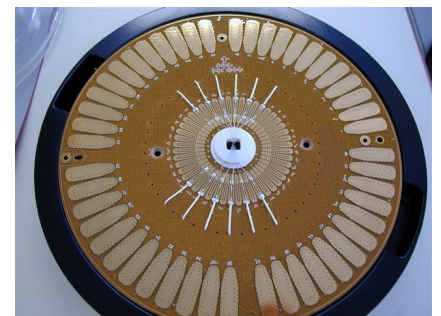
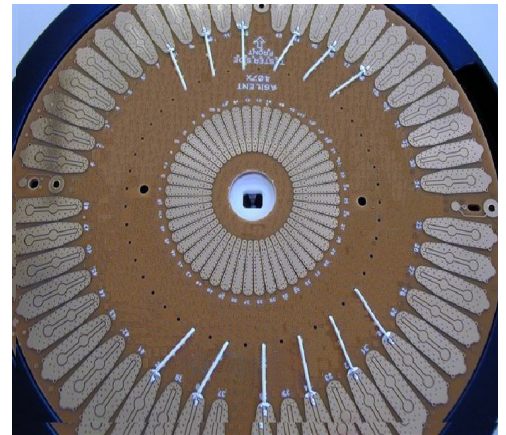


The team is proud to announce that as a result of its efforts to develop new technologies, tester manufacturers of parametric ATE have given to the company the agreement to manufacture Ultra Low Leakage probe cards in all technologies available for the parametric test : Ceramic Strip Line Blades (since 2000), Coaxial Epoxy (since 2002).

The Agilent 4073-4083 probe card uses the same coaxial epoxy needles developed for parametric tests and we developed a specific board to achieve low leakage and a low propagation delay specification. We always test our probe cards in a clean room environment and specifically for Agilent Ultra Low Leakage probe cards, we use the B1500 tester to control pin to pin leakage before any delivery.

If you choose the 4073-4083 complete product manufactured and provided by Synergie CAD, we can ensure all needle assembly is made in the parametric production line to guarantee very high specifications. These probe cards are available in coax epoxy ring technologies and we also offer development in high temperature probing up to 200 °C continuous tests.

Synergie CAD also shares its experience and its know-how to manufacture parametric probe cards for other testers such as Keithley, Suss Microtech, ReedHlom...Please ask for further details.



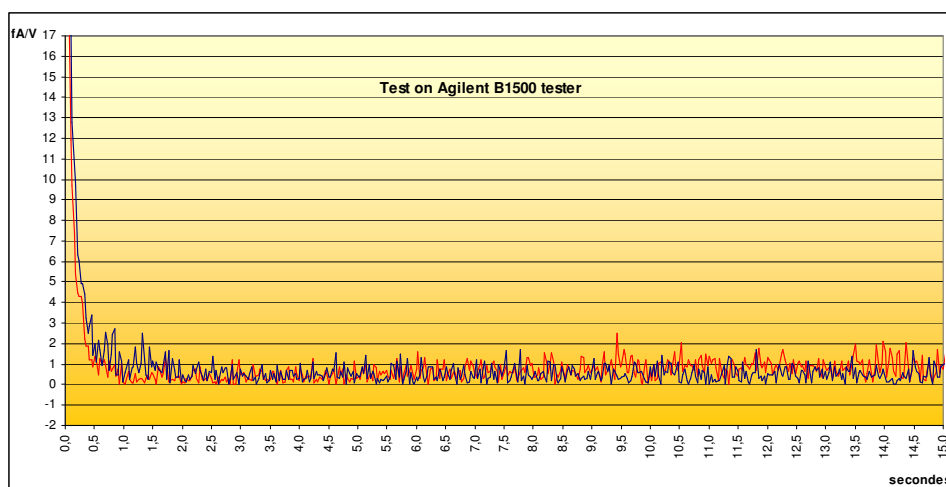
Web site: www.synergie-cad.fr www.synergie-cad-probe.fr

Your Contacts: JL.Bosser@synergie-cad.fr
or
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SPECIFICATIONS	VALUES
Probe Card	
Typical Probe Card Depth (from Bottom)	80-250 mils +/- 5
Minimum Pitch	80 μ m
Minimum Pad dimensions	50 μ m
Tip position	in line
Number of probes	1-64
Probe position alignment accuracy	+/- 5 μ m
Operating temperature	-40 °C to 200 °C
Rotational specification	+/- 1 °
Typical Overdrive	3 mils
Typical touchdown	250 000 to 1 000 000
Needles	
Type	Coaxial Epoxy needles
Material	Copper Beryllium or Tungsten Rhenium
Tip diameter	1 to 2 mils (25 to 50 μ m)
Tip length	7 to 25 mils (175 to 625 μ m)
Planarity	+/- 5 μ m
Pad specification	
Material	Aluminum, Copper, Polysilicon, other...
Flatness between 2 pads	+/- 10 μ m
Probe mark dimensions	30 to 60 μ m
Electrical Specifications	
Leakage : Pin to Ground , Pin to Pin 4073	1 fA/V @ 10s 10 fA/V @ 1s
Maximum current per pin (depending on material tested)	Depending on needle dimension and material from 300 mA to 1.5 A
Typical parasitic capacitance	NA
Typical DC contact resistance (Probe)	0.5 to 1 Ohm
Maximum DC contact resistance (Tip to Test equipment)	2 Ohms +/- 1
PCB specification	
Material	Polyimide
Thickness	3.2 mm

Ask for our special Order form giving us all necessary data used for manufacturing.



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