

# Keithley Probe Cards

## KEITHLEY PROBE CARDS

Accuprobe can now manufacture and offer to Keithley customers probe card assemblies for the S400, 600 and 900 Parametric Test Systems. A full range of probe cards including Ceramic Blade, Epoxy-Ring, and Coax-Epoxy can be supplied. Customers are assured that critical parametric measurements necessary for superior wafer test yield are obtainable with the Keithley and Accuprobe combination

The probe cards are assembled, cleaned and tested to tightly controlled specifications as outlined in the Keithley Engineering Manuals. Probe card failures can occur from a contaminated card. Careful handling in manufacturing helps to maintain the probe card's very low leakage characteristics, and the use of vapor degreasers ensures that all manufacturing process contamination is removed from the card. Leakage testing, using Keithley programmable electrometers, is used to verify the card's continuity and leakage characteristics. Probe card ID chips may be installed as part of the manufacturing process.

## CERAMIC BLADE PROBES

For Ceramic Blade probe cards, Accuprobe uses ceramic blade probes either standard ceramic blades, or with 50 ohm stripline con-



struction in the assembly of the probe contact array. Ceramic blades are ideal for use in applications where critical signal levels require a probe with superior low noise characteristics. Stripline probes are used for sensitive applications and are the perfect solution for mixed signal, RF and high-speed digital applications. The probes are carefully assembled on the probe card to correspond to the location of the parametric test pads on the device and as specified in the probe card assembly order form.

## EPOXY RING CARDS

Accuprobe can also supply Epoxy-Ring, and Coax-Epoxy probe card technology which offers low probe to probe capacitance for high performance and also lower probe leakage allowing extremely low current measurements. Epoxy probe cards have the additional advantage of high density, with pin counts down to 3 mil (75mm) pitch.

## PROBE CARD ORDERING

To order a probe card assembly, please provide Accuprobe with the following information:

Construct a model number to order as follows:

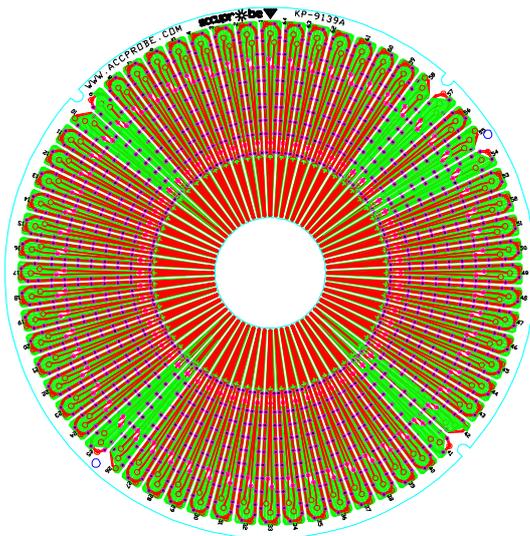
CBLD-STTT - XXXX - #P

TTT= TEST SYSTEM 400, 600, 900

XXXX= YOUR UNIQUE DEVICE ID

#P = Number of probes

e.g.: CBLD-S900-ABCD DEVICE-16P



*Model KP-9139A Probe card*

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1. Please complete a probe card assembly order form. A copy can be obtained from your Accuprobe sales office by fax or you can visit our Web site, [www.accuprobe.com](http://www.accuprobe.com), sub-page <http://www.accuprobe.com/order1.htm> to complete the form online or download or print from the site and send it in with your order. While completing the probe card assembly order form you will need to identify several device parameters, which will help us to build your probe card correctly and insure that you, receive exactly what you ordered. There is a detailed instruction for completing the order form in our website.

2. Please send a device or coordinate file for the contact pads. There is an additional charge for building a probe card assembly from coordinates, therefore an actual device is preferred. In the near future Accuprobe will be able to accept coordinates downloaded to our website.

3. Before specifying the probe selection in the order form, please refer to Accuprobe's Blade probe data sheet to specify the Ceramic Blade probes at web page: <http://www.accuprobe.com/datasheets/blade/blade.htm> When selecting a probe tip for aluminum contact pads please select a Tungsten OR Tungsten Rhenium probe tip. For Gold contact pads please select a BeCu probe tip. Tip diameter selection is based upon the contact pad size. Typically select a tip diameter that is equal to or less than 1/2 the pad size. For example: for a 3 mil (75um) pad select a 1.5 mil (38um) tip diameter. Therefore, model CZ2MW3A would be appropriate.

4. Fax the information to Accuprobe as soon as you have the purchase approved so that Accu-



probe can get a head start with organizing the material and allocating time in the production schedule for you card assembly. Accuprobe recognizes that timely delivery is critical to your test needs. The completeness and timing of your information transfer will significantly affect our ability to quickly get you the probe card assembly you need.

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