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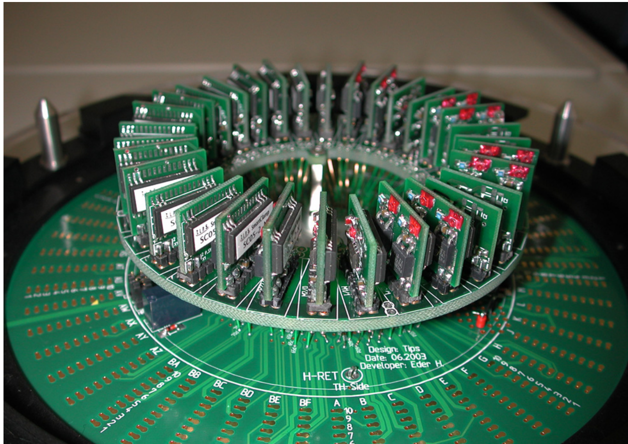
T. I. P. S.
Messtechnik GmbH

Vertical Probe Cards for High Current Automotive- and Mixed Signal ICs

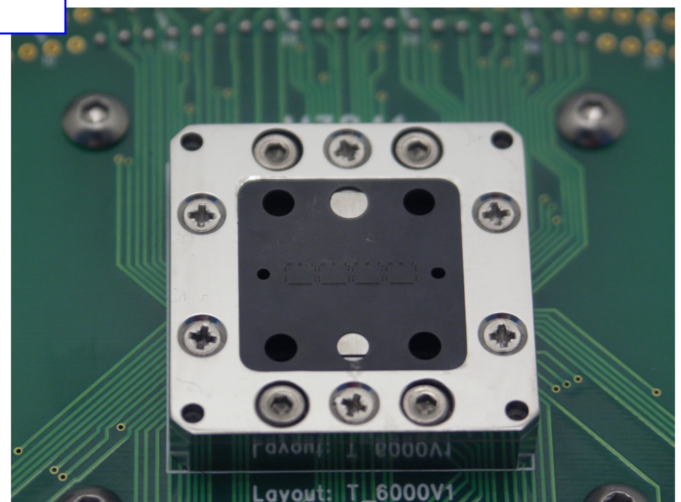


Vertical probe card with "SmartClamp" protected power outputs, dual die

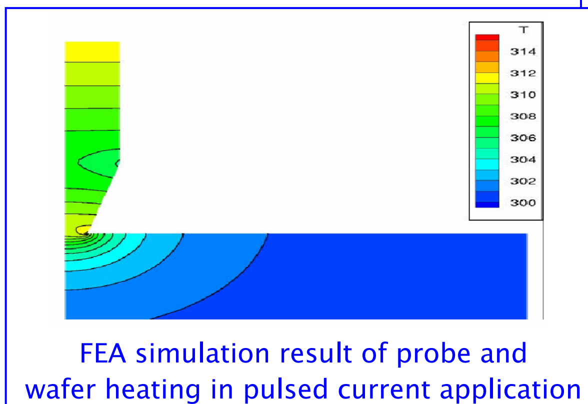
Applications characterised by a combination of **logic circuitry** and **power outputs** sharing the same die give special challenges for probe cards design and manufacturing - high density, fine pitch bond pads for the logic part in combination with hefty currents to be tested going up to several Amperes.

T.I.P.S.' vertical probe cards are specifically developed to address these requirements:

- Low resistance and high current carrying capability probes.
- SmartClamp probes protection technology allows safe testing of high test currents and protects probes and D.U.T. from overcurrent spikes.



Quad die vertical probe head and interposer



FEA simulation result of probe and wafer heating in pulsed current application

- Special interposer technology allows for high currents and good signal integrity.
- Numerical simulation of probe and wafer contact heating enables to define S.O.A.R. (safe operating area) in pulsed and DC high current application.

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