accuprobe

Probing the World of Microelectronics

PROBE TIPS #2

A Technical Bulletin for Probing Applications

Fixed Pattern Probe Card

A Guide to the design, function, and common descriptive jargon for rectangular probe cards.

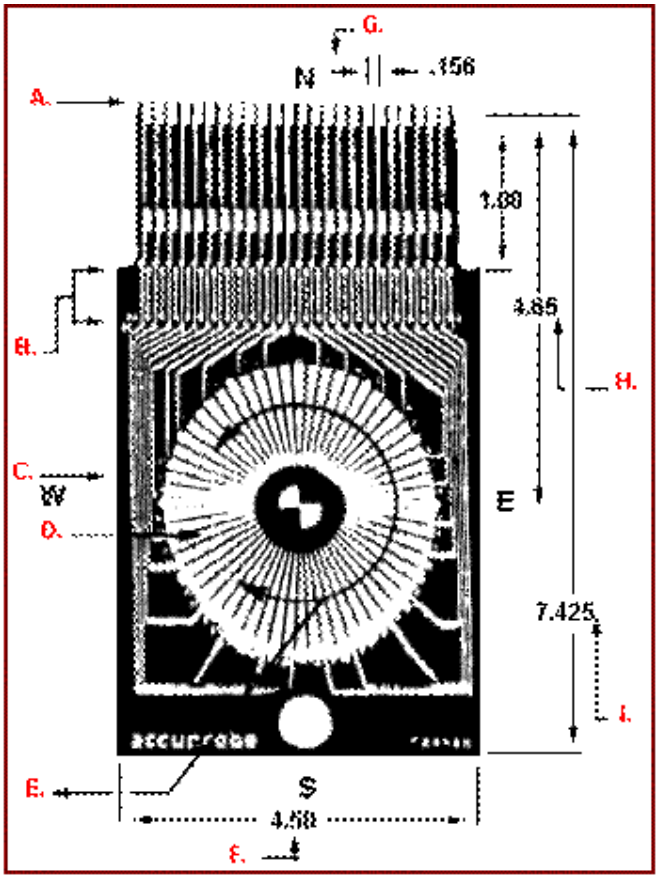
Device is a generic term to describe the microelectronic circuitry under test to determine if it meets design specifications.

Below is a list of terms related to the probe card diagram.

A. Connector Finger (Goldfinger): The interconnection between a specific probe contacting a device test point and the test computer, usually gold plated.
B. Patch Wiring Area: (a.k.a. Jumper or Strap Wiring Area): Consisting of cutable traces for interconnection flexibility to accommodate test system programs.
C. Trace: Individual conductor path from probe land to connector.
D. Probe land: The surface position to which a probe is soldered, after precision alignment to the device test point.
E. Card Starburst: Surface area of card, composed of probe lands.
F. Card Width: It is important that this dimension be compatible with the cardholder hardware of the prober.
G. Connector End of the Probe Card: The card edge is inserted into an edge card connector and wiring harness which carries signals between the ATE computer and the probe card. The total number of connector fingers counted on the top and bottom of the card must be compatible with the test system. Designated the North quadrant for device orientation purposes.
H. Center of Rotation: Distance from card edge to the center of the device to be probed. May be important when pushing limits of the prober step and repeat table travel. Often important in laser trimming applications.

Card Length: Must be compatible with proper hardware.

Probe Card Diagram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