SEMIPROBE® Test • Inspect • Innovate

SUCCESSFUL APPLICATION: HIGH POWER - 1219



Specific Requirements:

The customer wanted to test a variety of wafers ranging in size from 100 mm to 200 mm at high voltages in a vacuum environment. They wanted to test both vertical and lateral devices at ambient and up to 10 KV. They needed the ability to use probe cards as well as individual programmable manipulators with HV and DC probe arms. The probe system had to be interfaced to a Keysight B1505 parametric analyzer and other test instrumentation.

SemiProbe Solution:

- PS4L SA-8 Semi-automatic 200 mm probe system:
 - o 200 mm programmable X, Y, Z and theta stage with control electronics
 - PILOT Software Suite Navigator, Wafer Map, Autoalign and Programmable Manipulator Modules
 - Vibration isolation table
- Large vacuum chamber with removable top and front-loading door for easy loading and unloading of devices; all components in the vacuum chamber rated to 10⁻⁵ torr
- Agilent turbo-molecular vacuum pump
- Large microscope bridge and movement with X,Y Z and theta for long working distance optics with a motorized focus
- Compound optics with CCTV system
- Programmable manipulators and probe cards:
 - Four programmable three-axis manipulators with coaxial HV (10 kV) and low voltage (600 V) triaxial probe arms, cables and probes
 - Probe card holder 4.5" cards
- Integrated with Keysight B1505 Parametric Analyzer