

SUCCESSFUL APPLICATION: HIGH FREQUENCY - 0320







Specific Requirements:

The customer wanted to automatically test individual filters used for 5G applications. The radio frequency (RF) probe station would be used in a high-volume wafer production environment that operates 24/7. The RF devices were not in wafer form and could have variations in X, Y, Z and theta from device to device. The customer wanted to use a customized common carrier that would be used pre- and post- probe. One of the manipulators would be manual (3 axis) and the other programmable (3 axis). This would allow one RF probe to remain fixed in contact while the other RF probe could be moved to contact various sized devices.

SemiProbe Solution:

- PS4L FA-8 fully automatic 200 mm probe system:
 - o 205 mm x 205 mm programmable X, Y, Z and theta stage and control electronics
 - 200 mm RF chuck with lift pins and two independent calibration substrates
 - PILOT Software Suite Navigator, Wafer Map and Autoalign
- Integrated microscope:
 - Microscope bridge and microscope movement (100 mm x 100 mm) with locking axis knobs
 - Compound Optics with motorized focus, customized lifting and CCTV system
- Non-contact height measurement system
- Material handling unit (MHU): end-effector, scanner, pre-aligner, bar coder reader, safety enclosure with interlocks
- Manual and programmable RF manipulators, RF probe arms, RF probes, calibration substrates, RF cables, DC manipulator, probe tips