

SUCCESSFUL APPLICATION: OPTOELECTRONICS - 0419



Specific Requirements:

The customer wanted a turn-key semi-automatic probing and testing system with double-sided probing capabilities (DSP) to test optoelectronic devices. They needed to test whole wafers, partial wafers and individual die. The device would be stimulated from the top with a probe card or individual manipulators and the backside would have a detector mounted on a programmable X, Y and Z stage to collect the light output. The environment had to be dark, and the devices needed to be tested at temperatures ranging from ambient to 225 °C. The customized graphical user interface had to control the prober and test instrumentation as well as collect the data.

SemiProbe Solution:

- SA-8 Semi-automatic 200 mm probe system:
 - Double-sided probing capabilities
 - 200 mm programmable X, Y, Z and theta stage
 - PILOT Software Suite – Navigator, Wafer Map and Autoalign
 - Customized graphical user interface
- Top-side probing with manipulators or probe card and bottom-side light detection with detector
- Carriers for wafers, partial wafers and individual die
- Thermal system operating between ambient temperature and 225 °C
- Programmable coarse and fine stage for optical detector
- Dark box, interconnect panels and a vibration isolation table