

MEMS

Introduction

MEMS have moved from small specialty applications to mainstream products used in every aspect of our lives. From the air bag accelerometers in our cars to the microfluidic “Lab-on-a chip” devices that are revolutionizing the way we get faster medical information and improve our lives MEMS are becoming a powerful new tool in providing access to information faster and easier than ever before. We help engineer pioneering solutions that allow electrical and non-electrical measurement and/or stimulation of your MEMS device.

- *Probing & Inspection Systems*
- *R&D to Production*
- *Manual, Semiautomatic, Automatic Systems*
 - *Die, Wafers, Frames, Substrates*
 - *50 mm to > 300 mm*

Vacuum Probing



Vacuum probers are used for resonators, sensors and any other MEMS product that will eventually be packaged in a vacuum. Wafer level test saves money by providing known good die (KGD) before expensive packaging as well as determining the optimal vacuum level for the package.

MEMS Motion Analysis



Systems integrated with the powerful Polytec MSA-500 laser Doppler Vibrometer system enable users to accurately measure the motion in actuators, energy harvesting or any other device with moving parts.

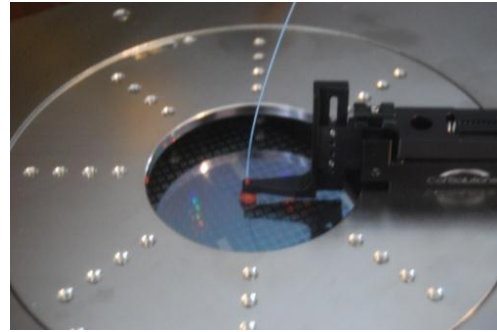
Types of MEMS Tested

- ❖ *Resonators*
 - *Inertial Sensors*
 - *Accelerometers*
 - *Gyroscopes*
- ❖ *Sensors*
 - *Pressure Sensors*
 - *IR Sensors*
 - *Bio-Metric Sensors*
- ❖ *Actuators*
- ❖ *MEMS Microphones*
- ❖ *Ink jet printers*
- ❖ *DLP Displays*
- ❖ *Optical Switching*
 - *Digital micro mirror switch*
- ❖ *Microfluidics*
 - *Bio-MEMS*
 - *Fluid acceleration for cooling*
 - *Lab-on-a-chip*
- ❖ *Energy Harvesting*

Let us help you with your MEMS testing or inspection requirements

Microfluidic Probing

Lab-on-a-chip, fluidic cooling and other devices which require the insertion, measurement or extraction of liquids or gases in micro-channels in a device

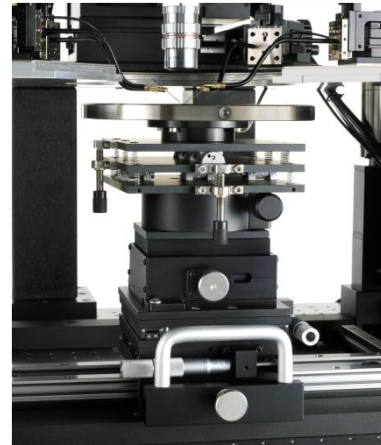


Optical Wafer Inspection

Many MEMS devices require optical inspection to determine missing components, contamination, saw errors, etc. Our Wafer Inspection System provides a powerful solution that can lower your costs and cut time to market.

Unique Tilt and Roll

Solutions for both single device and wafer level test with pitch and roll while making electrical contact.



“From Lab to Production, SemiProbe provides cost effective solutions with systems that upgrade and grow with your requirements.”