

MEMS

Main Points

1. MEMS – micromachining using microelectronic processes for devices of 10-100 microns or so in size
2. Wide variety of devices (mechanical, electrical, photonic)
3. Photolithography for geo definition
4. Etching and deposition
5. Use of sacrificial layers for release
6. Anisotropic etching of Si

Possible Questions

1. What is MEMS?
2. How do we use a sacrificial layer to produce a “free structure”?
3. Give an example of a MEMS device.
4. Why is Si a good material for MEMS?
5. What property of Si is exploited for anisotropic etching?

I will not ask you to remember a particular device structure or process flow.