

Homework set 1 Spring 2001

EE 397K ADV STDS IN ELECTRICAL ENGR; Unique Number 15170

date: 2/7/01

due: 2/14/01

Identify a commercially available “mems” device. Provide a brief description of the device, what it is used for, and the basics of how it works. Also find the following information:

- What is the unit cost of the device?
- Determine how much electronics are directly integrated in the device. Try to get some idea of the complexity of any integrated electronics (i.e., just a couple for transistors used as a pre-amp, or a fairly complicated analog circuit, or in an extreme case a full blown VLSI circuit).
- Assess the relative value to the overall device operation of:
 - i. the mems part of the device.
 - ii. the electronics portion of the device.