
MEMS Applications Overview Assessment

Participant Guide

The objective of this MEMS Applications Overview Assessment is to assess your knowledge and understanding of MEMS Applications as covered in the MEMS Application Overview Learning Module.

There are ten (10) assessment questions.

1. Which of the following BEST describes MEMS?

- a. A microdevice such as a pump or laser used to simulate a similar macro device
- b. A microdevice or groups of devices that integrate both mechanical and electrical components
- c. A series of small devices that work together to accomplish the required task
- d. Micro size devices that measure pressure and acceleration.

2. List five commercial fields in which MEMS have already proven to be beneficial.

- a. _____
- b. _____
- c. _____

3. What type of MEMS device is used as the deployment sensor in automotive airbag systems?

4. Describe the basic operation of a MEMS Pressure Sensor.

5. What type of MEMS device is used in medical infusion pumps to identify blockage in the flow tubes?

6. What are two types of inertial sensors?

7. Describe the basic operation of an accelerometer.

8. State three applications of MEMS in the medical field. Identify at least one type of sensor that could be used in each application.

a. _____

b. _____

c. _____

9. State three applications of MEMS in the optical or wireless communications field. Identify at least one type of sensor that could be used in each application.

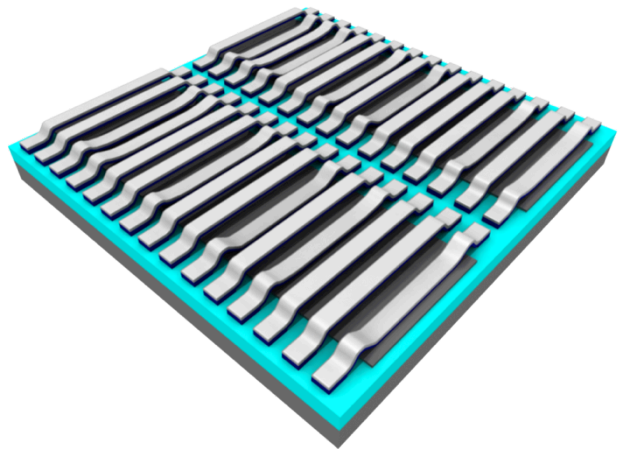
a. _____

b. _____

c. _____

10. What type of MEMS device is illustrated in the figure?

- a. Inertial Sensor
- b. Pressure sensor
- c. Grating Light Valve
- d. Digital Mirror Display



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