



Pressure Sensor Process Workshop
Southwest Center for Microsystems Education
Location East Mountain High School
February 26, 2010, 10 am to 3 pm

Workshop Description

This workshop covers a fabrication process for a MEMS pressure sensor. After studying the 10 step process, participants will complete two of the process steps (lift-off and anisotropic etch) using actual fabricated chips. Participants will also study 10 chips that represent each step of the fabrication process. They will identify the process represented by each chip and arrange the chips in the correct process order. Workshop discussions will include where and how this material and the related activities can be incorporated into an existing curriculum.

Audience: High School and Community College Instructors

Participant Preparation (download educational materials from scme-nm.org):

- Participants need to read the following educational materials prior to the workshop:
 - o Pressure Sensor Process Primary Knowledge (PK)
 - o Deposition PK (optional)
 - o Photolithography PK (optional)
 - o Etch PK (optional)
- Participants have full access to these and all of SCME's educational materials via scme-nm.org.

Participant Workshop Materials (SCME Provided)

- Pressure Sensor Process Learning Module
- All materials necessary to complete all workshop activities

Participants are encouraged to bring cameras.

Discussion Led Format for presentations – Ask questions!

Workshop Schedule - Note: Schedule is subject to change as required by SCME/MTTC.

Saturday, February 26: 10 am to 3 pm

10:00-10:30

- Welcome and Introductions
- Overview of Workshop and Expectations
 - o Pre workshop survey

10:30-12:00

- Lift-off Process
- Begin Etch Process

12:00 – 13:00 Lunch

13:00-15:00

- MTTC Pressure Sensor Process Overview
- Animation
- Pressure Sensor Process Matching Activity
- Dissemination and Wrap-up