For more information, visit our website:
http://mfc.engr.arizona.edu

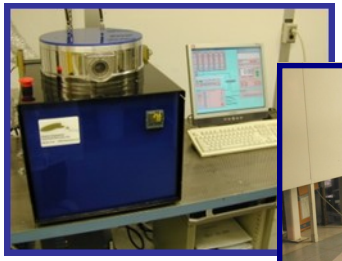
Cutting &Dicing

Ebeam Evaporation

Low Pressure CVD

Reactive Ion Etching

Plasma Enhanced CVD



Profilometry

FEES

For a listing of academic user & industrial user fees please check our website:

http://mfc.engr.arizona.edu/access

Contact Omid Mahdavi for more details. We have a flexible fee structure depending on the type and duration of the desired facility use.

CONTACT INFORMATION

Mailing Address
Micro/Nano Fabrication Center
1230 E. Speedway Blvd, Rm 230F
PO BOX 210104
Tucson, AZ 85721-0104

E-mail Inquiries: omidm@email.arizona.edu

Administration

Omid Mahdavi, Facility Supervisor
omidm@email.arizona.edu
(520) 621-9849 phone, (520) 626-7877 fax
Omid has many years of industry experience as a Sr. technical contributor at Motorola, Burr Brown, & Texas Instruments. He has also been a consultant to industry on processing & quality improvements.

……

Gregg Cure, Maintenance Supervisor
gcure@ece.arizona.edu
(520) 626-1987 phone, (520) 626-7877 fax
Gregg brings 25 years of industry experience. He was a Site Coordinator for SpeedFam-IPEC for both domestic and Southeast Asia operations.

……

Garth Perry, Business Manager ARL
perryg@email.arizona.edu
(520) 621-0640 phone

Micro/Nano Fabrication Center

Knowledge for the Future

micro/nano fabrication center

AN EDUCATIONAL, RESEARCH, & INDUSTRIAL RESOURCE

THE UNIVERSITY OF ARIZONA.

CENTER OVERVIEW

The Micro/Nano Fabrication Center was created in 2004 to be a flexible foundary, offering industrial space & facilities, industrial cleanroom space & facilities, device processing & characterization equipment. We have academic & industrial users working in the areas of semiconductors, bioengineering, MEMS, optics, and thermoelectrics.

Class 10 & 100 Cleanroom Space — We have 4000 sq. ft. of work area available in our Class 10 & Class 100 cleanroom, equipped with acid & solvent exhaust, easy access to power, nitrogen, DI water, drain to the neutralization system, space for vacuum pumps in the immediate chase area.

Class 10,000 Space—Our Class 10,000 chase area of approximately 10,000 sq. ft. has access to acid & solvent exhaust, easy access to power, nitrogen, DI water, drain to the neutralization system, and space for vacuum pumps.

In-house High Capacity Ultra-pure Water — We can supply thousands of gallons of 18 Mohm ultra pure water to our users.

In-house Waste Treatment —We can neutralize wet bench waste streams without the need for users to collect their waste. This is a great feature allowing users to install and operate their own wet benches and processing equipment.

The Center has assisted companies with their:

- ***FEASIBILITY STUDIES***
- ***PROTOTYPING***
- ***PRODUCT DEVELOPMENT***
- ***DEFERMENT OF MAJOR CAPITAL EXPENSES***
- ***SHORT COURSES***

PROCESSING SERVICES

Photolithography—High resolution image transfers on substrates up to 6" diameter. Frontside/ Backside alignment capability. Low resolution images on substrates up to 12 inch square.

Etch/Cleans—A number of different plasma etch/ clean systems for a variety of films and treatments. Wet benches and chemicals for a variety of wet etching in both class 10 & class 100 areas. Wafer spin rinse dryers available. CO_2 cleaner available.

Chemical Mechanical Planarization (CMP)— Solutions for Dielectrics and Metals, IPEC 372M and 372 MU. We also have access to an APD-800 300mm R&D polisher.

CVD —Low pressure and plasma enhanced capabilities to deposit SiN, Poly Si, a-Si, Low Temperature SiO2 (LTO), n -doped LTO (PSG), n– doped Poly Si, Si Rich Oxide (SRO) on substrates up to 6" in diameter.

Thermal Oxidation & Anneal—Substrates up to 6" in diameter and temperatures as high as 1200C.

Metallization—E-beam & thermal evaporation of a number of metals including but not limited to Ag, Au, Pt, Al, Cu, Ti, Ni, Cr, Ge, Bi, Te

Metrology—Ellipsometer, profilometers, AFM, 4 pt probe, Filmetrics & Nanospec for thickness, Surfscan particle measurement. We have access to a number of SEM/EDX facilities on campus.

Assembly tools include—Wafer Saw, Die Attach, Wire Bonder and Wire Bond pull tester.

RESEARCH
EDUCATION
INDUSTRY

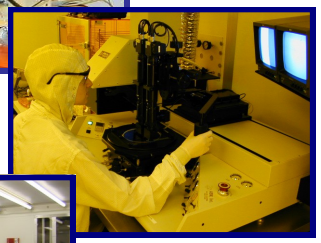
For more information, visit our website:
http://mfc.engr.arizona.edu

Metrology

Wafer Cleaning

Wet Processing

Lithography



$C0_2$ Cleaning

micro/nano fabrication center