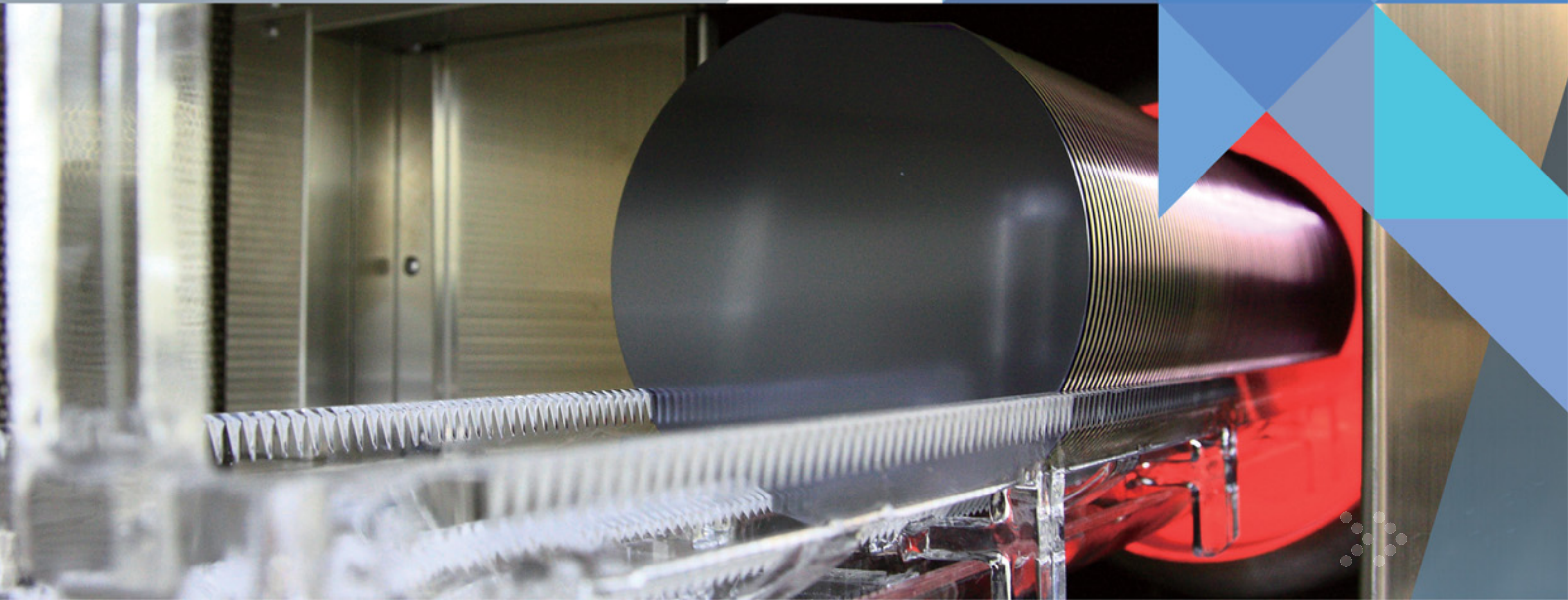
Capability

Dedicated MEMS

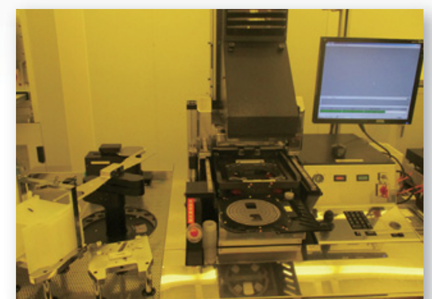


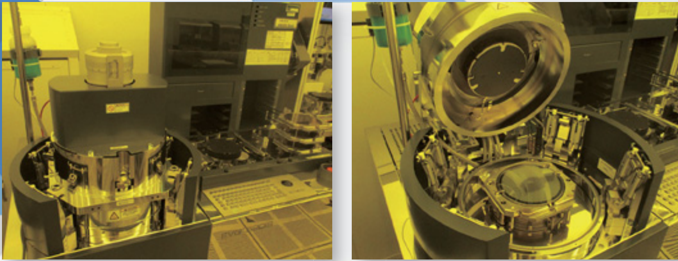
MEMS Thin Film Deposition / Ion Implanter / Thermal Treatment :

- Sputtering: Al, AlCu, AlSiCu, Cu, Pt, Ta, Ta_2O_5, Ti, TiN, Au, TaAl, Cr, NiCr, TiW
- E-Gun: Ti, Au, Cu, Pt, Ni, Ag, Cr, Al
- PECVD: α-Si, SiN, SiO_2, SiC, PSG, BPSG
- LPCVD: SiN, Poly-Si
- High Current Implanter: up to 160 kev
- Medium Current Implanter: up to 250 kev
- Thermal Oxidation, Annealing , Alloy, and RTP
- Others: Cu electroplating

Photolithography :

- 5X G-line Stepper: 1 μm Resolution, Registration < 0.2 μm
- 1X Double Side Aligner: 3 μm Resolution,2.0 μm overlay control for single side alignment & 4.0 μm overlay control for double side alignment
- Coater Track
- Double Side Coater / Developer System
- Spray Coater
- Developer Track
- Polyimide, BCB, SU8





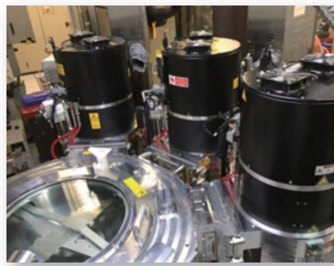
Wafer Bonding :

- Anodic Bond for Silicon or SOI on Glass Wafers
- Sandwich Bonding: Glass-Si-Glass, Si-Glass-Si
- Fusion Bond with or without Cavities
- BCB Adhesive Bond
- Au/Si, Au/Sn, Ge/Al Eutectic Bond
- Bond Alignment Accuracy ±5μm

Etching :

DRY Etch:

- Metal Etcher
- Poly Si Etcher
- ICP Deep Si Etcher
- Oxide / SiN Etcher

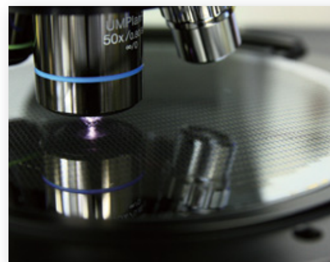


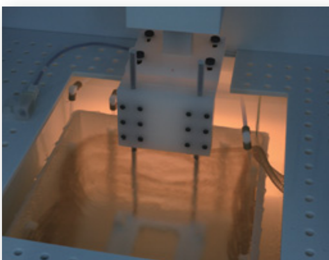
WET Etch:

- Wafer Cleaning Bench
- PR Stripper
- Metal Etcher
- Oxide Etcher
- SiN Etcher
- Metal Lift-off
- KOH Etcher with ECE Stop
- Scrubber for Particle Removal

Metrology & Testing :

- SEM, White-light Interferometer, IR Microscope
- Energy Dispersive X-ray Spectroscopy
- Wafer Probing and Dicing





NMOS Process Capability :

- Voltage: 5v / 12v / 18v
- Gate Length: 1μm
- Isolation Structure: LOCOS
- BPSG as ILD Layer and Al Contact Holes