

Micro and Nanofabrication Clean Room

## Techniques and equipment

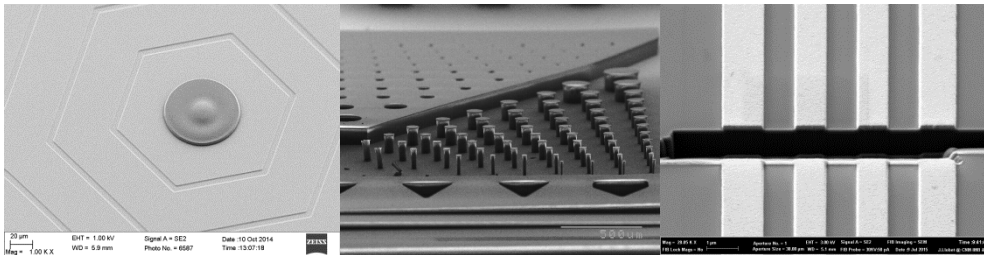
### PHOTOLITHOGRAPHY

Surface: 150 m<sup>2</sup>  
Class 100

- Automatic coater/developer system
- Contact/proximity and double-side contact/proximity mask aligners
- i-line Stepper
- Mask-Less Laser Lithography (i-line)
- Automatic mask cleaner

### Techniques and processes

- Optical Lithography on positive and negative photoresist for dry and wet etching
- Micro-nano designs obtained by Stepper
- Patterning with LOR and AZ photoresist for lift-off processes
- Microfluidic structures and molding with SU8 and SUEx/ADEX.
- Structural layers with polyamide
- Prototype manufacturing in Direct Laser Writer



### Equipment



#### GAMMA80 Süss

- Automatic Coater-Developer system
- HMDS deposition
- Hot and cold plates for bakes
- Sample size: 100 and 150 mm wafer
- For HIPR and OIR photoresist



### Delta 20/Delta 80 Süss

- Manual Spin Coaters
- Gyrset system (Delta 80)
- Sample size: 2'' to 6'' wafer
- For AZ photoresist, SU8 and polyamide



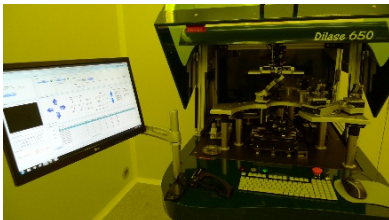
### Karl Süss MA6 & MA/BA6

- Contact/Proximity and double-side contact/proximity mask aligners
- Critical dimension = 1  $\mu\text{m}$
- g-i line (MA6) and i line (MA/BA6)
- Sample size: 100 and 150 mm wafer
- Mask size: 5'' x 5'' and 7'' x 7''



### NSR 2205i12D

- Stepper i-line
- Critical dimension = 350nm
- Max. exposure area = 22 x 22 mm
- Sample size: 100 and 150 mm wafer
- Reticle size: 6'' x 6'' x 0.25''



### KLOÉ Dilase 650

- Mask-less Laser Lithography
- Direct write i-line
- DiodeLaser: 70mw@375nm
- Critical dimension = 1  $\mu\text{m}$
- Min. exposure area = 3x3 mm<sup>2</sup>
- DXF, LWI, GDSii formats accepted



### OBDUCAT QS W 300SM

- Automatic Mask Cleaner
- Not use organic solvents
- Modes: Pyranha mix/RCA1/Megasonic
- Rinse and dry included
- Mask size: 5'' x 5'' / 7'' x 7''

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