

The Wisconsin Center for Applied Microelectronics



- A cleanroom research facility for microfabrication & nanofabrication technologies, products and innovations.
- Providing equipment for Micro-machining, Semiconductor electronics, and Opto-electronics.

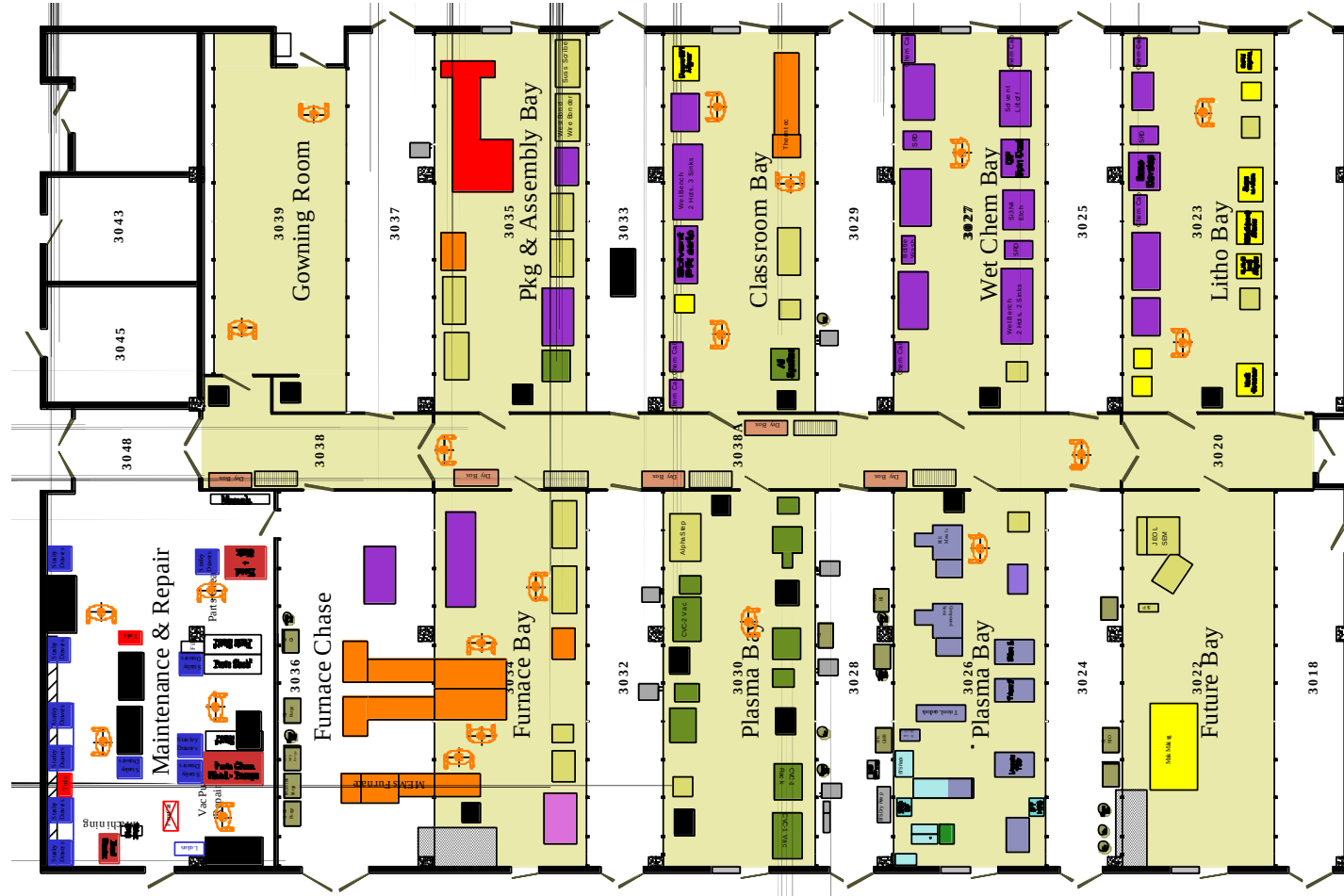
Cleanroom

- New facility opened May 2003
- Cleanroom
 - Class 10 1280 sq. ft.
 - Class 100 3376 sq. ft.
 - Class 1,000+ 2040 sq. ft.
 - Service space 3200 sq. ft.
- Non-Clean
 - Non-clean Labs 960 sq. ft.
 - Support Space 1064 sq. ft.



Cleanroom Layout

Class 1,000 = 2040 sqr. Ft. Class 100 = 3380 sqr. Ft. Class 10 = 1280 sqr. Ft.



Gowning Room



Equipment Available

Lithography

Nikon NSR-2005i8 Stepper

Karl Suss MA6/BA6 2-sided Contact Aligner

Karl Suss MJB-3 Contact Aligner

Karl Suss MJB-3 Contact Aligner (with I.R. backside alignment)

Headway Photoresist Spinners

Obducat NIL 2.5 Nanoimprinter

Wet Chemical

Several Wet Etch Benches

Quartz Tube Wash



Lithography Bay



Wet Chemistry Bay



Equipment Available

Deposition

CHA-600 Ebeam Evaporator (metals)
CVC-601 DC Sputterer (metals)
PlasmaTherm 74 Plasma CVD (dielectrics)
Telemark Ebeam Evaporator (dielectrics)
WCAM Ebeam Evaporator (metals)



Analytical Equipment

Tencor Flexus 2320 Film Stress Measurement
Filmetrics Optical Spectrometer
Tencor Alpha Step 200 Profilometer
PC based 4 pt probe



Deposition Bay



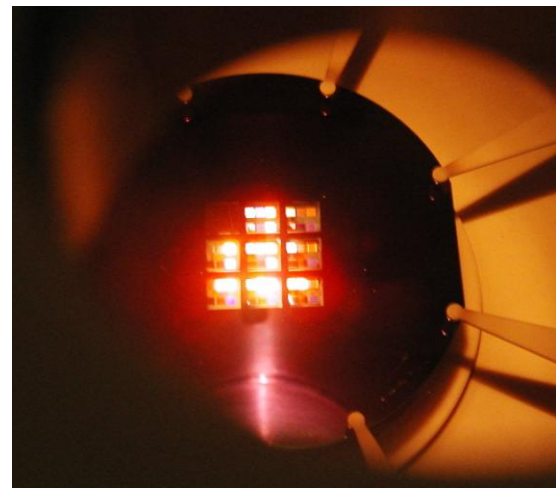
Equipment Available

Thermal Processing

- Several Oxidation Tubes (wet/dry oxides)
- Several Anneal Tubes
- Silicon Nitride LPCVD Tube
- Polysilicon LPCVD Tube
- LTO CVD Oxide Tube
- AG 610 RTA

Plasma Etch

- PlasmaTherm 74 RIE (oxide, nitride etch on Si)
- STS MEMs Deep Silicon Etcher
- PlasmaTherm 790 RIE (general purpose)
- Trion Phantom (polymer etching)
- PlasmaTherm ECR etch (compound semi)



Furnace Bay



Plasma Etch Bay



Equipment Available

Assembly

Electronic Visions Wafer-Wafer Bonder

Tousimis Critical Point Dryer

WestBond 747677 Wedge Wire Bonder

K+S 4124 Ball Wire Bonder

Karl Suss RA-120 Wafer Scribe

MicroAutomation 1006 Wafer Saw

MEI-720 Die Attacher

Indium Evaporator (die bonding)



Polymer Processing

425C Oven

Cooke Vacuum Oven



Teaching Bay

