

LOCATION	MAKE & MODEL	EQUIPMENT TYPE	OWNER/TRAINER	ITEMS REQUIRED FOR TRAINING
TFAB	Kulicke & Soffa 4524	Ball Bonder	Dennis Bueno	Die and package
Bay-2	West Bond 7476 E -79	Wedge Bonder	Dennis Bueno	Die and package
101B	Zeiss Supra 55VP with EDAX Genesis 4000	ScanningElectronMicroscope(SEM)withX-ray microanalysis	Richard wells	Highvacuumcompatiblesamplesonly,noloosepowders
101C	Zeiss 1540 Cross Beam with Nabity	FocusedIonBeam(FIB)systemwiththe-beamand ion beam writing	Richard wells	Highvacuumcompatiblesamplesonly,noloosepowders
105	Workroom		Paul Logan	Contact Owner
105DA	Chemical Storage Cabinets	Dock Storage	Dennis Bueno	
208	Kulicke & Soffa (K & S) Model 4124-2	Thermosonic Gold Ball Bonder	Dennis Bueno	Die and package
208	J.A. Woollam Co. Inc. VASE	Ellipsometer	Richard wells	Thin film sample
Alcove	CHA Industries Vacuum Evaporator Model SEC-1000-RAP	Electron Beam Evaporator	Kevin Chambers	Crucible, evaporation material, and wafer
Alcove	PlasmaQuest Model 129	Sputter System	Kevin Chambers	4" sputter target (consult owner), wafer
Alcove	AJA Orion-5-UHV	Sputter System	Kevin Chambers	4" wafer

Bay 1	Blue_M IGP 6680	Inert Atmosphere Oven	Dennis Bueno	wafer
Bay 1	Optical Associates Inc. (OAI), Model: 806 MBA	Optical double-sided contact mask aligner	Dennis Bueno	Photoresist, developer, 4" wafer, 5"x5" photomask, proper glassware
Bay 1	Karl Suss MA56	Contact Mask Aligner	Dennis Bueno	Photoresist, developer, 4" wafer, 5"x5" photomask, proper glassware
Bay 1	Headway PWM32-PS-R790	Wafer Spinner	Dennis Bueno	Coating material and wafer
Bay 1	Signatone	Temperature controlled hotplates	Dennis Bueno	wafer
Bay 1	Cole-Palmer Hot Plate	Four hotplates	Dennis Bueno	wafer
Bay 1	AO Reichert POLYVAR MET	Optical Microscope	Richard Wells	wafer
Bay 1	Nanonex NXB200	Nanoimprinter	Dennis Bueno	3" dia. or smaller mold and wafer, UV and underlayer resists (NanoFAB provides Thermal resist from Nanonex),
Bay 1	Millipore Gradient A10 and RiOs 16	Point of use deionized water system	Kevin Chambers	
Bay 1	Chemical cabinets	solvent, acid, bases, and refrigerator	Dennis Bueno	
Bay 1	Chemical hoods	Solvent, Acid/bases, develop, and spinner	Dennis Bueno	
Bay 2	Digital Instruments Dimension 5000	Atomic Force Microscope	Richard wells	Tip holder, tips, wafer
Bay 2	Nikon	Nomarski Microscope	Richard wells	Wafer

Bay 2	AlphaStep IQ	Surface Profiler	Richard wells	Wafer with a step feature on it
BAY 2	Zeiss LSM 5 Pascal	Confocal Microscope	Richard wells	Wafer
Bay 2	Ocean Optics Inc., NanoCalc UV-VIS	Reflectometry System	Richard wells	Thin film sample
Bay 2	Agilent4155CSemiconductorParameterAnalyzerand4284APrecisionLCRMeter.MicromanipulatorModel8060-US8-V0-1-A Probe Station	Electrical Test Station	Kevin Chambers	Wafer with electrical contacts on it for probing
Bay 2	HP4061ATestStation.IncludesHP4276A,HP4275A,HP4140B, and switching controller (HP 4083A)	Electrical Test Station	Kevin Chambers	Wafer with electrical contacts on it for probing
Bay 2	Micromanipulator Model 6000	probe station with a shielded box	Kevin Chambers	Wafer with electrical contacts on it for probing
Bay 2	Vacuum Probe Station	Closed chamber probe station	Kevin Chambers	Wafer with electrical contacts on it for probing
Bay 3	Neocera Inc.' PLD, Lambda Physik COMPex Excimer Laser	Pulsed Laser Deposition System	<u>Dennis Bueno</u>	3"targetand4"wafer(PermissionfromProf.Celik-Butler is required)
Bay 3	Technics Micro-RIE Series 800 Plasma System	Reactive Ion Etching System	<u>Kevin Chambers</u>	Wafer with photoresist pattern
Bay 3	PlasmaTherm 500 Series	Plasma Processing System	<u>Kevin Chambers</u>	
Bay 3	Diener PICO UHP-RF	Asher	<u>Richard wells</u>	Wafer with photoresist
Bay 3	TRION	DRIE Etch System	<u>Dennis Bueno</u>	4" Wafer with photoresist pattern
Bay 3	TRION MINILOCK II	RIE ETCH SYSTEM	<u>Kevin Chambers</u>	4" Wafer with photoresist pattern

Bay 3	TRION ORION II	PECVD/LPCVD SYSTEM	<u>Dennis Bueno</u>	4" wafer
Bay 3	Home-built sputter system		<u>Kevin Chambers</u>	3" target and 4" wafer
Bay 3	JetFirst 150	Rapid Thermal Processor	<u>Kevin Chambers</u>	4" wafer
Bay 3	AG Associates RTA, Model: Heatpulse 210	Rapid thermal annealing system	<u>Kevin Chambers</u>	4" or smaller wafer
Bay 3	MiniBrute	Annealing tube furnace	<u>Dennis Bueno</u>	4" wafer
Bay 3	Diffusion Furnace (Mini-Brute)	Annealing tube furnace	<u>Richard wells</u>	4" wafer
Bay 3	Tystar Furnace (Oxide, Wet and Dry)	Silicon Dioxide Growth	<u>Dennis Bueno</u>	4" wafer
Bay 3	Tystar Furnace (LPCVD Nitride Growth)	LPCVD Nitride	<u>Dennis Bueno</u>	4" wafer
Bay 3	AJA Orion-8-HV	E-beam Evaporator	<u>Kevin Chambers</u>	4" or smaller wafer
Clean Room	All supply cabinets		<u>Paul Logan</u>	
Clean Room	Storage and Dry Sample Boxes		<u>Paul Logan</u>	
Clean Room	Tool Boxes		<u>Paul Logan</u>	
Clean Storage	Waste Chemical Cabinets		<u>Dennis Bueno</u>	

Entry Chase	Microautomation Inc. Model 1100	Wafer Dicing Saw	<u>Dennis Bueno</u>	4" or smaller wafer
Entry Chase	Disco DAD3220	Dicing saw	<u>Dennis Bueno</u>	4" or smaller wafer
TFAB	NRC 3117	Thermal Evaporator	<u>Richard wells</u>	3" or smaller wafer, boats, evaporation materials
TFAB	Thermco MiniBrute	Diffusion Furnace	<u>Dennis Bueno</u>	4" or smaller wafer
TFAB	Lindberg	Oxidation Furnace	<u>Dennis Bueno</u>	2" or smaller wafer
TFAB	Acid , Base, and Solvent Cabinets		<u>Dennis Bueno</u>	
TFAB	AJA Orion-5-HV	Thermal evaporator	<u>Richard wells</u>	4" or smaller wafer, boats, evaporation materials
TFAB	Gaertner Ellipsometer, Model L116A	Ellipsometer	<u>Richard wells</u>	Thin film sample
TFAB	HP 4284A and HP 4145A, MM 6000 Probe Station	Electrical Test Station	<u>Richard wells</u>	Wafer with electrical contacts on it for probing
TFAB	Veeco FPP5000	Four-point probe	<u>Dennis Bueno</u>	wafer with diffused layer or thin film
TFAB	JANDELENGINEERINGLTD, ModelMWP-6-SPECprobestand, and RM3 Test unit	Four-point probe system	<u>Kevin Chambers</u>	wafer with diffused layer or thin film
TFABYellowRoom	Karl Suss MJB3	Mask Aligner	<u>Dennis Bueno</u>	Photoresist, developer, 2" wafer, 3"x3" photomask, proper glassware
TFABYellowRoom	Two Blue-M Ovens		<u>Dennis Bueno</u>	wafer

TFABYellowRoom	Thermoline	Two hotplates	<u>Dennis Bueno</u>	wafer
TFABYellowRoom	Headway Spinner	spinner	<u>Dennis Bueno</u>	wafer and coating material
TFABYellowRoom	Millipore Milli-Q UV plus and Milli-Q RO 10 plus	Point of use deionized water system	<u>Dennis Bueno</u>	
TFABYellowRoom	Solvent Cabinet and small refrigerator		<u>Dennis Bueno</u>	
TFABYellowRoom		Weighing Scale	<u>Dennis Bueno</u>	sample to be weighed
TFABYellowRoom	One Acid and One Solvent Hood		<u>Dennis Bueno</u>	
TFAB Yellow Room	EVG 520IS	Wafer Bonder	Kevin Chambers	Wafer
TFAB Yellow Room	EVG 620	Backside Aligner	Dennis Bueno	Wafer, 5"x5" Mask, Resit, developer
Bay-4	Nickel Electroplating	Nickel Electroplating	Kevin Chambers	Wafer