

MIT.nano

FAB.NANO TOOL CHARGE LIST

AY 2022-2023

TOOL	MIT INTERNAL RATE
DEPOSITION	
ALD-AllPurpose	\$59.5/wafer + \$1020/um
ALD-Ozone	\$59.5/wafer + \$1020/um
ALD-Plasma-Arradiance-XTDP	\$59.5/wafer + \$1020/um
Dimatix2837_Printer	\$50/hr and \$120/item
EBeam-AJA	\$140/run + \$45/hr + materials
EBeam-EVO	\$140/run + \$45/hr + materials
EBeam-Temescal-FC2800	\$140/run + \$45/hr + materials
EBeam-Temescal-LL	\$140/run + \$45/hr + materials
PECVD-2Chamber-AMAT-Centura	\$59.5/wafer + \$8.5/um
PECVD-Samco-PD220	\$59.5/wafer + \$8.5/um
PECVD-STS-MMPLEX	\$59.5/wafer + \$8.5/um
Sputter-4Chamber-AMAT-Endura	\$85/wafer
Sputter-AJA-ChamberLoad	\$170/run + \$42.5/hr + materials
Sputter-AJA-LL	\$170/run + materials
Sputter-Balzer	\$68/hr and \$1275/um
Sputter-Balzer-Au	\$68/hr and \$1657.5/um
Storage-Metal-U08	\$0/run
ThermalEvap-Parylene	\$119/run
DIFFUSION	
Anneal-Box	\$42.5/run + \$12.8/hr
Anneal-Tube	\$59.5/run + \$21.3/hr
Ox-Tube-Lindberg	\$59.5/run + \$21.3/hr
RTA-1100C-ASMicro	\$34/wafer
RTA-1100C-ASOne150	\$34/wafer
RTA-1300C-ASOne150	\$34/wafer
RTA-1300C-ASOne150-5Gas	\$34/wafer
Tube-OxAnneal-Expertech-CTR200	\$212.5/run + \$85/um
Vacuum-Oven	\$59.5/run + \$21.3/hr

DRY ETCH	
DRIE-SPTS-Pegasus	\$59.5/wafer + \$0.3/um
DRIE-STS-MMPLEX	\$59.5/wafer + \$0.3/um
RIE-2Chamber-AMAT-P5000	\$59.5/wafer + \$8.5/um
RIE-Cl2-SAMCO-200iP	\$59.5/wafer + \$8.5/um
RIE-F-Samco-230iP	\$59.5/wafer + \$8.5/um
RIE-Mixed-Samco-230iP	\$59.5/wafer + \$8.5/um
VaporEtch-XeF2	\$170/run
METROLOGY	
AFM-Asylum-JupiterXR	\$76.5/hr
AFM-Veeco	\$76.5/hr
AIR_Solar_Sim	\$44.2/hr
Cleave-LatticeAx	\$42.5/run + \$0.9/um
Dektak-150	\$17/hr
Dektak-XT	\$17/hr
Ellipsometer-Semilab-SE2000	\$51/run
Filmetrics-F20	\$17/hr
Filmetrics-F20-Lower	\$8.5/hr
Filmstress-Tencor-FLX2320	\$42.5/hr
Fluidic-Test	\$42.5/hr
Microscope-Inspect-4k	\$25.5/hr
Microscope-Inspect-HD	\$17/hr
ProbeStation-Summit-11000	TBD
Scribe-Backside	\$25.5/run + \$0.9/cut
Scribe-Frontside	\$25.5/run + \$0.9/cut
SEM-Hitachi-Regulus8100	\$76.5/hr
SEM-Zeiss-Sigma300	\$76.5/hr
Tencor-P10	\$42.5/hr
Veeco-Wyko-NT9800	\$42.5/hr
NANOMAT	
4_Point_Probe	\$44.2/hr
Agilent5500_AFM	\$44.2/hr and \$37.1/item
AIR_Bladecoater	\$44.2/hr
AIR_FOM	\$44.2/hr
Cary_UV-Vis_Spec	\$44.2/hr
Fluorescence_Spec	\$100.3/run + \$10.2/hr
GB_Metals_Evaporator	\$140/run + \$30/hr + materials
GB_Organics_Evaporator	\$140/run + \$30/hr + materials
GB_Solar_Sim	\$44.2/hr
GB_Spincoater	\$44.2/hr

PACKAGING	
Clean-Ar-Plasma	\$59.5/hr
DieBonder-PickAndPlace	\$59.5/hr
Diesaw-DAD3240	\$25.5/wafer
Freezer-Packaging	\$59.5/hr
Microscope-QuickVision	\$59.5/hr
Oven-EnvironmentalTest-ESPEC	\$297.5/run + \$2.6/hr
Oven-Reflow	\$59.5/hr
Solder-Station	\$25.5/hr
Vacuum-Sealer	\$8.5/run
Wirebond-Auto	\$59.5/hr
Wirebond-Ball-MEI	\$59.5/hr
Wirebond-Ball-Westbond	\$59.5/hr
Wirebond-Wedge	\$59.5/hr
XRay-Inspection	\$59.5/hr
PHOTOLITHOGRAPHY	
Asher-Barrel-Thierry	\$17/run
Asher-Chuck-ESI	\$17/run
Asher-SoftLitho	\$17/run
Beamer	\$0/hr
CoatDevelop-picoTrack	\$17/wafer
Coldplate-Solvent	\$42.5/hr
CPD-Toussimis-931	\$51/run
Develop-Brewer-200CBX	\$17/wafer
Develop-L08	\$68/run
Develop-U10	\$68/run
Develop-U12	\$68/run
DirectWrite-MLA150-AirAF	\$119/hr
DirectWrite-MLA150-OptAF	\$119/hr
DirectWrite-NanoFrazor	\$59.5/run + \$34/hr
DirectWrite-Nanoscribe-GT2	\$85/run + \$34/hr
EBL-Elionix-HS50	\$93.5/hr
EBL-Spinner-Hood-U06	\$68/run
Elionix	\$93.5/hr
General-Spinner-Hood-L10	\$68/run
General-Spinner-Hood-U12	\$68/run
HMDS-Yes-U10	\$0/wafer
Hotplate-Tower-U10	\$17/run
Hotplate-Tower-U12	\$17/run
Interference-LloydsMirror	\$119/hr

Liftoff-L08	\$68/run
Liftoff-L10	\$68/run
MaskAlign-EV620	\$59.5/run + \$42.5/hr
MaskAlign-MA6	\$59.5/run + \$42.5/hr
MaskAlign-SoftLitho-EV620	\$59.5/run + \$42.5/hr
Oven-PostBake-U10	\$17/run
Oven-PostBake-U12	\$17/run
Oven-PreBake-U10	\$17/run
Oven-PreBake-U12	\$17/run
Polymer-Spinner-Hood-U10	TBD
Resist-Spinner-Hood-U10	\$68/run
Spinner-EBL	\$17/wafer
Spinner-PMGI-U12	\$17/wafer
Spinner-Polymer	\$17/wafer
Spinner-Resist-Dispense-U10	\$17/wafer
Spinner-Resist-L10	\$17/wafer
Spinner-Resist-U12	\$17/wafer
UpNano_3D_Printer	TBD
WaferBonder-EV501	\$51/wafer
WaferBonderAlign-EV620	\$51/wafer
SOFT LITHO	
Microscope-Inspect-SU8	\$17/hr
Microscope-Stereo-SU8	\$8.5/hr
Mixer-PDMS-Degas	\$17/run
Oven-PDMS	\$8.5/run
PDMS-Prep	\$17/hr
SoftLitho-Develop	\$17/hr
SoftLitho-Prep	\$17/hr
Spinner-SU8	\$17/wafer
SU8-Spinner-Hood	\$17/hr
WET ETCH & CLEAN	
Acid-Etch-General-L06	\$212.5/full tank
Acid-Etch-General-U10	\$212.5/full tank
Acid-Extended-U07	\$212.5/full tank
Acid-PostCMP-U07	\$212.5/full tank
Acid-PreClean-L06	\$212.5/full tank
Acid-PreClean-U06	\$212.5/full tank
Acid-SmallTanks-U10	\$212.5/full tank
CMP-GnP	\$59.5/wafer
NitrideEtch-Phos-L06	\$212.5/full tank

Ops-ParticleCounter	\$0/run
OxideEtch-HF-BOE-L06	\$212.5/full tank
Plating-U04	\$212.5/full tank
RCA-Diffusion-L02	\$212.5/full tank
SiliconEtch-KOH-TMAH-L06	\$212.5/full tank
Solvent-Clean-U06	\$68/run
Solvent-L06	\$68/run
SRD-L06	\$8.5/run
SRD-U10	\$17/run