

PROCESS BATCH SHEET (Al DC Sputter Deposition) Issue 4

Pg ____ of ____

ENSC Batch No. _____ Wafers Started _____ Date _____

Material _____ Orientation _____ Size _____ Thickness _____

Resistivity _____ Type _____

Wafer Vendor _____ Vendor Batch # _____ SFU P.O. _____

Process Step #	Process Conditions	Oper & Wafer #	Comments
			Substrates must be very clean. Perform either an RCA clean or a good organic solvent clean. Either must be followed by a thorough rinse / dry
_____A	Weigh Substrate (optional) For thickness calculation.		
_____B	Load Substrates Secure to holders in chamber		
_____C	Rough Pump Evac chamber to 50 mTorr		
_____D	High Vacuum Pump To 3 x 10e-6 Torr or lower		
_____E	Sputter Clean Source Example: 500 W*min @ 0.2A in current mode at 3 mTorr Ar pressure		
_____F	Sputter Deposit Aluminum Example: About 8000 W*min @ 0.2A at 3 mTorr Ar press, depending on thickness needed.		Example: 8000 W*min will give about 1 micron of Al on a single, stationary wafer.
_____G	Shut Down Process Stop process (F1), close Hi Vac valve. Bleed chamber to atmosphere.		
_____H	Remove Substrates Open chamber. Remove substrates carefully.		
_____I	Shut Down System Turn down per procedures		
_____J	Inspect Substrates Visual, weight, thickness, adhesion		