

PECVD1-SiN standard recipe-1000A			PECVD1 Typical Film Properties
<b>1. Chamber Clean ( wet clean)</b> <b>WET CLEAN</b> Wipe clean upper chamber walls with DI Wipe off upper chamber walls with IPA	<b>2. Chamber (clean+coat)</b> <b>30CLN_SN</b> step1: Initial t=10", p=2x10-2 T=250C step2: N2 purge t=30" p=300mT step3: evacuate, base pressure=2x10-2, t=10" step4:loop step5:gass stabilization, t=30" step6:etch chamber, t=30' step7:evacuate, t=10" step8:N2 purge step9:evacuate step10:loop step11:SiN gass stabilization step12:SiN deposition( 200A coat) step13:evacuate step14:N2purge, t=30" step15:end	<b>3.SiN Deposition</b> <b>SiN_10</b> step1: Initial t=10" step2: N2 purge t=30" step3: evacuate, t=10" step4:loop step5: SiN gass stabilization, t=30" <b>step6: SiN deposition</b> <b>Time=9'28.1"</b> <b>Temperature=250°C</b> <b>Pressure=900mT</b> <b>Gass Flow:</b> <b>SiH4=150sccm</b> <b>N2=450sccm</b> <b>NH3=1.54sccm</b> <b>Power:</b> <b>RF1=22W</b> step7:evacuate, t=10" step8:N2 purge t=30" step9:evacuate t=10" step10:loop	Deposition rate=11.21nm/min Refractive index@632.8nm=1.938 Stress=508.86MPa HF etch rate=85.52nm/min

Automatic - Process : SIN10 Step: 6

<b>Description</b>	SiN Dep 1000 A
<b>Process Pump</b>	LOVAC
<b>Deposition ID</b>	SIN250
<b>Deposition [Å]</b>	1000

TEMPERATURE	
Setpt	Actual
Channel 2	250 248

GAS CHANNELS	
	Setpt Actual
SiH4	150 149
N2	450 450
NH3	1.54 1.56

RF GENERATORS	
RF1	
	Setpt Actual
RF Control	POWER
RF Config	PE
Power	22 21
Ref	0.0
DC	11

	Setpt	Elapsed	Left
Time	09:28.1	08:16.0	01:12.1