

PECVD-SiN standard recipe-1000A

1. Chamber Clean ( wet clean)

WET CLEAN

Wipe clean upper chamber walls with DI  
Wipe off upper chamber walls with IPA

2. Chamber clean+coat

30CLN\_SN

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

3.SiN Deposition

SiN\_10

step1: Initial t=10"  
step2: N2 purge t=30"  
step3: evacuate, t=10"  
step4:loop  
step5: SiN gass stabilization, t=30"

step6:SiN deposition t=9'28.1"

Temperature=250°C

Pressure=900mT

Gass Flow:

SiH4=150sccm

N2=450sccm

NH3=1.54sccm

Power:

RF1=22W

step7:evacuate, t=10"  
step8:N2 purge t=30"  
step9:evacuate t=10"  
step10:loop

Automatic - Process : \_SiN10 Step. 6

Description **SiN Dep 1000 A**  
Process Pump **LOVAC**

Deposition ID **SIN250**  
Deposition (Å) **1000**

TEMPERATURE  
Setpt Actual  
Channel 2 **250 248**

Pressure[mTorr] **900 903**

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