

Advanced PECVD-Nitride2( HF n=2.00, 9.3nm/min)				Advanced PECVD SiN 3000A Typical Film Properties
SiN deposition~3000A, 300C				Deposition rate=9.05nm/min
Step1: NITRIDE2 coat				Refractive index@632.8nm=1.952
	<b>Name</b>	<b>Value</b>	<b>Changeable</b>	Stress=-480.68MPa
	Process pressure	800 mtorr	N	HF etch rate=48.32nm/min
	RF setpoint	30 W	N	
	stabilization time	15 seconds	N	
	<b>step time(m)</b>	<b>10</b>	<b>Y</b>	
	<b>step time(s)</b>	<b>0</b>	<b>Y</b>	
	2%SiH4 %He	1040	N	
	N2	980	N	
	NH3	17	N	
Step2: NITRIDE2 deposition				
	<b>Name</b>	<b>Value</b>	<b>Changeable</b>	
	Process pressure	800 mtorr	N	
	RF setpoint	30 W	N	
	stabilization time	15 seconds	N	
	<b>step time(m)</b>	<b>30</b>	<b>Y</b>	
	<b>step time(s)</b>	<b>0</b>	<b>Y</b>	
	2%SiH4 %He	1040	N	
	N2	980	N	
	NH3	17	N	
Step3: STANDARD PLASMA CLEAN				
1. pump down				
	<b>Name</b>	<b>Value</b>	<b>Changeable</b>	
	stabilization time	15 seconds	N	
	<b>step time(m)</b>	<b>0</b>	<b>N</b>	
	<b>step time(s)</b>	<b>30</b>	<b>N</b>	
2. Pre-purge				

	Name	Value	Changeable
	purge	1 (Yes/No)	N
	stabilization time	15 seconds	N
	step time(m)	1	N
	step time(sec)	0	N
	<b>3.1 High Pressure</b>		
	Name	Value	Changeable
	Cload position	50%	N
	Ctune position	50%	N
	DriveMatch	1 (Yes/No)	N
	Process pressure	600 mtorr	N
	RF setpoint=300	300 W	N
	Stabilization time	35 seconds	N
	step time(m)	ENTER TIME	Y
	step time(s)	0	Y
	CF4/O2(5)	500 sccm	N

For 7min( coat+deposition) run 1min CLEAN