

Advanced PECVD-LS Nitride2(n=1.93,-40MPa, 8.3nm/min)			Advanced PECVD LS SiN~2500A Typical Film Properties
SiN deposition~2500A, 300C			Deposition rate=4.33nm/min
Step1: NITRIDE2 coat			Refractive index@632.8nm=1.932
	Name	Value	Changeable
	LF on time(ms)	1000ms	Y
	LF setpoint	90W	Y
	Process pressure	800 mtorr	N
	RF on time(ms)	6000ms	N
	RF setpoint	30 W	N
	stabilization time	15 seconds	N
	step time(m)	10 min	Y
	step time(s)	0 sec	Y
	2%SiH4 %He	1040sccm	N
	N2	980sccm	N
	NH3	18sccm	N
Step2: NITRIDE2 deposition			Stress=-26.31MPa
	Name	Value	Changeable
	LF on time(ms)	1000ms	Y
	LF setpoint	90W	Y
	Process pressure	800 mtorr	N
	RF on time(ms)	6000ms	N
	RF setpoint	30 W	N
	stabilization time	15 seconds	N
	step time(m)	30 min	Y
	step time(s)	0 sec	Y
	2%SiH4 %He	1040sccm	N
	N2	980sccm	N
	NH3	18sccm	N
Step3: STANDARD PLASMA CLEAN			HF etch rate=46.22nm/min
1. pump down			
	Name	Value	Changeable
	stabilization time	15 seconds	N
	step time(m)	0	N
	step time(s)	30	N
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
3.1 High Pressure			
	Name	Value	Changeable
	Clodad 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