PECVD Characterization Data

SiO_2 Film Thickness: **500 nm** **Recipe:** Deposition Time: 6.5 min Chiller Temp: 70°C Substrate Temp: 350°C RF Generator Forward Power: 20 W 5% SiH_4/Ar: 170 sccm N_2O: 710 sccm	SiO_2 Film Thickness: **3.4 um** **Recipe:** Deposition Time: 105 min Chiller Temp: 70°C Substrate Temp: 350°C RF Generator Forward Power: 20 W 5% SiH_4/Ar: 170 sccm N_2O: 710 sccm
Si_3N_4 Film Thickness: **550 nm** **Recipe:** Deposition Time: 25 min Chiller Temp: 70°C Substrate Temp: 350°C LF Generator Forward Power: 50 W Pulse Time: 15 sec RF Generator Forward Power: 50 W Pulse Time: 7 sec 5% SiH_4/Ar: 400 sccm NH_3: 20 sccm N_2: 600 sccm	Si_3N_4 Film Thickness: **20 nm** **Recipe:** Deposition Time: 2 min Chiller Temp: 50°C Substrate Temp: 350°C LF Generator Forward Power: 20 W Pulse Time: 7 sec RF Generator Forward Power: 20 W Pulse Time: 13 sec 5% SiH_4/Ar: 400 sccm NH_3: 20 sccm N_2: 600 sccm
SiC Film Thickness: **120 nm** **Recipe:** Deposition Time: 15 min Chiller Temp: 70°C Substrate Temp: 350°C RF Generator Forward Power: 20 W 5% SiH_4/Ar: 300 sccm CH_4: 100 sccm	PolySi Film Thickness: **188 nm** **Recipe:** Deposition Time: 30 min Chiller Temp: 70°C Substrate Temp: 580°C RF Generator Forward Power: 7 W 5% SiH_4/Ar: 500 sccm
Chamber Clean Recipe: Cleaning Time: 90 min Chiller Temp: 40°C Substrate Temp: 180°C LF Generator Forward Power: 200 W RF Generator Forward Power: 200 W N_2O: 100 sccm CF4: 160 sccm	