

1. 晶片傳送/處理模組 (Wafer Handling Module)

晶片傳送/處理模組

1. FI 6.3



2. E-chuck

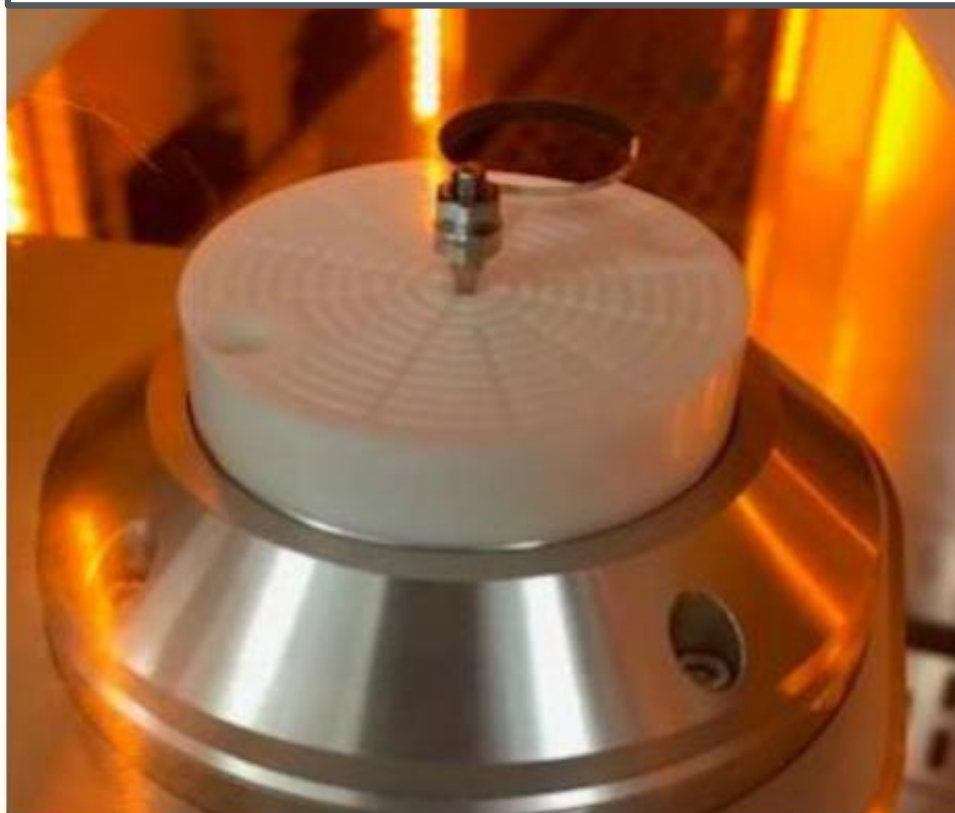


3-1. Open Cassette

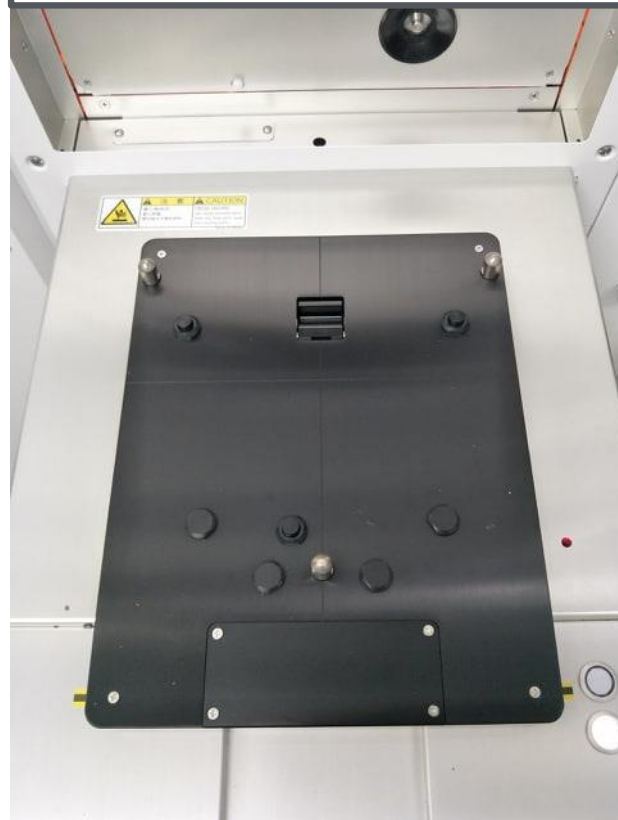


晶片傳送/處理模組

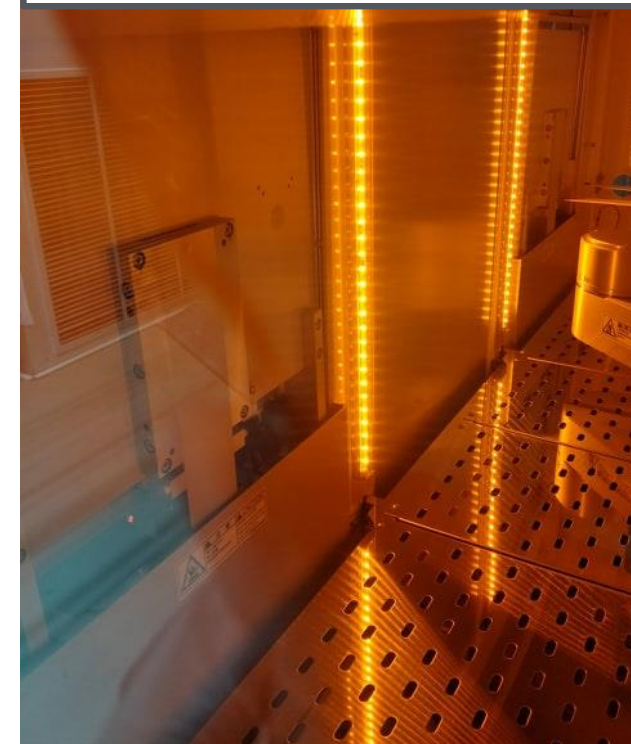
3-2. Aligner



3-3. Cassette sensor



3-4. Complete Wafer Mapping System

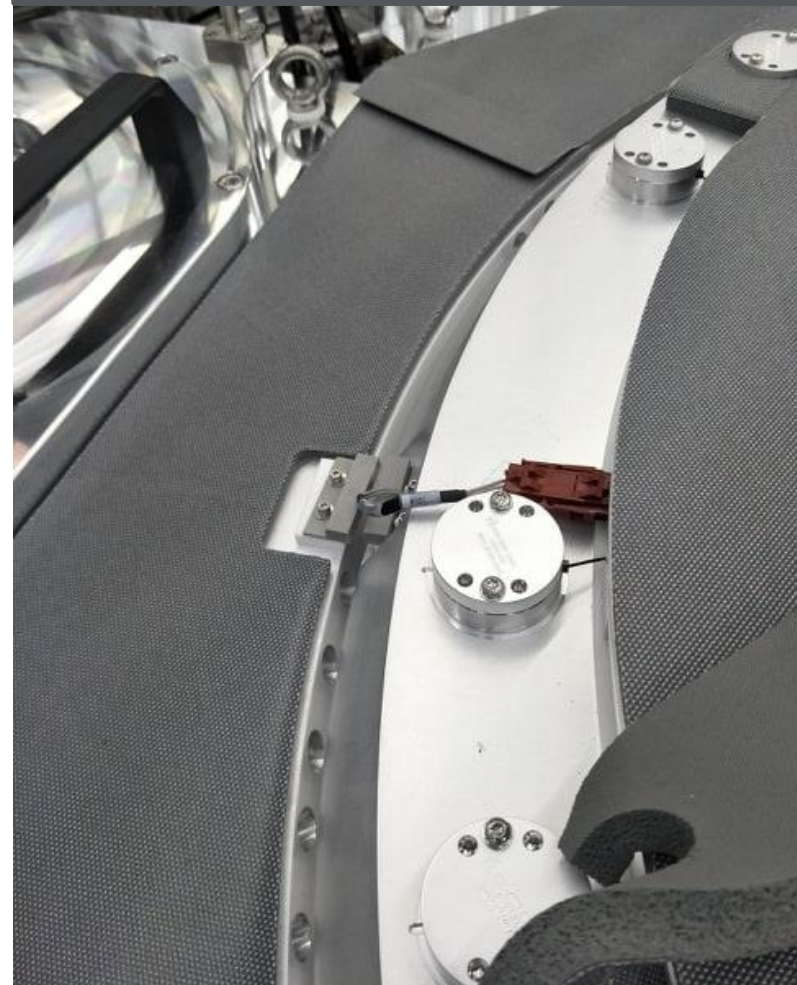


晶片傳送/處理模組

4. Ceramic Blade (FABS)

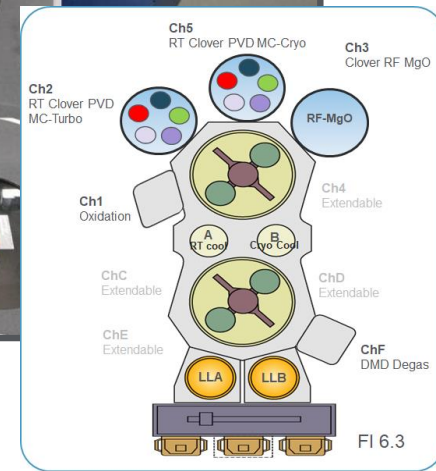
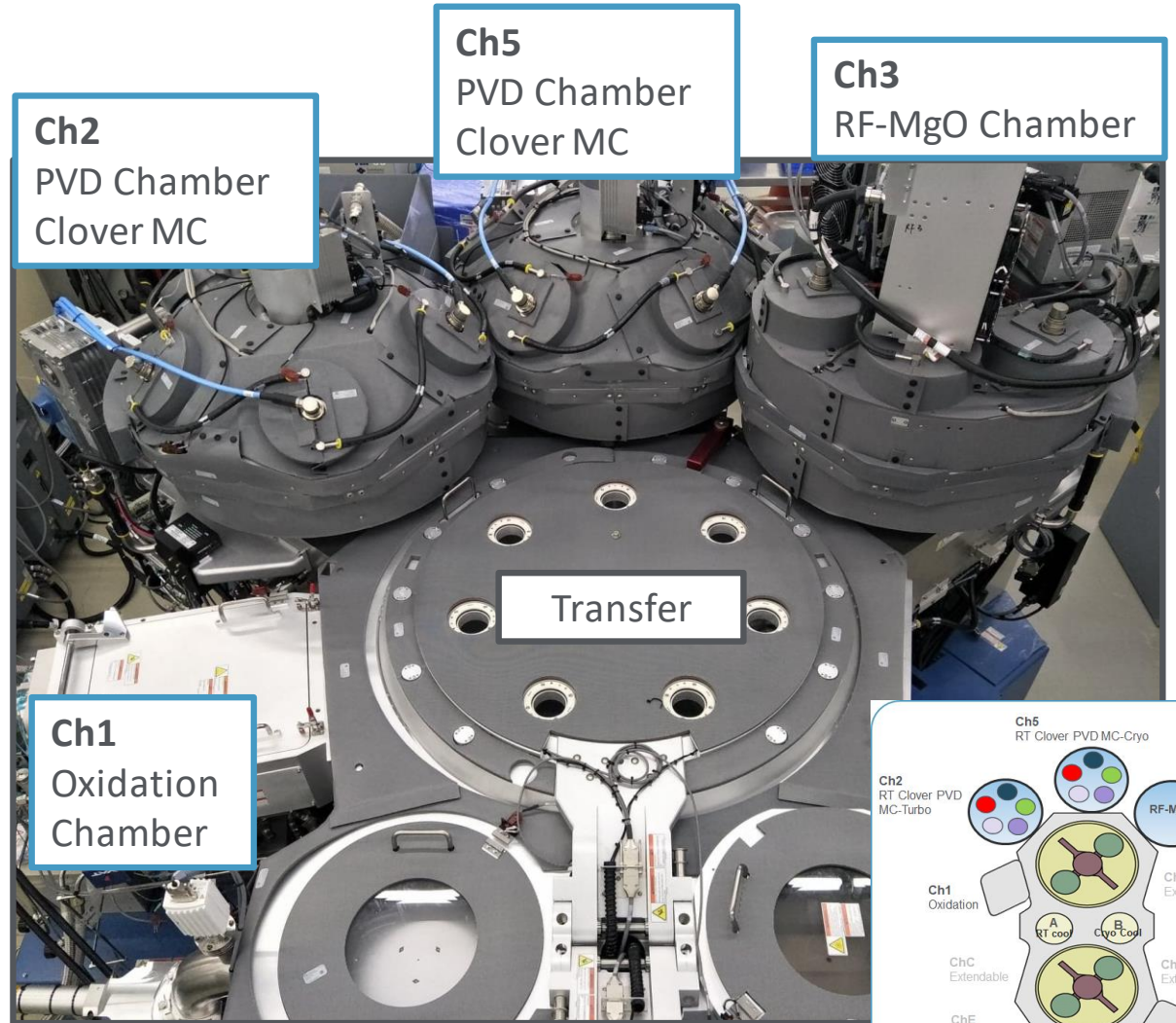
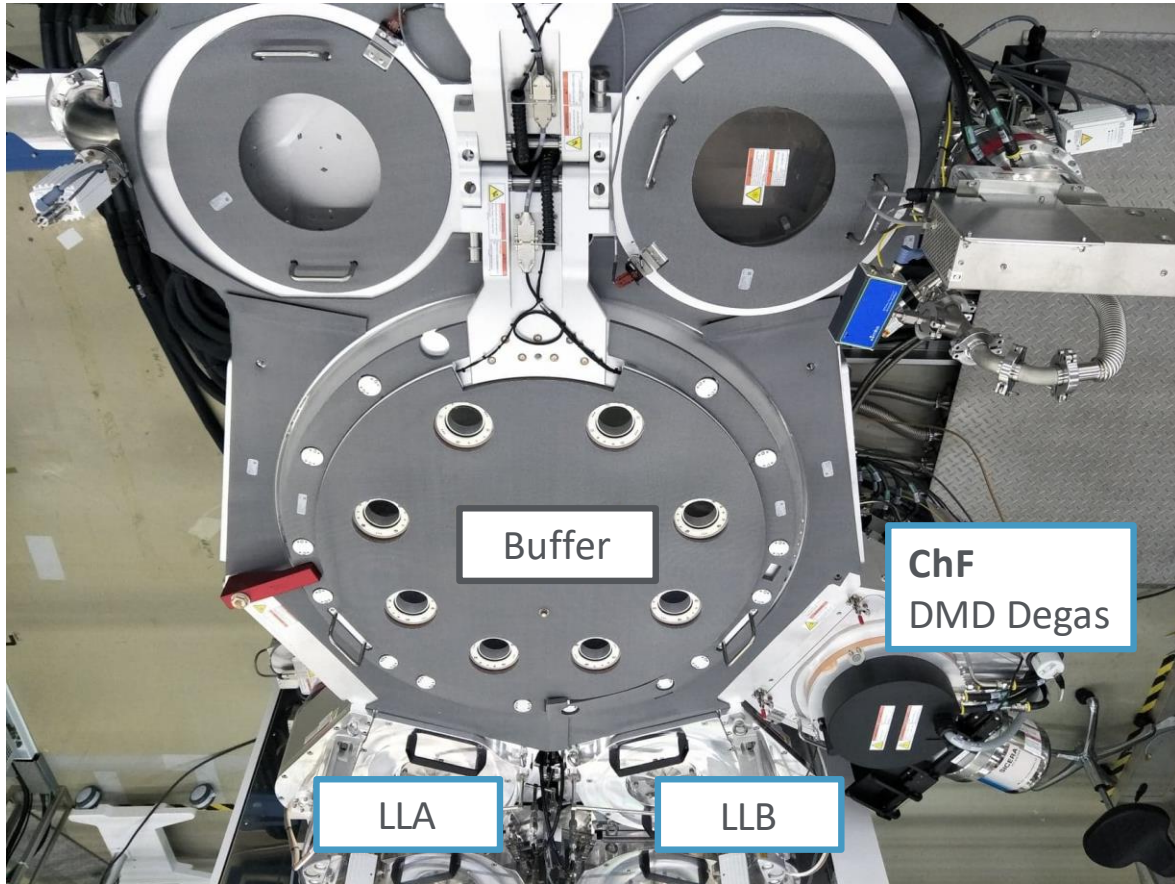


5. Robot door interlock system



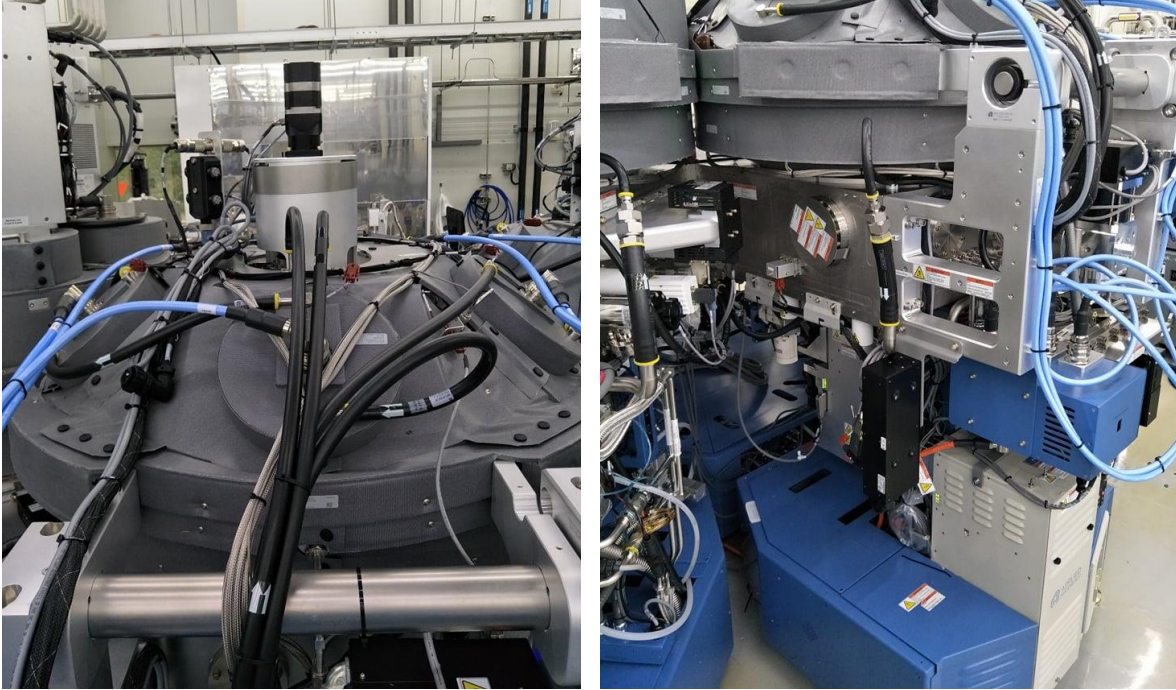
2. 製程區

2.1 集結式主體結構



2.2 薄膜沉積腔體(PVD Chamber)

Clover PVD



ESC



MKS DC Gen



MFC



Sumitomo Cryo Pump



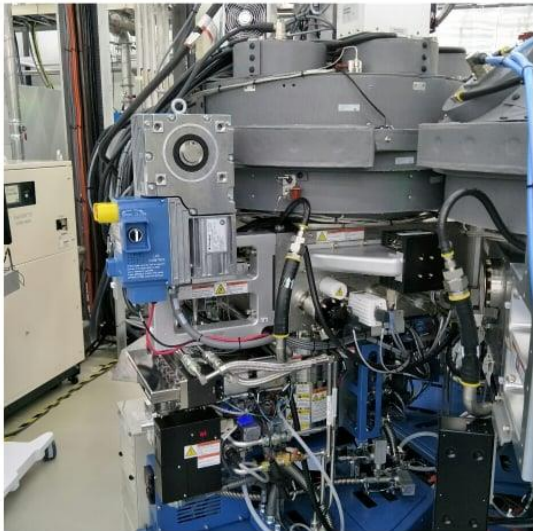
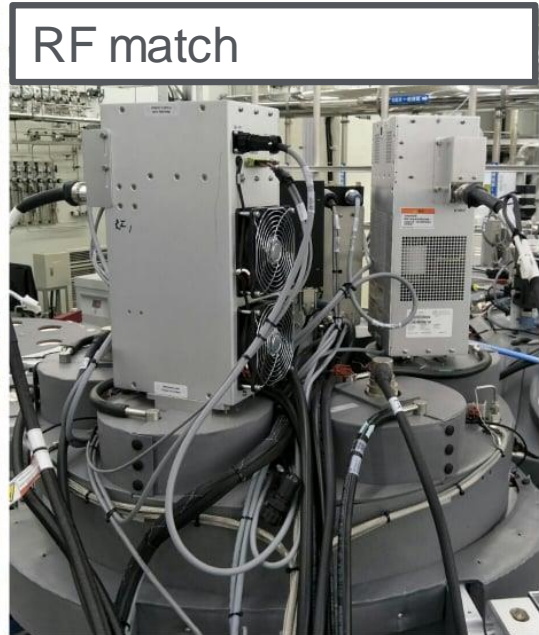
Cathode X5



Adjust angle



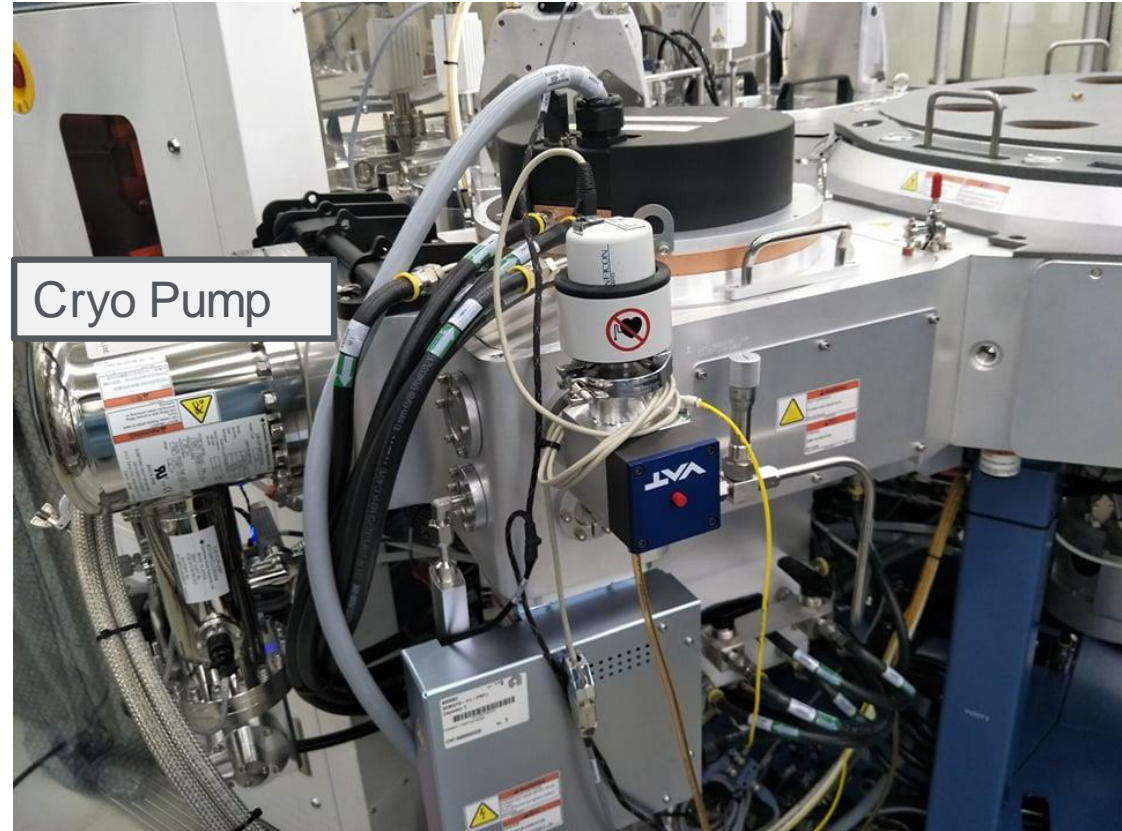
2.3 射頻氧化鎂薄膜沉積 (RF-MgO Chamber)



2.4 氧化製程腔體 (Oxidation)



2.5 釋氣腔體 (Dual Mode Degas)



2.6 真空系統

Chamber Position	Base pressure (Torr)	Base Pressure Spec (Torr)	Leak rate (nTorr/min)	Leak rate Spec (nTorr/min)
LLA	7.0E-8	$\leq 1E-7$	4998	≤ 8000
LLB	9.0E-8	$\leq 1E-7$	4999	≤ 8000
Buffer	3.3E-9	$\leq 1E-8$	0	≤ 1000
Transfer	4.1E-9	$\leq 1E-8$	2	≤ 1000
CH1	1.8E-8	$\leq 1E-7$	23.75	≤ 5000
CH2	1.9E-9	$\leq 1E-8$	8.87	≤ 200
CH3	1.2E-9	$\leq 1E-8$	15.54	≤ 200
CH5	1.8E-9	$\leq 1E-8$	10.80	≤ 200
CHF	7.6E-8	$\leq 5E-7$	567	≤ 1000



2.7 超低溫冷卻系統

19-Nov-2019 14:27:50 AT/System: CH2/TempCtrl/Bakeout.wPowerSP changed from '0 %' to '40 %'

Power	Request	Actual
CFB25 - ML24	0.00 W	0.00 W
CFB20 - ML24	0.00 W	0.00 W
CoFe - ML24	0.00 W	0.00 W
Mo - SL19	0.00 W	0.00 W
Mg - SL19	0.00 W	0.00 W

Water: 4.1 gal/min

Process Pressure: 0.06 mTorr

Water Pump: Pump On, TC On, Temp1 100.00 K, Pressure 0.0 μTorr

Cryo 2: 100.00 K, 0.0 μTorr

CH2 Pump: Ready

Recipe Control: Mo7.2sCoFe9.6s-2x Mo7.2s CoF...

Recipe So Far Loop Count: Loop Steps 0 to 0, So Far Count 0 of 0

Recipe: PM Recipe

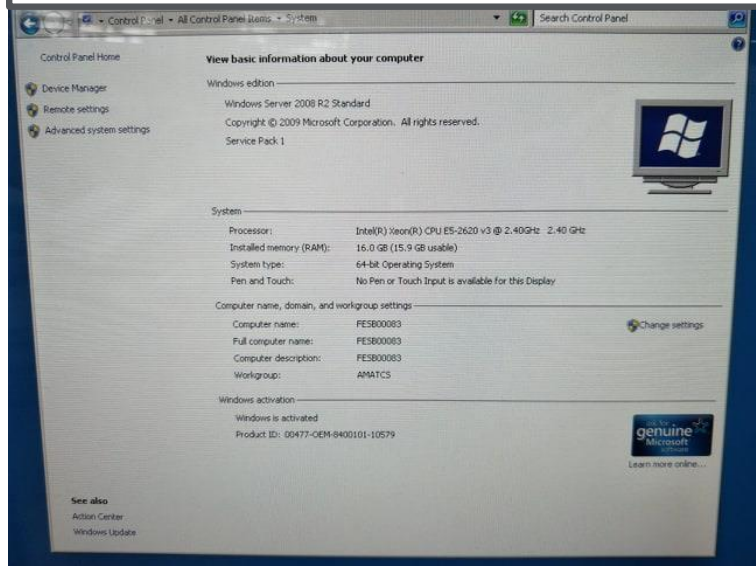
Cryo-Cool 1st temperature 100K
(Criteria < 110K)



3. 控制模組

控制模組

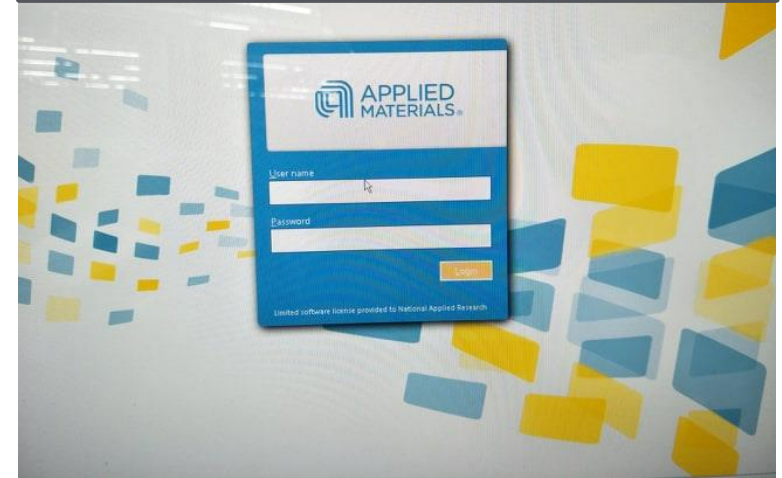
3.1 Windows Operation System



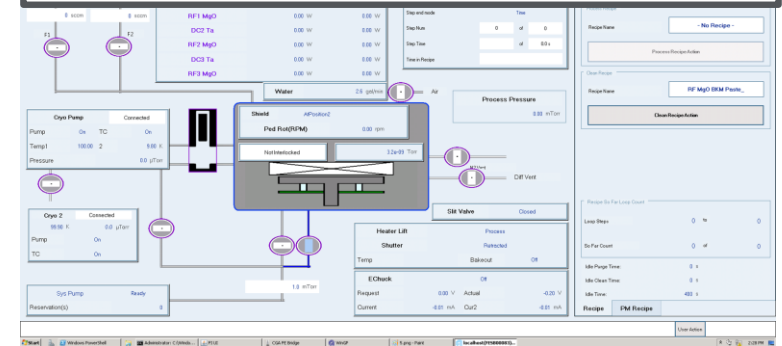
3.2 Monitor / Key board / Mouse X2



3.3 Authorization Access Interface

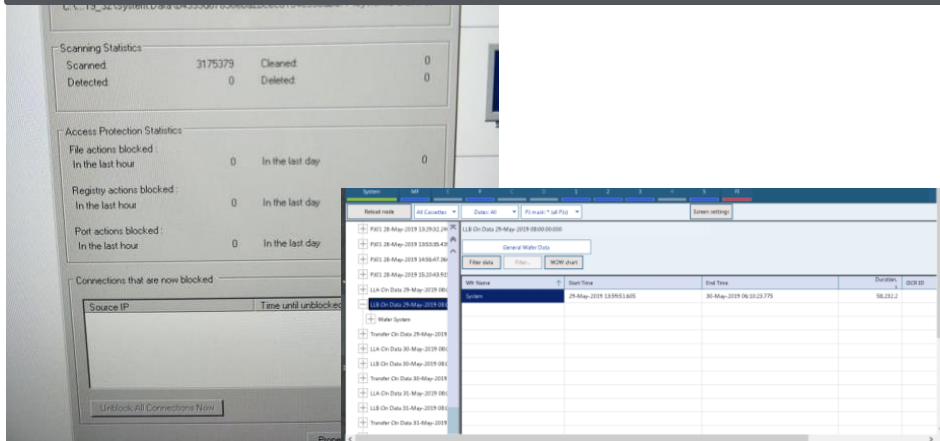


3.4 Control Interface



控制模組

5. Wafer History/ Anti-Virus Scan



6. Parameter Offset Warning Function

Parameter Name	Alert Scope	OH1 Feedback APC	OH2 PVD Multi-Cathode	OH3 PVD Multi-Cathode	OH4 PVD Multi-Cathode	OH5 PVD Multi-Cathode	OH6 PVD Multi-Cathode	OH7 PVD Multi-Cathode
Process Pressure Monitor Fault Limit	Device	20 bar	0.5 bar	0.25 bar	0.5 bar			
Process Pressure Monitor Warning Limit	Device	28 bar	0.45 bar	0.45 bar	0.45 bar			
Rate of Rise Warning Limit	Device	2000 r/min/min	1000 r/min/min	500 r/min/min	1000 r/min/min	0.02 r/min/min	0.02 r/min/min	
Rate of Rise Fault Limit	Device	2500 r/min/min	1000 r/min/min	500 r/min/min	1000 r/min/min	0.025 r/min/min	0.025 r/min/min	
Leak Check Isolate Stabilization Time(7S)	Device	5 s	5 s	5 s	5 s			
Leak Check Warning Limit	Device	7 r/min/min	0.001 r/min/min	0.001 r/min/min	0.001 r/min/min			
Leak Check Fault Limit	Device	5 r/min/min	0.001 r/min/min	0.001 r/min/min	0.001 r/min/min			
Fedrate Temperature Warning Range	Device	5000 mdegC						
Fedrate Temperature Fault Range	Device	10000 mdegC						
Temp Control TC Stabilization Time	Device	2 s						
ECheck Voltage Tolerance	Device	10 %	10 %	10 %	10 %			
Water/Centre Tap Bias Warning Range	Device	20 %	20 %	20 %	20 %			
Water/Centre Tap Bias Fault Range	Device	40 %	40 %	40 %	40 %			
Water/Centre Tap Bias TC	Device	2 s	2 s	2 s	2 s			
Water/Centre Tap Bias Ts	Device	5 s	5 s	5 s	5 s			
End Before Checking the Backside Gas Pressure	Device	2 s						
End Before Stabilizing the Backside Gas Pressure	Device	2 s						

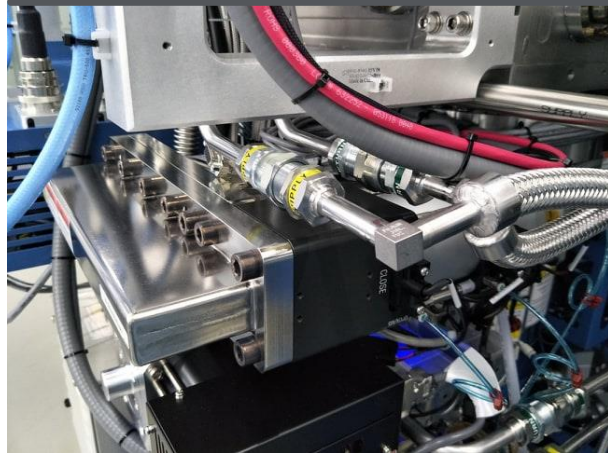
7. Auto Recovery



8. DC Gen



8. Gate Valve



8. Heater Module



8. Cooling Water / Cooling System



控制模組

9. UPS



Light Tower



Helium Compressor

