

Process		Bi-layer Process	
		LOR 3A	S1813
Dehydration Bake (hot plate)	temp (°C)	200	
	time (min)	5	
Spin coating LOR 3A	speed (rpm)	3000	
	acceleration (rpm/s)	5000	
	time (s)	45	
Soft-bake (hotplate)	temp (°C)	185	
	time (min)	5	
Spin coating S1813	speed (rpm)		3000
	acceleration (rpm/s)		5000
	time (s)		30
Soft-bake (hotplate)	temp (°C)		115
	time (s)		120
Expose (12mW/cm ²)	mode		LVC
	time (s)		4
Develop 1	developer		CD 26
	developer: di water ratio		No mix
	time (sec) (approx.)		30
Rinse in DI water	time (min)		2
Bake (hot plate)	temp (°C)		125
	time (s)		60
Develop 2	developer	CD 26	
	developer: di water ratio	No mix	
	time (sec) (approx.)	40	

NB:

1. SC: Soft Contact; HC: Hard Contact; VC: Vacuum Contact; LVC: Low Vacuum Contact
2. Development of LOR 3A is accomplished in a basic water solution (CD 26)
3. Develop 1 develops through S1813. Develop 2 develops through LOR 3A isotropically.

4. Develop 2 time can be varied to increase/decrease undercut. Also LOR 3A softbake temp is used to control the undercut etch rate. Higher softbake temp leads to lower undercut rate.
5. This process was used to lift-off 1000Å Au/100Å Ti with minimum feature size of 2 μm.
6. LOR 3A does not dissolve well in acetone. Use 1165 heated to 80°C max. Remove wafer into a new stripper bath after most metal has been lifted off. Rinse in AMI before water rinse. Final O₂ Clean can help.
7. These are results using a bare Silicon substrate. Films on substrates and/or use of other types of substrates may affect the exposure and/or development time. Adjust as needed.
8. Use of this process data should act as a guide to developing and/or refining your process rather than being adopted as is.