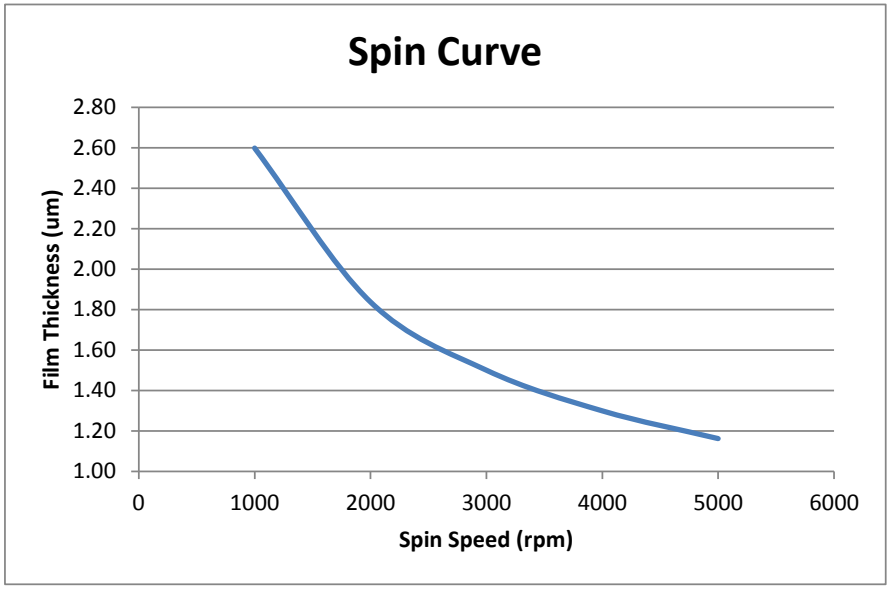
KL IR Lift-Off Photoresist

Image Reversible Resist with Negative Lift-off Profile

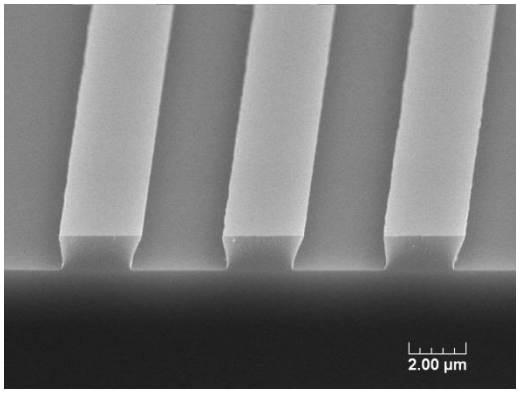


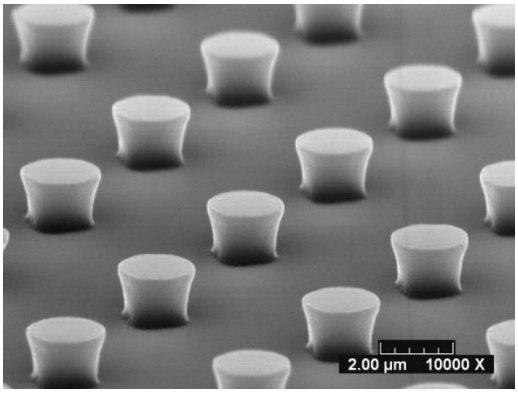
Formulary can be easily adjusted to modify spin curve.

Positive Resist Mode Process Conditions	
Softbake	105 C for 90 seconds
Exposure	Broadband, i-line, g-line
PEB	115 C for 60 seconds
Development	0.26N TMAH
Removal	NMP / DMSO based strippers

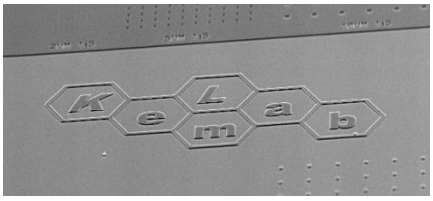
Negative Lift Off Resist Mode Process Conditions	
Softbake	105 C for 90 seconds
Exposure	Broadband, i-line, g-line
Reversal Bake (critical step)	130 C for 90 seconds
Flood Exposure (non-critical)	150 mJ/cm2 (broadband)
Development	0.26N TMAH
Hardbake (optional)	130 C for 60 seconds
Removal	NMP / DMSO based strippers

Example: Negative tone Lift-Off Process

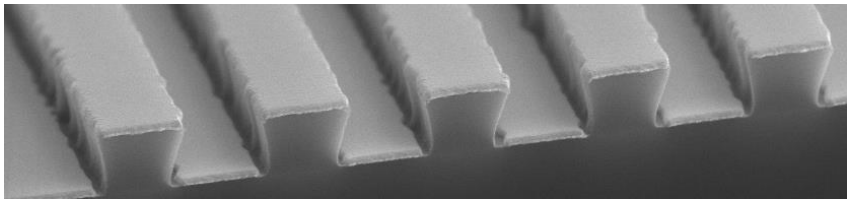




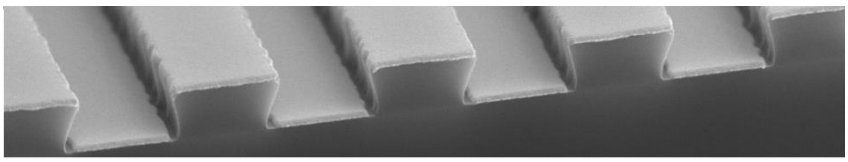
Film Thickness	1.5 microns
Broadband exposure	100 mJ/cm2
Develop time	45 seconds puddle (recommended)



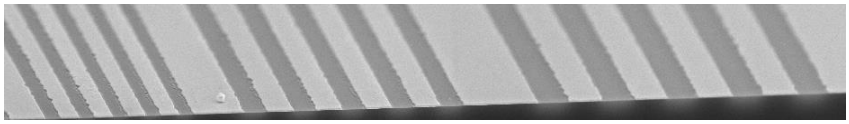
Example: Gold Deposition & Lift Off Process



2 µm line/space after E-beam metal deposition



3 µm line/space after E-beam metal deposition



2, 3, 4 µm dense line/space after lift off

Film Thickness of photoresist	1.5 µm
Film Thickness of Gold	150 nm
Adhesion Layer	Ti

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Handling & Disposal Considerations

Consult the MSDS for handling and appropriate PPE. KL IR contains a combustible liquid; keep away from ignition sources, heat, sparks and flames.

KL IR is compatible with typical waste streams used with photoresist processing. It is the user's responsibility to dispose in accordance with all local, state, and federal regulations.