

EE143 Lab Week 8

1) Lithography

Time (sec)		
Softbake:		
Exposure:		
Developer:		
Hardbake:		
Linewidth (um) of Photoresist		
Nominal	Measured	% Overetch
2		
3		
4		
8		

Take a photo of the linewidth marks

Vernier Misalignment:	
X	
Y	

Take 3 Photos: Overall Vernier Pattern, and zoomed photo of X & Y vernier patterns

2) Aluminum:

Aluminum Etch Time:		..
Linewidth (um) of Al after etch		
Nominal	Measured	% Overetch
2	
3		
4		..
8		
Sintering:		
Time (min)		
Temperature (C)		

Questions:

Calculate % overetch of the linewidth patterns

What was a visual method for determining completion of etching?

Calculate theoretical Al thickness from etch time.

Calculate theoretical Al thickness from the sheet resistance.