



NOEL Technologies

LITHOGRAPHY SERVICES

Contact Printing 1:1

Features

Wafer Diameter	2"	3"	4"	6"	8"	12"
Minimum Feature Size	2.0µm					5.0µm
I Line Photo Resist: 2.0µm Micro Chem 3012 Typical Sidewalls with 2.0um I Line	75°					
Mask Specifications: Soda Lime, AR Chrome Mask Plates	5" for 2", 3" & 4"			7"	9"	14"
Note 1: Mylar Masks/Non-Critical Patterning Minimum Feature Size	5" 20µm		7" 20µm	9" 20µm	14" 20µm	
Note 2: Smaller Features Upon Request & Engineering Review	>1.5µm					>3.0µm
Note 3: Thicker Resist Available (I Line, Micro Chem 220-7)	10µm (Maximum Thickness)					
Note 4: SEM Profiles available upon request.						



General Information:

- 1:1 Contact Printing is referred to as 1:1 Patterning. The mask plate is directly transferred into the photosensitive resist-coating. Alignment marks are utilized for precise mask registers prior to exposure. Minimum of two alignment marks are required on each mask.
- Mask is placed in full contact or close proximity (<20µm) with the resist-coated wafer.
- UV light is illuminated over the entire wafer, substrate, transmitting light thorough the clear areas of the mask, with the opaque areas blocking the light.
- During the development cycle, the photo-resist is washed away, while the areas not exposed to the light remain on the wafers duplicating the circuitry, or pattern, on the mask.
- Non-Critical, Low Cost Patterning is also available utilizing a Mylar Mask for >20µm features.