

What is EUV? A litho technology that delivers 3x -> 5x Resolution Enhancement

$$\text{Resolution} = k_1 \times \frac{\lambda}{\text{NA}}$$

k_1 difficulty, limit = 0.25

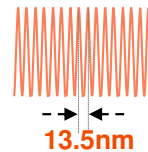
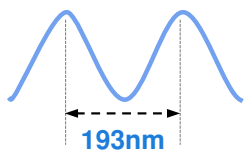
ArF immersion

$k_1 = 0.265$
strong OPC mask

EUV

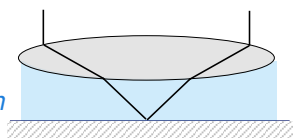
$k_1 = 0.32$
OPC mask

λ Wavelength

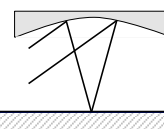


NA Numerical Aperture

NA 1.35
Maximum



NA 0.33
Current



NA > 0.5
Future

Resolution Minimum pitch

