

# EUV Mask Technical and Standards Workshop

## The EUV Patterned Mask

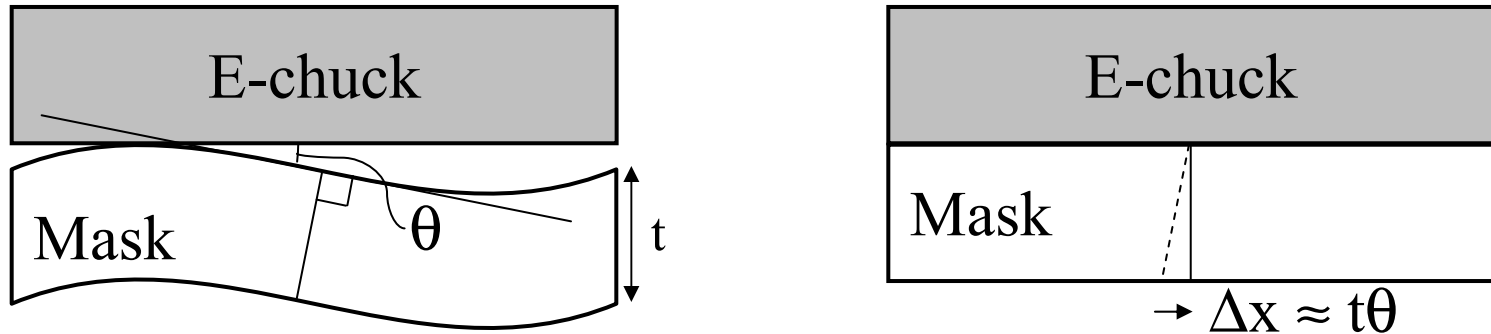
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11/10/05



# Local Slope of Back Surface

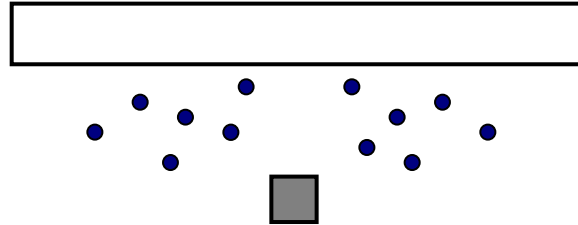
- Local slope of back surface causes IPD.



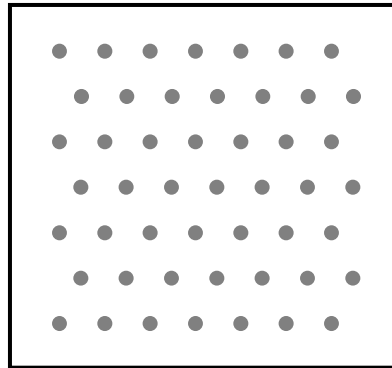
- This IPD can be compensated by the concept of P40.
  - But differences of clamping pressure between two chucks bring about overlay errors.
  - At least +/-20% pressure have to be assumed even if chucks satisfy P40.
- Higher spatial frequency deformation is hard to compensate and is easily affected by clamping pressure differences.
  - Small tool polishing probably tends to generate steep slopes.
- We have no standard about local slope of back surface.

# Conductive Layer on Back Surface

- Mechanical contact is major source of particle generation, therefore standardization of mask contact area is in process.



- But area contacted by e-chuck is much larger than area contacted by end-effector or frame.



- Conductive layer on back surface must play a very important role in preventing particle generation.