



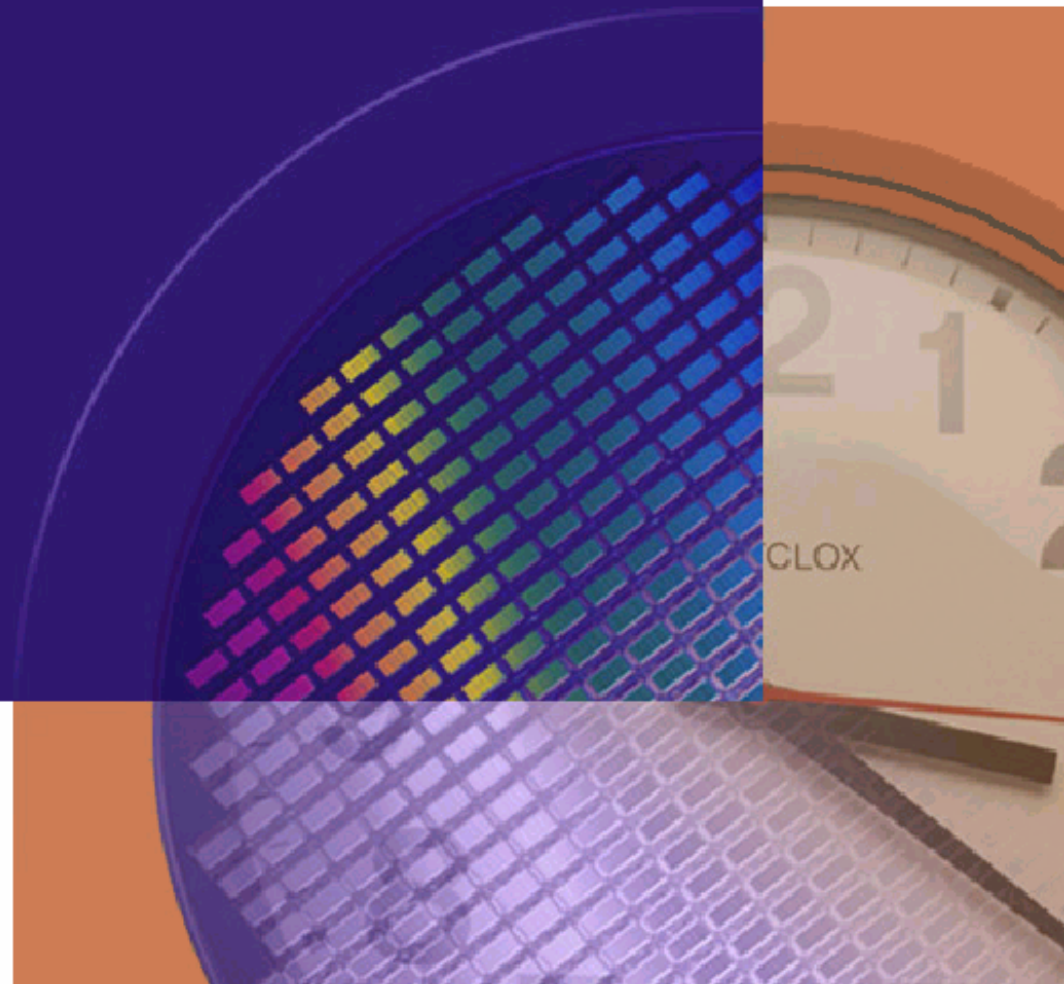
Accelerating Yield<sup>®</sup>

**EUV Mask Technology &  
Standards Workshop  
Panel Session 3**

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# Inspection Tool Supplier Challenges

- EUV Reticle Pattern Inspection General Concerns
  - Technical
    - System: Market requirements → resolution, S/N, data rate,...
    - HW subsystems: Illumination source, sensor, optics, ...
    - Production worthiness: MTBF, MTTR, ...
  - Financial
    - NRE, market size, ASP, ROI, consumable costs,...
- EUV Reticle Pattern Inspection Specific Concerns
  - Is actinic inspection required?
  - Will non-actinic inspection be a reasonable alternative?
  - Are there new printable defect types?

# Recommendations

- Perform Appropriate Inspections at Appropriate Process Steps
  - Substrate
  - MLS / Absorber
  - Patterned Absorber
- Utilize Current Optical Pattern Inspection Infrastructure to Drive EUV Reticle Yield Learning
  - Optimize optical contrast
  - Leverage installed equipment base