# IEUVI MASK TWG
## Sunday February 22, 2009

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| 1:00 PM – 1:10 PM | Introduction and Greetings | *K. Orvek, SEMATECH* |
| 1:10 PM – 2:00 PM | SEMI Standards Updates<br>• 4466B Draft for Carrier – Voting End February 18<br>• P40 Slightly Revised Draft for Voting April 13<br>• P37 New Draft Version – Specifications Moving to ITRS | <br>*L. He, Intel*<br>*J. Zimmerman, ASML*<br>*K. Orvek, SEMATECH* |
| 2:00 PM – 2:50 PM | ITRS Roadmap, Specifications for EUVL Masks 2010-2012 | |
| 2:50 PM – 3:10 PM | Break | |
| 3:10 PM – 3:20 PM | Review Mask Infrastructure Readiness Survey Results | *K. Orvek, SEMATECH* |
| 3:20 PM – 4:50 PM | Focus Topics: Mask Defect Density<br>• Blank Defects<br>• Real-World Printing of EUV Mask Defects<br>• Covering Defects – Fiducial Status | <br>*H. Yun, SEMATECH*<br>*O. Wood, AMD*<br>*S. Huh, SEMATECH* |
| **4:50 PM – 5:00 PM** | **Wrap Up and Plans for Next TWG Meeting** | ***K. Orvek, SEMATECH*** |
| **5:00 PM – 6:00 PM** | **Extra Session: In-Depth Discussion of Fiducials** | ***S. Huh, SEMATECH***<br>***P. Yang, Intel*** |

# IEUVI Mask TWG -> two TWG's

- Masks are the 2nd highest issue facing EUVL (source #1)
- Sources limit throughput, but masks could end up preventing any yield
  - Masks are more of a 'Showstopper'
- There are too many issues and activities related to masks to cover in one 4-hour TWG.
- SEMATECH is proposing to IEUVI Board to have two TWG's focusing on mask issues:
  - EUV Mask Build
  - EUV Mask Use

# International EUV Initiative

IEUVI Source TWG

IEUVI Optics TWG

IEUVI Mask Build TWG

IEUVI Resist TWG

IEUVI Mask Usage TWG

International EUV Initiative
Executive Board

*http://www.ieuvi.org*
*Executive Chair: Paolo Gargini*

- *Regular coordination meetings*
- *Technical Working Groups*
- *Benchmarking data exchange*
- *Co-sponsorship of workshops*

# Focus of the two Mask TWGs

- EUV Mask Build TWG:
  - Infrastructure items directly related to building masks
    - Tools – inspection, writing, cleaning, repair
    - Materials – substrate, films
    - Defects
    - SEMI standards for substrates, blanks, masks
- EUV Mask Use TWG:
  - Issues more directly related to using masks
    - CTE of substrate and mask build/use temperatures
    - Flatness compensation
    - Incident angle of exposure light
    - Defect masking thru pattern placement (fiducials)
    - Carriers
    - Potential Pellicles
    - ITRS roadmap

# Next meeting of IEUVI Mask TWG(s)

- During SEMATECH'S EUV Symposium
  - October
  - Prague, Czech Republic

**And now, the fun continues with an extended session on Fiducials**