

IEUVI MASK TWG

Sunday February 22, 2009



1:00 PM – 1:10 PM	Introduction and Greetings	<i>K. Orvek, SEMATECH</i>
1:10 PM – 2:00 PM	SEMI Standards Updates <ul style="list-style-type: none">• 4466B Draft for Carrier – Voting End February 18• P40 Slightly Revised Draft for Voting April 13• P37 New Draft Version – Specifications Moving to ITRS	<i>L. He, Intel</i> <i>J. Zimmerman, ASML</i> <i>K. Orvek, SEMATECH</i>
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	<i>K. Orvek, SEMATECH</i>
3:20 PM – 4:50 PM	Focus Topics: Mask Defect Density <ul style="list-style-type: none">• Blank Defects• Real-World Printing of EUV Mask Defects• Covering Defects – Fiducial Status	<i>H. Yun, SEMATECH</i> <i>O. Wood, AMD</i> <i>S. Huh, SEMATECH</i>
4:50 PM – 5:00 PM	Wrap Up and Plans for Next TWG Meeting	<i>K. Orvek, SEMATECH</i>
5:00 PM – 6:00 PM	Extra Session: In-Depth Discussion of Fiducials	<i>S. Huh, SEMATECH</i> <i>P. Yang, Intel</i>

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