



# iEUVi Mask TWG

Monterey, CA  
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Lead: [David.Chan@SEMATECH.org](mailto:David.Chan@SEMATECH.org)

[Long.He@sematetch.org](mailto:Long.He@sematetch.org)

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## Quick Introduction From Audience

- Identify your name
  - Organization you represent
  - Brief responsibility or interest in Mask TWG
- 
- Friendly Reminder: Please turn your cell phone in silent mode.

# Mask TWG: Mission & Objective



- **Mission:**

Ensure EUV Mask Infrastructure Readiness for:

- Pilot Line Production 2011 – 2012
- High Volume Manufacturing 2013 - 2016

- **Objectives:**

- Identify Required Standards
- Coordinate industry-wide conversions
- Identify any gaps between current industry efforts and projected future needs
- Highlight gaps to member organizations and IEUVI Board for action

# Today's Agenda



Start	End	Topic	Lead
10:00	10:15	Introduction	David Chan (SMT)
10:15	10:45	EUV Mask Standard Update	Long He (SMT/Intel)
10:45	11:00	Current EUV mask handling status and issue in maskshop	Naoya Hayashi (DNP)
11:00	11:45	Discussion of carrier types, tool implementation, and shipping strategy	Long He (SMT/Intel)
11:45	12:00	Discussion and conclusion	All / David Chan (SMT)
12:00		Meeting Adjourn	

# iEUVi Mask TWG – Oct 16 in Miami, FL



Start	Finish	Topic	
8:00 AM	8:10 AM	Introduction / house keeping	David Chan, SEMATECH
8:10 AM	8:25 AM	Report-out of IEUVI Mask WTG at BACUS	David Chan, SEMATECH
8:25 AM	8:40 AM	E152 carrier standard update	Long He, SEMATECH/INTC
8:40 AM	9:10 AM	Gudeng EUV carrier development and evaluation update	Chenwei Ku, Gudeng
9:10 AM	9:40 AM	Entegris EUV carrier status and roadmap	Tom Kielbaso, Entegris
9:40 AM	9:55 AM	Nikon/Canon perspectives of potential improvement of pod performance	Kazuya Ota, Nikon
9:55 AM	10:05 AM	Break	
10:05 AM	10:25 AM	Automation challenges of EUV reticle carriers	Suresh Biligiri, Rorze Automations
10:25 AM	10:45 AM	Initial learning of in-fab handling	Rik Jonckheere, IMEC
10:45 AM	11:00 AM	Issues of reticle coatings	Kazuya Ota, Nikon
11:00 AM	12:00 PM	Topic discussions & action plans: - Shipping options / strategy - Reticle storage - Non-exposure tool implementation (Blank Dep, Inspection, AIMS, Clean) - Pod clean	All (LH lead)
12:00 PM	1:00 PM	Lunch	

# iEUVi Mask TWG – Oct 16 in Miami, FL



1:00 PM	1:10 PM	IMEC inputs on blank defectivity	Rik Jonckheere, IMEC
1:10 PM	1:25 PM	Program and native defect printability	Harry Kwon, SEMATECH/Samsung
1:25 PM	1:55 PM	EUV mask cleaning challenges for 11 nm and 16 nm HP nodes	Abbas Rastegar, SEMATECH
1:55 PM	2:10 PM	Critical issues for deposition tool	Vibhu Jindal, SEMATECH
2:10 PM	2:25 PM	Next generation sources for ion beam deposition tool	Veeco
2:25 PM	2:40 PM	Dual pod handler	B. A. vander Zwan, TNO
2:40 PM	2:55 PM	Front-end handling strategy for defect-free EUV mask blank deposition	Jaewoong Sohn, SEMATECH
2:55 PM	3:10 PM	Modeling particle transport in low pressure under plasma conditions	Alex Likhanskii, Tech-X
3:10 PM	3:25 PM	Detection of small size particles in low pressure and component evaluation	Gregory Denbeaux, CNSE
3:25 PM	3:35 PM	<b>Break</b>	
3:35 PM	3:50 PM	Particle defects originating from Valves and possible solutions	VAT
3:50 PM	4:05 PM	Particle defects originating from Seals and possible solutions	Jeff Blouse, ASNA
4:05 PM	4:20 PM	Component and Shield Cleaning processes for low defectivity	David Laube, Pentagon
4:20 PM	4:30 PM	Current challenges of euv substrate and mask blank cleaning	Arun Kadaksham, SEMATECH
4:30 PM	5:00 PM	Action plans / Meeting adjourn	Vibhu Jindal, SEMATECH

# Closing Remarks

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## Next meeting of IEUVI Mask TWG(s)

- We are looking for suggestions in tasks priorities and topics of discussions
- Inputs on meeting formats, etc. are welcome
- Schedule:
  - @ EUV Symposium, Oct 16, 2011, Miami USA