

Japan Silicon Wafer Committee Meeting Summary and Minutes

Japan Spring Meetings 2013
March 8, 2013, 13:00 – 17:00
JPR Bldg, Conference Room1, SEMI Japan Office, Tokyo, Japan

Next Committee Meeting

June 7, 2013, 13:00-17:00 Japan Standard Time
Japan Summer Meetings 2013, JPR Bldg, Conference Room1, SEMI Japan Office, Tokyo, Japan

Committee Announcements (optional)

None

Table 1 Meeting Attendees

Co-Chairs: Naoyuki J. Kawai (The University of Tokyo), Tetsuya Nakai (SUMCO)

SEMI Staff: Hirofumi Kanno

<i>Company</i>	<i>Last</i>	<i>First</i>	<i>Company</i>	<i>Last</i>	<i>First</i>
The University of Tokyo	Kawai	Naoyuki	SUMCO	Nakai	Tetsuya
Consultant	Takenaka	Takao	GlobalWafers Japan	Takeda	Ryuji
GlobalWafers Japan	Araki	Koji	Consultant	Shimizu	Yasuhiro
Hitachi High Technologies	Ikota	Masami	Freelance	Yoshise	Masanori
Japan SEMI lab	Sakuta	Jiro	Consultant	Kumai	Sadao

Table 2 Leadership Changes

<i>Group</i>	<i>Previous Leader</i>	<i>New Leader</i>
International Polished Wafer Task Force	Takao Takenaka / Consultant	Koji Izunome / GlobalWafers Japan remains.
	Kazuhito Matsukawa / Renesas Electronics	
	Koji Izunome / GlobalWafers Japan	
International Annealed Wafer Task Force	Koji Izunome / GlobalWafers Japan	Koji Araki / GlobalWafers Japan

Table 3 Ballot Results (or move to Section 4, Ballot Review)

None

Table 4 Authorized Ballots (or move to Section 7, New Business)

None

Table 5 Authorized Activities (or move to Section 7, New Business)

None

Note: SNARFs and TFOFs are available for review on the SEMI Web site at:

<http://downloads.semi.org/web/wstdsbal.nsf/TFOFSNARF>

Table 6 New Action Items (or move to Section 8, Action Item Review)

<i>Item #</i>	<i>Assigned to</i>	<i>Details</i>
130308-01	Naoyuki J. Kawai	Yasuhiro Shimizu had comments about withdrawal of the JEITA Standards EM3501. Naoyuki J. Kawai informs the JEITA Silicon Technologies committee of his comments.
130308-02	Tetsuya Nakai	Tetsuya Nakai informs the GCS members of the transfer of JEITA Standards.
130308-03	SEMI Staff	SEMI Staff conducts the ballot action for Related Information in accordance with current SEMI Standards Regulations.
130308-04	Tetsuya Nakai	Tetsuya Nakai report what the local rule on the Global Silicon Wafer Committee should apply to the current revised SEMI Standards Regulation to the GCS members.
130308-05	Tetsuya Nakai	Tetsuya Nakai reports the committee decision about consideration of transfer of Related Information to the GCS members and give it in the liaison report at the next North America Spring meeting.

Table 7 Previous Meeting Actions Items (or move to Section 8, Action item Review)

<i>Item #</i>	<i>Assigned to</i>	<i>Details</i>
091912-2	SEMI Staff	To confirm Task Force leaders of Task Force member list status of each Task Forces
120612-1	SEMI Staff	To submit modified SNARF for Revision of SEMI MF-1535-0707, Test Method for Carrier Recombination Lifetime in Silicon Wafers by Noncontact Measurement of Photoconductivity Decay by Microwave Reflectance to Silicon Wafer GCS to have approval in December. -Closed-

1 Welcome, Reminders, and Introductions

Naoyuki J. Kawai called the meeting to order at 13:00. The meeting reminders on antitrust issues, intellectual property issues and holding meetings with international attendance were reviewed. Attendees introduced themselves.

Attachment: 01, Required Elements Reg_20100302_E+J

2 Review of Previous Meeting Minutes

The committee reviewed the minutes of the previous meeting.

Motion: Approval of previous meeting minutes

By / 2nd: Tetsuya Nakai (SUMCO) / Sadao Kumai (Consultant)

Discussion: None

Vote: 9:0

Attachment: 02, Minutes for JA Silicon Committee_6Dec2012_r05

3 Liaison Reports

3.1 Europe Silicon Wafer Committee

Hirfoumi Kanno (SEMI Japan) reported there was no update for the Europe Silicon Wafer Committee.

The next meeting will be in conjunction with SEMICON Europa, October 2013, in Dresden, Germany.

3.2 North America Silicon Wafer Committee

Hirofumi Kanno (SEMI Japan) reported there was no update for the North America Silicon Wafer Committee.

The next meeting will be in conjunction with SEMICON West Standards Meetings at the San Francisco Marriott Marquis in San Francisco, California. The committee will meet on Tuesday, July 9, 2013 from 1:00 PM-5:00 PM. Check <http://www.semi.org/node/45276> for the latest schedule including Task Force meetings.

3.3 Japan Regional Standards Committee

There was no report at this time.

3.4 Silicon Wafer GCS (Global Coordination Subcommittee)

Tetsuya Nakai (SUMCO) reported for the Silicon Wafer GCS. Of note:

GCS Approval - This is a request for your approval of two SNARFs being proposed by Murray Bullis (Int'l Polished Wafer TF leader).

- 1) Revision of M1-xx13, Specification for Polished Single Crystal Silicon Wafers
(Subj: Nanotopography)
- 2) Revision of M1-xx13, Specification for Polished Single Crystal Silicon Wafers
(Subj: Edge Profile)

Attachment: 03, GCS Report_130308

3.5 JEITA Report

Naoyuki J. Kawai (The University of Tokyo) gave the JEITA report. Of note:

The JEITA Silicon Technology Committee is going to be disbanded at the end of March, 2013. Due to the disbandment, the JEITA members are considering the transfer of existing JEITA standards to SEMI Standards and Japan Society of Newer Materials. SEMI Standards Silicon Wafer committee will need to have revision work of existing SEMI Standards in order to delete their descriptions for JEITA/JEITA Standards in reference Standards sections in the future.

Action Item: 130308-01, Yasuhiro Shimizu had comments about withdrawal of the JEITA Standards EM3501. Naoyuki J. Kawai informs the JEITA Silicon Technologies committee of his comments.

Action Item: 130308-02, Tetsuya Nakai informs the GCS members of the transfer of JEITA Standards.

Action Item: 130308-03, SEMI Staff conducts the ballot action for Related Information in accordance with current SEMI Standards Regulations.

Attachment: 04, 20130308 JEITA Liaison Report

Attachment: 05, 20130308 SEMI and JEITA_JEIDA.JIS Standards

3.6 SEMI Staff Report

Hirofumi Kanno (SEMI) gave the SEMI Staff Report. Of note:

- SEMI Global 2013 Calendar of Events
- NA Spring Meeting 2013
- 2013 Critical Dates for SEMI Standards Ballots
- Publication Update
- New Standards Ballot and Membership Systems
- New Ballot Formatting Templates

- Style Manual and Compilation of Terms
- Contact Information

Action Item: 130308-04, Tetsuya Nakai report what the local rule on the Global Silicon Wafer Committee should apply to the current revised SEMI Standards Regulation to the GCS members.

Attachment: 06, SEMI Staff Report 2013 March R0.4

3.7 JSPS Report

Takao Takenaka (Consultant) gave the SEMI Staff Report.

4 Subcommittee & Task Force Reports

4.1 International Polished Wafers Task Force

Takao Takenaka (Consultant) reported for the International Polished Wafers Task Task Force. This report contained information;

Murray Bullis is preparing new SNARF and ballot draft document proposal for revising the residual issues in M1 as stated above. These will be discussed during NA Spring meeting. Frank Riedel-san is preparing ballot draft document proposal for Si substrate wafer specification for GaN epitaxial growth on Si. This will be discussed during EU Spring Meeting.

Motion: Japan Silicon Wafer Committee asks the respective TFs to consider transferring their existing Related Information on their Guide and Specification Standards to Appendices.

By / 2nd: Tetsuya Nakai (SUMCO) / Sadao Kumai (Consultant)

Discussion: None

Vote: 9:0

Action Item: 130308-05, Tetsuya Nakai reports the committee decision about consideration of transfer of Related Information to the GCS members and give it in the liaison report at the next North America Spring meeting.

Attachment: 07, IPW TF Report on 2013, March 8

Takao Takenaka reported his and Kazuhiko Matsukawa (Renesas Electronics) step-down as co-leader of the International Polished Wafers Task Force.

4.2 International Epitaxial Wafers Task Force

Takao Takenaka (Consultant) reported for the International Epitaxial Wafers Task Force. SNARF will be submitted for approval at the next meeting for a revision, as suggested by T. Nakai, of SEMI M62 Table R2-7, 3-2.7 Nanotopography to change < 5 nm to "8nm (As agreed between Supplier & Customer)".

4.3 International Annealed Wafers Task Force

Ryuji Takeda (GlobalWafers Japan) briefly reported for the International Annealed Wafer Task Force.

Koji Izunome (GlobalWafers Japan) stepped down as the Task Force leader position.

Motion: Approve that Koji Araki (GlobalWafers Japan) has been appointed as a new co-leader of the International Annealed Wafer Task Force.

By / 2nd: Ryuji Takeda (GlobalWafers Japan) / Tetsuya Nakai (SUMCO)

Discussion: None

Vote: 8:0

4.4 International SOI Wafers Task Force

Tetsuya Nakai (SUMCO) reported for the International SOI Task Force. This report contained information on .

For M41 Revised SNARF, In section 3, Referenced Standard and documents, SEMI M34 (Guide for Specifying SIMOX Wafers) has been withdrawn and SEMI M71 (Specification for Silicon-on-Insulator (SOI) Wafers for CMOS LSI) was published in 2010 (revised 2012).

- The Task Force is going to remove SEMI M34 and add SEMI M71 for referenced standard in SEMI M41.

Int'l SOI TF members agreed to submit SEMI M41 Revision SNARF to the Si Wafer Committee on Dec.6, 2012.

- Ballot voting at Cycle 4 and Adjudication at SEMICON WEST

Attachment: 08, SOI TF Report_130308

4.5 Reclaim Wafer Task Force

Takao Takenaka (Consultant) reported that there was no activity for the Reclaim Wafer Task Force.

4.6 International Terminology Task Force

Tetsuya Nakai (SUMCO) reported that there was no activity for the International Terminology Task Force.

4.7 International Test Methods Task Force / Japan Test Methods Task Force

Ryuji Takeda (GlobalWafers Japan) reported for the Task Forces.

Japan Test Method Task Force

- GOI Working Group (Otsuki-san)
 - Developing on Revision60, Test Method for Time Dependent Dielectric Breakdown Characteristic of Amorphous SiO₂ Films For Silicon Wafer Evaluation
- Surface Organic Contaminant Analysis Working Group
 - Developing on Revision to MF1982“Test method for analyzing organic contaminants on silicon wafer surface by Thermal Desorption Gas Chromatography
 - ◇ This document is going to be balloted in Cycle3.
- Surface Metal Chemical Analysis Working Group
 - Developing on New Standard, Guide for the measurement of trace metal contamination on silicon wafer surface by inductively coupled plasma mass
- Bulk Heavy Metal Analysis by Electrical Measurement Working Group
 - No update
- BMD DZ Working Group
 - No update

Attachment: 09, Int'l Test Method cover on 0308

Attachment: 10, Test method TF Progress Report (130308)

4.8 International 450mm Shipping Box Task Force /

Yasuhiro Shimizu (Consultant) reported for the Task Forces. This report contained information on 450 mm Wafer Shipping System.

- Create a new standard for 450 mm Wafer System referring and reviewing SEMI M49 (300mm Wafer Shipping System)
- Discussed new shipping/handling system, especially secondary packaging and pallet size due to larger and heavier 450 FOSB than 300 FOSB.
- Preparing a ballot draft Doc. 5069 for Letter Ballot

Attachment: 11, SHIPPING BOX TF REPORT 2013_03_08r

4.9 International 450mm Wafer Task Force

None

4.10 International Advanced Wafer Geometry Task Force

Masanori Yoshise (Freelance) reported for the Task Forces. This report contained information on the result in EMICON Japan 2013.

- Doc 5450 Ballot Adjudication (M49 Revision) - Failed
- Doc 5430A Development (M73 Revision) – On voting
- New Business
 - Illustration for geometry parameter in M1
 - Update Test method for Bow, Warp & TTV measurement
- Next meeting on March 13th at Berlin

Attachment: 12, 20130308 Si Meeting AWG Japan Report

5 Old Business

None

6 New Business

None

7 Action Item Review

7.1 Open Action Items

Hirofumi Kanno (SEMI) reviewed the open action items. These can be found in the Open Action Items table at the beginning of these minutes.

7.2 New Action Items

Hirofumi Kanno (SEMI) reviewed the new action items. These can be found in the New Action Items table at the beginning of these minutes.

8 Next Meeting and Adjournment

The next meeting of the Japan Silicon Wafer committee is scheduled for June 7, 2013 at SEMI Japan Standards Summer Meetings in SEMI Japan Office Tokyo.

Respectfully submitted by:
 Hirofumi Kanno
 Manager, Standards
 SEMI Japan
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Minutes approved by:

Naoyuki J. Kawai (The University of Tokyo, Co-chair	<Date approved>
Tetsuya Nakai (SUMCO), Co-chair	<Date approved>

Table 8 Index of Available Attachments #1

#	Title	#	Title
01	Required Elements Reg_20100302_E+J	07	IPW TF Report on 2013, March 8
02	Minutes for JA Silicon Committee_6Dec2012_r05	08	SOI TF Report_130308
03	GCS Report_130308	09	Int'l Test Method cove on 0308
04	20130308 JEITA Liaison Report	10	Test method TF Progress Report (130308)
05	20130308 SEMI and JEITA_JEIDA.JIS Standards	11	SHIPPING BOX TF REPORT 2013_03_08r
06	SEMI Staff Report 2013 March R0.4	12	20130308 Si Meeting AWG Japan Report

#1 Due to file size and delivery issues, attachments must be downloaded separately. A .zip file containing all attachments for these minutes is available at www.semi.org. For additional information or to obtain individual attachments, please contact [SEMI Staff Name] at the contact information above.