



Silicon Wafer Japan TC Chapter

Meeting Summary and Minutes

Japan Standards Fall 2017 Meetings
 Thursday, September 21, 14:00 – 17:00
 SEMI Japan Office, Ichigaya, Tokyo

TC Chapter Announcements

Next TC Chapter Meeting

December 14, 2017, 13:00-17:00

Tokyo Big Sight, Tokyo, Japan

Table 1 Meeting Attendees

Italics indicate virtual participants

Co-Chairs: Nao Kawai (Meiji University), Tetsuya Nakai (SUMCO)

SEMI Staff: Junko Collins

<i>Company</i>	<i>Last</i>	<i>First</i>	<i>Company</i>	<i>Last</i>	<i>First</i>
ShinEtsu Handotai	Toda	Naohisa	Consultant	Kumai	Sadao
Meiji University	Kawai	Naoyuki	SUMCO	Nakai	Tetsuya
Global Wafers Japan	Takeda	Ryuji	Individual	Yoshise	Masanori
Hitachi High technologies	Ikota	Masami	Global Wagers Japan	Takamori	Yasutoshi
Miraial	Nagashima	Tsuyoshi			

Table 2 Leadership Changes: **None**

<i>WG/TF/SC/TC Name</i>	<i>Previous Leader</i>	<i>New Leader</i>

Table 3 Committee Structure Changes: **None**

<i>Previous WG/TF/SC Name</i>	<i>New WG/TF/SC Name or Status Change</i>



Table 4 Ballot Results: No ballot review

<i>Document #</i>	<i>Document Title</i>	<i>Committee Action</i>

#1 **Passed** ballots and line items will be submitted to the ISC Audit & Review Subcommittee for procedural review.

#2 **Failed** ballots and line items were returned to the originating task forces for re-work and re-balloting or abandoning.

Table 5 Activities Approved by the GCS between meetings of the TC Chapter: None

<i>#</i>	<i>Type</i>	<i>SC/TF/WG</i>	<i>Details</i>

Table 6 Authorized Activities

Listing of all revised or new SNARF(s) approved by the Originating TC Chapter.

<i>#</i>	<i>Type</i>	<i>SC/TF/WG</i>	<i>Details</i>
TBD	SNARF	International Advanced Wafer Geometry Task Force	Line item Revision for M49 “GUIDE FOR SPECIFYING GEOMETRY MEASUREMENT SYSTEMS FOR SILICON WAFERS FOR THE 130 nm TO 16 nm TECHNOLOGY GENERATIONS”
5774	SNARF	JA Shipping Box Task Force	Line Item Revision to modify the nonconforming title of SEMI M31-0708 MECHANICAL SPECIFICATION FOR FRONT-OPENING SHIPPING BOX USED TO TRANSPORT AND SHIP 300 mm WAFERS

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

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

Table 7 Authorized Ballots:

<i>#</i>	<i>When</i>	<i>TF</i>	<i>Details</i>
5774	Cycle 8, 2017	Japan Test Method TF	Practice for Sample Preparation Methods for Minority Carrier Diffusion Length Measurements in Silicon Wafers by Surface Photovoltage Methods
TBD	Cycle 8, 2017	International AWG TF	Line item Revision for M49 “GUIDE FOR SPECIFYING GEOMETRY MEASUREMENT SYSTEMS FOR SILICON WAFERS FOR THE 130 nm TO 16 nm TECHNOLOGY GENERATIONS”
TBD	Cycle 8, 2017	Japan Shipping Box TF	Line Item Revision to modify the nonconforming title of SEMI M31-0708 MECHANICAL SPECIFICATION FOR FRONT-OPENING SHIPPING BOX USED TO TRANSPORT AND SHIP 300 mm WAFERS



Table 8 SNARF(s) Granted a One-Year Extension: none

#	TF	Title	Expiration Date

Table 9 SNARF(s) Abolished: None

#	TF	Title

Table 10 Standard(s) to receive Inactive Status: None

Standard Designation	Title
SEMI M24-0612	Specification for Polished Monocrystalline Silicon Premium Wafers

Table 11 New Action Items

Item #	Assigned to	Details
SiW170921-01	Test Method TF	Ballot Submission: 5774 for cycle 8
SiW170621-02	Shipping Box TF	Ballot Submission: Line Item Revision to M31 for cycle 8
SiW170621-03	Junko Collins	Tell HQ staff to change the status of M24 from current to inactive at the beginning of 2018
SiW170621-04	Junko Collins	Check document list to identify originating region

Table 12 Previous Meeting Action Items:

Item #	Assigned to	Details
SiW170616-01	Junko Collins	To ask Shipping Box Task Force to start the line-item revision activity of M31 (per APPENDIX 4 of P.M.) - Done
SiW170616-02	Junko Collins	To conduct the 2 weeks review of SNARF for New Auxiliary Information: Round-Robin Testing of Sample Preparation Methods for Minority Carrier Diffusion Length Measurements by Surface Photovoltage Methods - done
SiW170616-03	Junko Collins	To conduct the 2 weeks review of SNARF 5774: Sample Preparation Method for Minority Carrier Diffusion Length Measurement in Silicon Wafers by Surface Photovoltage Method - Done

1 Welcome, Reminders, and Introductions

N. Kawai (Meiji Univ.) called the meeting to order at 14:00. The meeting reminders on antitrust issues, intellectual property issues and holding meetings with international attendance were reviewed. Attendees introduced themselves.

Attachment: Required_Elements_Reg_20150327_E+J_2016NewStdTemplate,

2 Review of Previous Meeting Minutes

The TC Chapter reviewed the minutes of the previous meeting.

Motion: To approve the meeting minutes of June 16, 2017
By / 2nd: T. Nakai (SUMCO) / R. Takeda (Global Wafers Japan)
Discussion: None
Vote: 8/0, Motion passed
Attachment: Si Japan TC Chapter 2017.06.16 R1.0,

3 Liaison Reports

3.1 *Silicon Wafer GCS*

T. Nakai (SUMCO) reported for GCS. Of note:

- Regarding terminology document M59
 - Status of M59 changes to inactive from current.
 - In case new terminologies needed to the new documents, such terminologies are included in the Terminology section in the document.
 - All terminologies can be covered by the COT.

Action Item: None,

Attachment: None,

3.2 *Silicon Wafer North America TC Chapter*

T. Nakai (SUMCO) reported for the Silicon Wafer North America TC Chapter.

Action Item: None,

Attachment: NA Silicon Wafer TC Liaison Report August 2017,

3.3 *Silicon Wafer Europe TC Chapter*

No liaison report, since Silicon Wafer Europe TC Chapter Meeting has not occurred since previous Japan TC Chapter Meeting

Action Item: None,

Attachment: None,

3.4 *JSNM / M4S (Material Standards Study Group for Semiconductor Supply Chain) Report*

M. Yoshise (Independent) reported. Meeting were held on July 6.

Action Item: None,

Attachment: None,

3.5 *SEMI Staff Report*



J. Collins (SEMI) gave the SEMI Staff Report. Of note, new Standards staff, See the attached report.

Action Item: None,

Attachment: SEMI Staff Report 20170906,

4 Ballot Review

NOTE 1: TC Chapter adjudication on ballots reviewed is detailed in the Audits & Review (A&R) Subcommittee Forms for procedural review. The A&R forms are available as attachments to these minutes. The attachment number for each balloted document is provided under each ballot review section below.

No ballot review

5 Task Force Reports

5.1 *International 450mm Shipping Box Task Force (Komatsu-san/Nagashima-san)/ JA Shipping Box Task Force (Komatsu-san/Nagashima-san.)*

- The last task force meeting was held on September 11, currently the task force works on revision to M31

Motion: SNARF Approval of the Line Item Revision to modify the nonconforming title of SEMI M31-0708 MECHANICAL SPECIFICATION FOR FRONT-OPENING SHIPPING BOX USED TO TRANSPORT AND SHIP 300 mm WAFERS

By / 2nd: T. Nagashima (Miraial) / S. Kumai (Consultant)

Discussion: None

Vote: 7/0, motion passed.

Motion: Submission of the ballot for the Line Item Revision to modify the nonconforming title of SEMI M31-0708 MECHANICAL SPECIFICATION FOR FRONT-OPENING SHIPPING BOX USED TO TRANSPORT AND SHIP 300 mm WAFERS, to cycle 8.

By / 2nd: T. Nagashima (Miraial) / S. Kumai (Consultant)

Discussion: None

Vote: 7/0, motion passed.

Action Item: Task Force to submit the ballot for cycle 8,

Attachment: SNARF_M31_Title Change,

5.2 *International Advanced Wafer Geometry Task Force/Japan Advanced Wafer Geometry Task Force*

M. Yoshise (independent) reported for the International Advanced Wafer Geometry Task Force. Refer the attached report. (AWG TF Report)

- Revision to SNARF of Line item revision to M49, Doc.6170

Motion: To revise SNARF : Line item Revision for M49 "GUIDE FOR SPECIFYING GEOMETRY MEASUREMENT SYSTEMS FOR SILICON WAFERS FOR THE 130 nm TO 16 nm TECHNOLOGY GENERATIONS"

By / 2nd: M. Yoshise (Individual) / T. Nakai (SUMCO)

Discussion: None

Vote: 7/0, motion passed.



Motion: To submit the ballot of Line item Revision for M49 "GUIDE FOR SPECIFYING GEOMETRY MEASUREMENT SYSTEMS FOR SILICON WAFERS FOR THE 130 nm TO 16 nm TECHNOLOGY GENERATIONS", to cycle 8
By / 2nd: M. Yoshise (Individual) / T. Nakai (SUMCO)
Discussion: None
Vote: 6/0, motion passed.

Action Item: TF submits the ballot to cycle 8,
Attachment: AWG TF Report,
SNARF M49 for 200mm rev0914A

5.3 International Polished Wafers Task Force

Y. Takamori (Global Wafers Japan) reported. See attached task force report.
About status change of M24

Motion: To change the status M24 to Inactive from Current at the beginning of 2018.
By / 2nd: Y. Takamori (Global Wafers Japan) / R. Takeda (Global Wafers Japan)
Discussion:
Vote: 8/0, motion passed.

Action Item: Staff to report it to HQ Responsible staff,
Attachment: TF Meeting Minutes_SEMI M24 5year Review 0917,

5.4 International Epitaxial Wafers Task Force (Toda-san)

T. Toda (SHE) reported there is no special report.

Motion:
By / 2nd:
Discussion:
Vote:

Action Item: None,
Attachment: None,

5.5 International Annealed Wafers Task Force (Araki-san)

There is no special report since there is no current activity.

Motion:
By / 2nd:
Discussion:
Vote:

Action Item: None,
Attachment: None,

5.6 *International SOI Wafers Task Force (Ogura-san/ Nakai-san)*

There is no special report since there is no current activity.

Motion:

By / 2nd:

Discussion:

Vote:

Action Item: None,

Attachment: None,

5.7 *International Terminology Task Force (Nakai-san)*

See GSC Report.

Motion:

By / 2nd:

Discussion:

Vote:

Action Item: None,

Attachment: None

5.8 *International Test Methods Task Force (Takeda-san) Japan Test Method Task Force (Takeda-san/ Otsuki-san/ Omata-san)*

R. Takeda (Global Wafers Japan) reported. See details in the attachment.

Attachment: Test Method TF Meeting Minutes_20170919 (1),

- 5774: New Standard: Guide for Sample Preparation Method for Minority Carrier Diffusion Length Measurement in Silicon Wafers by Surface Photovoltage Method for Cycle 8.

Motion: To submit the ballot of the 5774: New Standard: Guide for Sample Preparation Method for Minority Carrier Diffusion Length Measurement in Silicon Wafers by Surface Photovoltage Method, to cycle 8

By / 2nd: R. Takeda (Global Wafers Japan) / M. Yoshise (individual)

Discussion: None

Vote: 7/0, motion passed

Action Item: Task Force submit the ballot to cycle 8

Attachment: none

5.9 *International Advanced Surface Inspection Task Force (Ikota-san / Tamaki-san)*

- The last meeting was held during SEMICON West 2017.
- The following documents were reviewed;
 - 6041, passed TC Chapter review

- 6996 failed, will re-ballot.
- Doc. 6096A: Line Item Revision to SEMI M53-0216 Practice for Calibrating Scanning Surface Inspection Systems Using Certified Depositions of Monodisperse Reference Spheres on Unpatterned Semiconductor Wafer Surfaces was submitted to Cycle 6, ballot review is conducted at the SEMICON Europa meeting

Action Item: None,

Attachment: None,

5.10 Fiducial Mark Interoperability Task Force (Nakai-san)

T. Nakai (SUMCO) reported that this task force will be disbanded by the end of this year. Japan Silicon Wafer TC Chapter decided disbandment of this task force. Japan Si TC Chapter is waiting for the other TC Chapter decision to disband the task force.

Motion:

By / 2nd:

Discussion:

Vote:

Action Item: None,

Attachment: None,

6 Old Business

6.1 Previous Action items

- See Table 12. All action items are closed.

Action Item: None,

Attachment: None,

6.2 3-years project Period Check

- Approval of project period expansion
 - None

Action Item: None,

Attachment: None,

6.3 Consideration of 5-year Review

- None

7 New Business

7.1 New Activity

- None,

Action Item: None,

Attachment: None,



8 Next Meeting and Adjournment

The next meeting is scheduled for December 14, 2017 (SEMICON Japan Standards meeting) at Tokyo Big Sight, Tokyo Japan.

See <http://www.semi.org/standards-events> for the current list of events.

Adjournment: 17:00.

Respectfully submitted by:

Junko Collins

Standards & EHS

SEMI Japan

Phone: 81.3.3222.5819

Email: jcollins@semi.org

Minutes tentatively approved by:

Nao Kawai (Meiji University), Co-chair	<Date approved>
Tetsuya Nakai (SUMCO), Co-chair	<Date approved>

Table 13 Index of Available Attachments#1

<i>Title</i>	<i>Title</i>
Required_Elements_Reg_20150327_E+J_2016NewStdTemplate	Si Japan TC Chapter 2017.03.10 R0.2
03.01_NA Silicon Wafer TC Liaison Report June 2017	03.04_SEMI Staff Report 20170614_r3a
05.02_AWG TF Report	05.07_SEMI M59 Discussion_170606 修正 河合
05.08_Test Method TF Meeting Minutes_20170615	05.08_SNARF5774 rev2_2017.06.16
05.08_SNARFXXXX rev1_2017.06.16	

#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.