



Global Silicon Wafer Japan TC Chapter

Meeting Summary and Minutes

Japan Standards-Summer 2022 Meetings
 Thursday, August 25, 2022, 13:00 –15:00[JST]
 Official Virtual TC Chapter Meeting

TC Chapter Announcements

Next TC Chapter Meeting

tentatively scheduled for the week of December 14-16, in conjunction with SEMICON Japan 2022. Schedule details TBD.

Official Virtual TC Chapter Meeting and Tokyo Big Sight (Hybrid)

Table 1 Meeting Attendees

Italics indicate virtual participants

Co-Chairs: Name (Company) Tetsuya Nakai (SUMCO), Ryuji Takeda (Global Wafers Japan)

SEMI Staff: Mami Nakajo

<i>Company</i>	<i>Last</i>	<i>First</i>	<i>Company</i>	<i>Last</i>	<i>First</i>
<i>SELF</i>	<i>Kawai</i>	<i>Naoyuki</i>	<i>SUMCO</i>	<i>Nakai</i>	<i>Tetsuya</i>
<i>Wafer Information Service</i>	<i>Yoshise</i>	<i>Masanori</i>	<i>Shin-Etsu Handotai Co., Ltd.</i>	<i>Tsunoda</i>	<i>Hitoshi</i>
<i>TEL</i>	<i>Mashiro</i>	<i>Supika</i>	<i>X-FAB Sarawak Sdn. Bhd</i>	<i>Liew</i>	<i>Emily</i>
<i>KOKUSAI ELECTRIC CORPORATION</i>	<i>Matsuda</i>	<i>Mitsuhiro</i>	<i>Hitachi High-Tech Corporation</i>	<i>Oka</i>	<i>Kenji</i>
<i>Global Wafers Japan</i>	<i>Takeda</i>	<i>Ryuji</i>	<i>Siltronic AG</i>	<i>Passek</i>	<i>Friedrich</i>
			<i>SEMI Japan</i>	<i>Nakajo</i>	<i>Mami</i>

Table 2 Leadership Changes

<i>WG/TF/SC/TC Name</i>	<i>Previous Leader</i>	<i>New Leader</i>
International Epitaxial Wafers TF	Naohisa Toda (Shin-Etsu Handotai)	Hitoshi Tsunoda (Shin-Etsu Handotai)

Table 3 Committee Structure Changes

<i>Previous WG/TF/SC Name</i>	<i>New WG/TF/SC Name or Status Change</i>
None	

Table 4 Ballot Results

<i>Document #</i>	<i>Document Title</i>	<i>Committee Action</i>
None		

#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

#	Type	SC/TF/WG	Details
None			

No activity requested by the Japan TC Chapter between meetings.

Table 6 Authorized Activities

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

#	Type	SC/TF/WG	Details
6570A	SNARF	Japan Test Method Task Force	New Standard: Guide for Measuring Bulk Micro Defect Density and Denuded Zone Width in Annealed Silicon Wafers by a Laser Scattering Tomography Technique

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

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

Table 7 Authorized Ballots

#	When	TF	Details
6570A	Cycle 7/8-2022	Japan Test Method Task Force	New Standard: Guide for Measuring Bulk Micro Defect Density and Denuded Zone Width in Annealed Silicon Wafers by a Laser Scattering Tomography Technique

Table 8 SNARF(s) Granted a One-Year Extension

#	TF	Title	Expiration Date
None			

Table 9 SNARF(s) Abolished

#	TF	Title
None		

Table 10 Standard(s) to receive Inactive Status

Standard Designation	Title
None	

Table 11 New Action Items

Item #	Assigned to	Details
20220825-01	International Test Methods Task Force	To prepare for the ballot submission of Document#6570: New Standard: Guide for Measuring Bulk Micro Defect Density and Denuded Zone Width in Annealed Silicon Wafers by a Laser-Scattering Tomography Technique into Cycle 7-2022

Table 12 Previous Meeting Action Items

Item #	Assigned to	Details
20220525-01	International Test Methods Task Force	To review and prepare for the ballot submission of Document#6570: New Standard: Guide for Measuring Bulk Micro Defect Density and Denuded Zone Width in Annealed Silicon Wafers by a Laser-Scatter Tomography Technique> Done



1 Welcome, Reminders, and Introductions

Tetsuya Nakai (SUMCO), called the meeting to order at 10:00. The meeting reminders on antitrust issues, intellectual property issues and holding meetings with international attendance were reviewed. Attendees introduced themselves.

Attachment: 01-02_Required Element Nov 2020 Rev1_E+J_r1

2 Review of Previous Meeting Minutes

The TC Chapter reviewed the minutes of the previous meeting.

Motion:	Approve the previous meeting minutes of the Silicon Wafer Japan TC Chapter on May 25, 2022 as written
By / 2nd:	Ryuji Takeda (Global Wafers Japan) / Naoyuki Kawai (Self)
Discussion:	None
Vote:	5 in favor and 0 opposed. Motion Passed.

Attachment: 02-01_20220525_Global Silicon Wafer Japan TC Chapter Meeting Minutes_approved

3 Ballot Review

None

4 Subcommittee and Task Force Reports

4.1 International Advanced Wafer Geometry Task Force

Masanori Yoshise (Wafer Information Service) reported for the International Advanced Wafer Geometry Task Force as follows.

Action Item: None,

Attachment: 04-01_AWG Report for Si Japan 0220824 M49 Discussion 202207011, 04-01_AWG NA SEMICON W 2022 minutes draft

4.2 International/Japan Test Method Task Force

Ryuji Takeda (Global Wafers Japan) reported for the Japan Test Method Task Force.

Also, Ryuji Takeda (Global Wafers Japan) reported on this topic.

Motion:	To approve Revised SNARF#6570, New Standard: Guide for Measuring Bulk Micro Defect Density and Denuded Zone Width in Annealed Silicon Wafers by a Laser-Scatter Tomography Technique
By / 2nd:	Ryuji Takeda (Global Wafers Japan) / Friedrich Passek (Siltronic AG)
Discussion:	Supika Mashiro (TEL) asked that "By[a] Laser Scattering technique " means one of the Technique? Does it mean that there are more than two or more than one and any of them can be used? Friedrich Passed(Siltronic AG) answered you can use any of them. In that case, there is no need to modify and description can be left as it is. The customer has agreement.
Vote:	7 in favor and 0 opposed. Motion Passed.

Motion:	To approve ballot submission of Revised SNARF, the Document 6570A in Cycle 07-2022
By / 2nd:	Ryuji Takeda (Global Wafers Japan) / Friedrich Passek (Siltronic AG)
Discussion:	None
Vote:	6 in favor and 0 opposed. Motion Passed.

Action Item: 20220825-01 To prepare for the ballot submission of Document#6570A: New Standard: Guide for Measuring Bulk Micro Defect Density and Denuded Zone Width in Annealed Silicon Wafers by a Laser-Scattering Tomography Technique into Cycle 7-2022

Attachment: 04-02_Test Method TF Meeting minute_2022.8,24, 04-02_SNARF_Nov2021 Doc6570

The following documents are still on the "5-year Review Check" list and Ryuji Takeda (Global Wafers Japan) reported the status in the Task Force report.

- M51-1012: Test Method for Characterizing Silicon Wafer by Gate Oxide Integrity
- M60-1014: Test Method for Time Dependent Dielectric Breakdown Characteristics of SiO₂ Films for Si Wafer Evaluation

4.3 International Advanced Automated Surface Inspection Task Force

No special topic was reported at this meeting.

4.4 International Polished Wafers Task Force

No special topic was reported at this meeting.

4.5 International Epitaxial Wafers Task Force

No special topic was reported at this meeting.

4.6 International Annealed Wafers Task Force

No special topic was reported at this meeting.

4.7 International SOI Wafers Task Force

Tetsuya Nakai (SUMCO) reported for the Japan Test Method Task Force.

Attachment: 04-07_SOI TF M41_220825

4.8 International Terminology Task Force

No special topic was reported at this meeting.

4.9 JA Shipping Box TF

No special topic was reported at this meeting.

5 Liaison Reports

5.1 Silicon Wafer Europe TC Chapter

there had not been meetings since 2019 due to COVID. The latest reports have been reported in the previous meetings. The schedule for the next meeting is planning.

5.2 Silicon Wafer North America TC Chapter

Tetsuya Nakai (SUMCO) reported for the Silicon North America TC Chapter as attached.

Attachment: 05-02_NA Si Wafer TC Chapter Liaison Report August 2022

5.3 GCS

Tetsuya Nakai (SUMCO) reported for the GCS that there are the following topics discussed.

- We proposed to pick up all documents mentioned “Mercury” .
We have to discuss which alternative for the mercury in SEMI MF 1392.
- Geometry Silicon Wafer Standards for non-Si substrates
We discussed at the International Advanced Wafer Geometry TF on July 11, 2022.
The TF will ask SEMI to organize inter-Region and inter-Committee cooperation on non-Si substrate issues with emphasis on geometry.

6 SEMI Staff Report

Mami Nakajo (SEMI) gave the SEMI Staff Report.

Mitsuhiro Matsuda(KOKUSAI ELECTRIC CORPORATION) pointed out one error in the publication title in the report.

Attachment: 06-01_Staff Report July 2022 v6_J

7 Old Business

7.1 Project Period Review

None

7.2 5 Year Review Check

7.2.1 SEMI M51-1012: Test Method for Characterizing Silicon Wafer by Gate Oxide Integrity

7.2.2 SEMI M60-1014: Test Method for Time Dependent Dielectric Breakdown Characteristics of SiO₂ Films for Si Wafer Evaluation

These documents are still on the "5-year Review Check" list and Japan Test Method TF are still working under the following SNARF.

#6687 SNARF for: Revision of M51: Test Method for Characterizing Silicon Wafer by Gate Oxide Integrity

#6702 SNARF for: Revision of M60: TEST METHOD FOR TIME DEPENDENT DIELECTRIC BREAKDOWN CHARACTERISTICS OF Amorphous SiO₂ FILMS FOR Silicon WAFER EVALUATION

Ryuji Takeda (Global Wafers Japan) reported them in the Japan Test Method Task Force report. (See 4.2)

8 New Business

8.1 Proposal of New Activity

8.1.1 Revision of SEMI M41- 0615, Specification of Silicon-on-Insulator (SOI) for Power Device/Ics

➡Since the TF meeting is scheduled to be held after this committee meeting, the proposal of the document to be balloted into Cycle 7 or 8 was postponed.

8.2 TF Leaders' change

Tetsuya Nakai (SUMCO) reported on this topic. Since Naohisa Toda(Shin-Etsu Handotai) stepped down as a leader of International Epitaxial Wafers TF due to the personnel change, Hitoshi Tsunoda (Shin-Etsu Handotai) was approved as a new leader of the TF.

Motion:	To approve the change of International Epitaxial Wafers TF leader from Naohisa Toda(Shin-Etsu Handotai) to Hitoshi Tsunoda (Shin-Etsu Handotai).
By / 2nd:	Ryuji Takeda (Global Wafers Japan) / Naoyuki Kawai (Self)
Discussion:	None
Vote:	6 in favor and 0 opposed. Motion Passed.

9 Action Item Review

9.1 Open Action Item

<i>Item #</i>	<i>Assigned to</i>	<i>Details</i>
20220525-01	International Test Methods Task Force	To review and prepare for the ballot submission of Document#6570: New Standard: Guide for Measuring Bulk Micro Defect Density and Denuded Zone Width in Annealed Silicon Wafers by a Laser-Scatter Tomography Technique>> Done

9.2 New Action Item

<i>Item #</i>	<i>Assigned to</i>	<i>Details</i>
20220825-01	International Test Methods Task Force	To prepare for the ballot submission of Document#6570A: New Standard: Guide for Measuring Bulk Micro Defect Density and Denuded Zone Width in Annealed Silicon Wafers by a Laser-Scattering Tomography Technique in Cycle7-2022

10 Next Meeting and Adjournment

The next meeting is tentatively scheduled for the week of December 14-16, in conjunction with SEMICON Japan 2022. Schedule details TBD. Please check www.semi.org/standards for updates.

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

Adjournment: [15:00]>.

Respectfully submitted by:

Mami Nakajo

Coordinator

SEMI Japan

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Minutes tentatively approved by:

Tetsuya Nakai (SUMCO), Co-chair	September XX, 2022
Ryuji Takeda (Global Wafers Japan), Co-chair	September XX, 2022

Table 13 Index of Available Attachments#1

<i>Title</i>	<i>Title</i>
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Table 13 Index of Available Attachments#1

01-02_Required Element Nov 2020 Rev1_E+J_r1	04-02_Test Method TF Meeting minute_2022.8,24
02-01_20220525_Global Silicon Wafer Japan TC Chapter Meeting Minutes_approved	04-02_SNARF_Nov2021 Doc6570
04-01_AWG Report for Si Japan 0220824 M49 Discussion 202207011	05-02_NA Si Wafer TC Chapter Liaison Report August 2022
04-01_AWG NA SEMICON W 2022 minutes draft04-01_AWG NA SEMICON W 2022 minutes draft	06-01_Staff Report July 2022 v6_J
04-07_SOI TF M41_220825	

#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.