Silicon Wafer Japan TC Chapter

Meeting Summary and Minutes

Japan Standards Summer Meetings 2025
Friday, August 29, 2025 2:00 PM – 4:00 PM JST
SEMI Japan, Tokyo, Japan/ Official Virtual TC Chapter Meeting (Hybrid)

TC Chapter Announcements

Next TC Chapter Meeting

TBD in conjunction with SEMICON Japan 2025
TFT Building, Japan/ Official Virtual TC Chapter Meeting (Hybrid)

Table 1 Meeting Attendees

Italic indicates virtual participants

Co-Chairs: Tetsuya Nakai (SUMCO), Ryuji Takeda (GlobalWafers Japan)
SEMI Staff: Akiko Yoshida (SEMI Japan)

Company	*Last*	*First*	*Company*	*Last*	*First*
GlobalWafers Japan	*Okano*	*Hirofumi*	Semilab Semiconductor Physics Laboratory	Ivanenko	Alina
GlobalWafers Japan	Takeda	Ryuji	*Shin-Etsu Handotai*	*Kobayashi*	*Takeshi*
Kobelco Research Institute	*Tsunaki*	*Hidetoshi*	Shin-Etsu Handotai	Nakasugi	Tadashi
KOKUSAI ELECTRIC	Matsuda	Mitsuhiro	SUMCO	Masada	Ayumi
Kohzu Precision	Kuwabara	Satoshi	SUMCO	Nakai	Tetsuya
Nanoverse Technologies	Akiyama	Satoshi			
SELF	Kawai	Naoyuki	SEMI Japan	Koga	Nahoko
SELF	*Yoshise*	*Masanori*	SEMI Japan	Yoshida	Akiko

Table 2 Leadership Changes

WG/TF/SC/TC Name	*Previous Leader*	*New Leader*
None		

Table 3 TC Chapter Structure Changes

Previous WG/TF/SC Name	*New WG/TF/SC Name or Status Change*
None	

Table 4 Ballot Results

Document #	*Document Title*	*Committee Action*
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 Ratification Ballot Results

Document #	*Document Title*	*ISC A&R Action*	*A&R Forms*
None			

Note 1: **Passed** Ratification ballots will be submitted to SEMI publication for final processing.

Note 2: **Failed** Ratification ballots were returned to the originating task forces for re-work and re-balloting or abandoning.

Table 6 Activities Approved by the GCS between meetings of the TC Chapter

#	*Type*	*SC/TF/WG*	*Details*
None			

Table 7 Authorized Activities

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

#	*Type*	*SC/TF/WG*	*Details*
7392	SNARF	Int’l Test Method TF	Line-item revision to SEMI M89-0721, Test Method for Recombination Lifetime of the Epilayer of the Silicon Epitaxial Wafer (p/p+, n/n+) by the Short Wavelength Excitation Microwave Photoconductive Decay Method

#1 SNARFs and TFOFs are available for review on the SEMI Web site at:
http://downloads.semi.org/web/wstdsbal.nsf/TFOFSNARF

Table 8 Authorized Ballots

#	*When*	*TF*	*Details*
7392	Cycle 8, 2025	Int’l Test Method TF	Line-item revision to SEMI M89-0721, Test Method for Recombination Lifetime of the Epilayer of the Silicon Epitaxial Wafer (p/p+, n/n+) by the Short Wavelength Excitation Microwave Photoconductive Decay Method

Table 9 SNARF(s) Granted a One-Year Extension

#	*TF*	*Title*	*Expiration Date*
6687	Int’l Test Method TF	Revision of M51: Test Method for Characterizing Silicon Wafer by Gate Oxide Integrity	2026/10/02

Table 10 SNARF(s) Abolished

#	*TF*	*Title*
None		

Table 11 Standard(s) to receive Inactive Status

Standard Designation	*Title*
None	

Table 12 New Action Items

Item #	*Assigned to*	*Details*
SW20250829-01	Int’l Test Method TF	To submit M89 Line Item Revision Ballot for Cycle 8,2025.
SW20250829-02	SEMI Staff	To send SNARF for M85 Major Revision to Silicon Wafer Global TC members for 2 weeks review.
SW20250829-03	SEMI Staff	To request Int’l ASI TF to report their activities at TC Chapter meeting.

Table 13 Previous Meeting Action Items

Item #	*Assigned to*	*Details*
SW20240829-01	SEMI Staff	To have a training session of Connect@SEMI for TF leaders. →Open
SW20250418-01	SEMI Staff	To forward the ballot review result of Doc.#7318 to the ISC A&R SC for procedural review. →Closed

1 Welcome, Reminders, and Introductions

Ryuji Takeda (GlobalWafers Japan), called the meeting to order at 2:00 PM JST. The meeting reminders on antitrust issues, intellectual property issues and holding meetings with international attendance were reviewed. Attendees introduced themselves.

Attachment: 01_Required Meeting Elements March 2024_J

2 Review of Previous Meeting Minutes

The TC Chapter reviewed the minutes of the previous meeting.

Motion:	Approve the minutes as written.
By / 2nd:	Ryuji Takeda (GlobalWafers Japan)/ Naoyuki Kawai (Self)
Discussion:	None.
Vote:	Result: 8-Y 0-N. **Motion Passed.**

Attachment: 02_SW JA TC Minutes_20250418_R0

3 Liaison Report

3.1 *Japan Regional Standards Committee (JRSC)*

Akiko Yoshida (SEMI Japan) reported for the JRSC that the meeting was held on August 28, 2025. Topics that are relevant to the Silicon Wafer Japan TC Chapter were:

- The Planning Meeting was held on Thursday, August 28, inviting TF leaders as well as TC co-chairs to deepen knowledge related to standardization. This year’s theme was “Gaps in Supply Chain Transparency and SEMI Standards.”
- To further promote awareness of individual contributions to standards activities, the JRSC decided to take the following actions:
  - ➢ The JRSC will revise the Award Guidelines for the “Technical Committee Award,” which recognizes individuals who have made outstanding contributions to respective TC in Japan Region. So far, the Guideline states that, in principle, the same individual would not be awarded multiple times for the same document or activity, even across different years. The Guideline will be revised to allow individuals to be recognized for their significant contributions in a given year, even if the same work continues for multiple years.

- Until now, recipients of the Technical Committee Award have been recognized during the TC meetings held in conjunction with SEMICON Japan or the subsequent nearest meeting, and the recognition has been recorded in the meeting minutes. However, the JRSC decided that award recipients will also be featured on a display panel at the SEMICON Japan venue.

3.2 *Global Coordinating Subcommittee (GCS)*

Tetsuya Nakai (SUMCO) reported for the Silicon Wafer GCS that they confirmed each region's TC meeting schedule in 2026 and ballot review timing at the GCS meeting held during NA Summer Meetings. The schedule will be as follows:

- Europe TC Chapter meeting: November during SEMICON Europa
- NA TC Chapter meeting: February during NA Winter Meetings and October during SEMICON West
- Japan TC Chapter meeting: April, August, and December during SEMICON Japan

Ballot reviews are allowed at any of the meetings above.

3.3 *Silicon Wafer Europe TC Chapter*

Tetsuya Nakai (SUMCO) reported that there had been no updates from the previous meeting.

Attachment: 03_EU SiW Liaison Report November 2024

3.4 *Silicon Wafer North America TC Chapter*

Tetsuya Nakai (SUMCO) reported for the Silicon Wafer North America TC Chapter. Of notes:

- The last meeting was held on June 3, 2025 at SEMI HQ and the next meeting will held on October 7, 2025 at SEMICON West.
- Doc.#6983A, Revision to SEMI M49-0918 With Title Change To: Guide for Specifying Geometry Measurement Systems for Silicon Wafers for the 130 nm To 3 nm Technology Generations was authorized for Letter Ballot in Cycle 7, 2025. Besides the work on Doc.#6983A, the Int'l Advanced Wafer Geometry TF is reviewing M67, M68, and MF1451 which are up to 5-year review.
- 21 wafer round-robin is expected to complete by the AFM WG under the Int'l Automated Advance Surface Inspection TF before SEMICON West in October, 2025, at which time a SNARF for a new standard for AFM measurement of surface roughness on device-grade silicon wafers will be proposed. The TF also proposed Type 2 editorial changes to SEMI M52 and they were approved.
- The International SOI Task Force is working on Doc. #6583, New Standard: Specification for SOI Wafers for RF Device Applications. The SNARF has been extended until July 2026 as it is nearing expiration.
- The Int'l Test Method TF is reviewing SEMI M20 and M44 which are up to 5-year review.

Attachment: 04_NA Si Wafer TC Chapter Liaison Report June 2025

4 SEMI Staff Report

Akiko Yoshida (SEMI Japan) gave the SEMI Staff Report. Of notes:

- At SEMICON West 2025, for the first time in Phoenix, Arizona in October, the second round of SEMI Global Standards Summit (GSS) will be held in the afternoon on Tuesday, October 7. The GSS is a strategic forum dedicated to identifying standards-critical areas and advancing an industry-wide standardization roadmap for the next 3- and 7-year horizons. The theme will be "Future Standards for Connected & Sustainable Semiconductor Manufacturing."

- Due to major renovation work at Tokyo Big Sight, the venue arrangements will be irregular this year. The Standards meetings will not be held in Conference Tower, but instead at TFT Building.
- Procedure Manual is revised and the July 7, 2025 version has been published online. This revision includes: 1) major revision to multiple related Standards on a single ballot action, 2) clarification to major revision ballot format, 3) primary standard revision checklist, and 4) clarification of the SNARF form.

Attachment: 05_Staff Report_August 2025_R0

5 Ballot Review

None.

6 Subcommittee and Task Force Reports

6.1 *International Advanced Wafer Geometry Task Force*

Masanori Yoshise (Self) reported for the International Advanced Wafer Geometry TF. Of notes:

- The TF completed drafting Doc.#6983A, Revision to SEMI M49-0918 With Title Change To: Guide for Specifying Geometry Measurement Systems for Silicon Wafers for the 130 nm To 3 nm Technology Generations, and it was submitted for Cycle 7, 2025 to be adjudicated at SEMICON Europa.
- SEMI M20 (Coordinate System) and M77 (ROA) are up for 5-year review. The TF will discuss them and will report the result at the next TC Chapter meeting.

Masanori Yoshise also suggested stepping down from the leadership.

Attachment: 06_AWG NA Summer 2025 minutes draft

6.2 *International/ Japan Test Method Task Force*

Ryuji Takeda (GlobalWafers Japan) reported for the International/ Japan Test Method TF. Of notes:

- Doc.#7318, New Standard: Test Method for Net Carrier Density And Resistivity Of Silicon Epitaxial Layer By Capacitance-Voltage Measurements With An Evaporated Metal Schottky Diode passed the TC Chapter review and subsequent procedural review by the ISC A&R Subcommittee. The document is pending publication. Once the document is published, the TF will revise the document to add Related Information.
- The documents below will be adjudicated at SEMICON West.
    - Doc.#7319, Line Item Revision to SEMI M88-0119, PRACTICE FOR SAMPLE PREPARATION METHODS FOR MEASURING MINORITY CARRIER DIFFUSION LENGTH IN SILICON WAFERS BY SURFACE PHOTOVOLTAGE METHODS
        - The TF will recommend the NA TC Chapter to pass this document (super clean) at SEMICON West.
    - Doc.#6570B, NEW STANDARD: GUIDE FOR MEASURING BULK MICRO DEFECT DENSITY AND DENUDED ZONE WIDTH IN ANNEALED SILICON WAFERS BY A LASER SCATTERING TOMOGRAPHY TECHNIQUE
        - The TF will recommend the NA TC Chapter to fail this document at SEMICON West, and will propose reallotting Doc.#6570C for Cycle 9, 2025 to be adjudicated at SEMICON Japan.
- SEMI M89-0721, Test Method for Recombination Lifetime of the Epilayer of the Silicon Epitaxial Wafer (p/p+, n/n+) by the Short Wavelength Excitation Microwave Photoconductive Decay Method is up for 5-year review and the TF presented the SNARF and requested Letter Ballot submission.

Motion: Approve the SNARF for Line Item Revision to SEMI M89-0721.
By / 2nd: Ryuji Takeda (GlobalWafers Japan)/ Naoyuki Kawai (Self)
Discussion: None.
Vote: Result: 9-Y 0-N. **Motion Passed.**

Attachment: 07_STANDARDS NEW ACTIVITY REPORT FOR1 for M89_R1

Motion: Authorize Letter Ballot for Line Item Revision to SEMI M89-0721 in Cycle 8, 2025.
By / 2nd: Ryuji Takeda (GlobalWafers Japan)/ Mitsuhiro Matsuda (KOKUSAI ELECTRIC)
Discussion: None.
Vote: Result: 6-Y 0-N. **Motion Passed.**

- SEMI M85-0120, Guide for the Measurement of Trace Metal Contamination on Silicon Wafer Surface by Inductively Coupled Plasma Mass Spectrometry is up for 5-year review. The SNARF for major revision to SEMI M85 was presented. The TC Chapter reviewed it and they agreed to send it Silicon Wafer Global TC members for 2 weeks review.

Attachment: 08_International_Japan Test Method TF meeting minutes Aug 25 2025

6.3 *International Advanced Automated Surface Inspection Task Force*

Although the activities are ongoing, no report was provided. Tetsuya Nakai (SUMCO) recommended SEMI staff to contact the TF leader to report the TF activities at the Japan TC Chapter meetings.

6.4 *International Polished Wafers Task Force*

Hirofumi Okano (GlobalWafers Japan) reported for the International Polished Wafers TF. Of notes:

- The TF reviewed the voting result of Doc.#7320, Revision to SEMI M1-0924, SPECIFICATION FOR POLISHED SINGLE, which was submitted for Cycle 2-25.
- The voting result will be adjudicated at SEMICON West.

6.5 *International Epitaxial Wafers Task Force*

Takeshi Kobayashi (Shin-Etsu Handotai) reported for the International Epitaxial Wafers TF that there had been no activities in the TF.

6.6 *International Annealed Wafers Task Force*

Ryuji Takeda (GlobalWafers Japan) reported that there had been no updates.

6.7 *International SOI Wafers Task Force*

Tetsuya Nakai (SUMCO) reported for the International SOI TF that they are working on Doc. #6583, New Standard: Specification for SOI Wafers for RF Device Applications.

6.8 *International Terminology Task Force*

Tetsuya Nakai (SUMCO) reported that there had been no activities.

7 Old Business

7.1 *Project Period Review*

- SNARF 6983, Revision for SEMI M49, Guide for Specifying Geometry Measurement Systems for Silicon Wafers for the 130 nm to 16 nm Technology Generations
  - SNARF will expire on November 16, 2025. The SNARF extension will be proposed at SEMICON West.
- SNARF 6687, Revision of SEMI M51, Test Method for Characterizing Silicon Wafer by Gate Oxide Integrity

Motion: Approve one year extension of the project period for SNARF 6687.
By / 2nd: Ryuji Takeda (GlobalWafers Japan)/ Naoyuki Kawai (Self)
Discussion: None.
Vote: Result: 9-Y 0-N. **Motion Passed.**

7.2 *5 Year Review Check*

The documents up for 5-year review are discussed in the respective TF report above.

8 New Business

None.

9 Action Item Review

9.1 *Open Action Item*

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SW20250418-01	SEMI Staff	To forward the ballot review result of Doc.#7318 to the ISC A&R SC for procedural review. →Closed

9.2 *New Action Item*

Item #	*Assigned to*	*Details*
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SW20250829-02	SEMI Staff	To send SNARF for M85 Major Revision to Silicon Wafer Global TC members for 2 weeks review.
SW20250829-03	SEMI Staff	To request Int'l ASI TF to report their activities at TC Chapter meeting.

10 Next Meeting and Adjournment

The next meeting is scheduled during SEMICON Japan 2025 (the date and time is TBD) at TFT Building and via Official Virtual TC Chapter Meeting (Hybrid). Refer to http://www.semi.org/standards for the current list of events.

Adjournment: 4:00 PM

Respectfully submitted by:

Akiko Yoshida
Sr. Coordinator
SEMI Japan
Phone: +81.50.5805.4605
Email: ayoshida@semi.org

Minutes tentatively approved by:

Tetsuya Nakai (SUMCO), Co-chair	September 26, 2025
Ryuji Takeda (GlobalWafers Japan), Co-chair	September 30, 2025

Table 14 Index of Available Attachments[#1]

Title	*Title*
01_Required Meeting Elements March 2024_J	05_Staff Report_August 2025_R0
02_SW JA TC Minutes_20250418_R0	06_AWG NA Summer 2025 minutes draft
03_EU SiW Liaison Report November 2024	07_STANDARDS NEW ACTIVITY REPORT FOR1 for M89_R1
04_NA Si Wafer TC Chapter Liaison Report June 2025	08_International_Japan Test Method TF meeting minuits Aug 25 2025

#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 Akiko Yoshida at the contact information above.