Metrics NA TC Chapter

Meeting Summary and Minutes

NA Winter Meetings

Thursday, February 27, 2025

3:00-5:00 PM Pacific Time

TC Chapter Announcements

Next TC Chapter Meeting

Thursday, June 5, 2025

3:00-5:00 PM Pacific Time

Table 1 Meeting Attendees

Italics indicate virtual participants

Co-Chairs: David Bouldin (Fab Consulting), Vladimir Kraz (BestESD), Mark Frankfurth (Cymer)
SEMI Staff: Michelle Sun

Company	*Last*	*First*	*Company*	*Last*	*First*
Tokyo Electron Ltd.	Mashiro	Supika	BestESD Technical Services	Vladimir	Kraz
SCREEN Semiconductor Solutions Co., Ltd.	Nishimura	Takayuki	UCT, ChemTrace	Kirsten	Smith
SEMI	Nguyen	Thai	Fab Consulting	David	Bouldin
SUNY RF (Albany)	Eisenbraun	Eric	KLA Corporation	Todor	Ganev
Tokyo Electron Limited	Hama	Naoya	SEMI	Michelle	Sun
BIRD ELECTRONIC CORP	Dummermuth	Martin	Consulting	Cickay	Jeanne

Table 2 Leadership Changes

WG/TF/SC/TC Name	*Previous Leader*	*New Leader*
RF Measurements TF		Martin Dummermuth (Bird)

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*
7130C	New Standard: Test Method Using Adhesive Replacement Substrates to Assess Particulate Surface Contamination of Critical Chamber Components	**Yes**, Ratification Ballot to be issued
7324	New Standard: Guide to Using a Liquid Particle Counter to Assess Particulate Surface Contamination on Critical Chamber Components and Coupons	**Yes**, with editorial changes

#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*
None			

#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*
None			

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

#	*TF*	*Title*	*Expiration Date*
None			

Table 10 SNARF(s) Cancelled

#	*TF*	*Title*
None		

Table 11 Standard(s) to receive Inactive Status

Standard Designation	*Title*
None	

Table 12 New Action Items

Item #	*Assigned to*	*Details*
None		

Table 13 Previous Meeting Action Items

Item #	*Assigned to*	*Details*
None		

1 Welcome, Reminders, and Introductions

David Bouldin (Fab Consulting) called the meeting to order at 3:05. The meeting reminders on antitrust issues, intellectual property issues and holding meetings with international attendance were reviewed. Attendees introduced themselves.

Attachment: Required Meeting Elements March 2024

2 Review of Previous Meeting Minutes

The TC Chapter reviewed the minutes of the previous meeting.

Motion:	Approve the minutes as written
By / 2nd:	By: Takayuki Nishimura / SCREEN Semiconductor Solutions Co., Ltd. Second: Vladimir Kraz / BestESD Technical Services
Discussion:	None
Vote:	7-Y 0-N

Attachment: Metrics-Minutes-Feb-2025

3 Liaison Reports

3.1 *Metrics Japan TC Chapter*

Michelle Sun (SEMI) reported for the Metrics Japan TC Chapter. Of note:

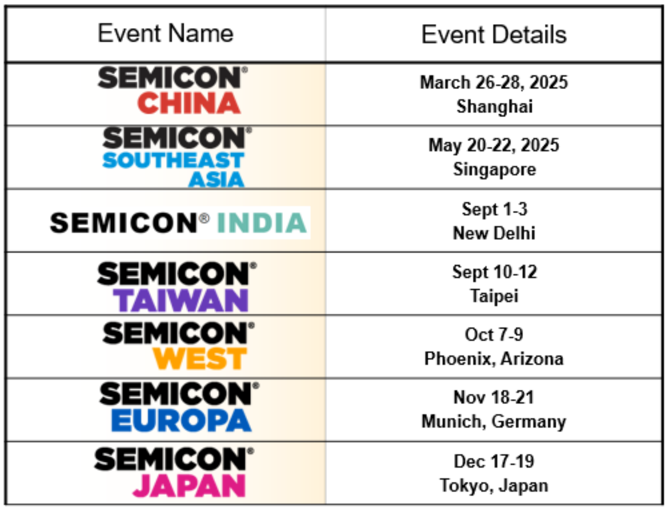
- Last meeting
  - Wednesday, December 11, 2024, in conjunction with SEMICON Japan 2024
    - Tokyo Big Sight, Tokyo, Japan/ OVTCCM (Hybrid)
- Next meeting
  - Tentatively scheduled for July 2025
- Organization Changes
  - Int’l Environmental Contamination Control TF disbanded

Attachment: 20250213_MetricsJapan_Liaison_Report_R0.1

3.2 *SEMI Staff Report*

Michelle Sun (SEMI) gave the SEMI Staff Report. Of note:

2025 Calendar of Events



Event Name	Event Details
SEMICON CHINA	March 26-28, 2025 Shanghai
SEMICON SOUTHEAST ASIA	May 20-22, 2025 Singapore
SEMICON® INDIA	Sept 1-3 New Delhi
SEMICON TAIWAN	Sept 10-12 Taipei
SEMICON WEST	Oct 7-9 Phoenix, Arizona
SEMICON EUROPA	Nov 18-21 Munich, Germany
SEMICON JAPAN	Dec 17-19 Tokyo, Japan

SEMICON West 2025-2030

- **2025—October 7-9 | Phoenix Convention Center | Phoenix, AZ**
- 2026—October 13-15 | Moscone Center | San Francisco, CA
- **2027—October 12-14 | Phoenix Convention Center | Phoenix, AZ**
- 2028—October 10-12 | Moscone Center | San Francisco, CA
- **2029—October 9-11 | Phoenix Convention Center | Phoenix, AZ**
- 2030—October 29-31 | Moscone Center | San Francisco, CA

Upcoming NA Meetings 2025

Event Name	Date/Venue	Ballot Cycles to Consider
NA Standards Meetings	June 2-5, 2025 SEMI HQ, Milpitas, California/USA	**Cycle 3-25** Ballot Submission Date: Wednesday, March 5, 2025 Voting Period Starts: Wednesday, March 19, 2025 Voting Period Ends: Friday, April 18, 2025 **Cycle 4-25** Ballot Submission Date: Thursday, March 20, 2025 Voting Period Starts: Wednesday, April 9, 2025 Voting Period Ends: Friday, May 9, 2025
SEMICON West	Oct 7-9, 2025 Phoenix Convention Center Phoenix, Arizona/USA	**Cycle 6-25** Ballot Submission Date: Thursday, June 19, 2025 Voting Period Starts: Wednesday, July 9, 2025 Voting Period Ends: Friday, August 8, 2025 **Cycle 7-25** Ballot Submission Date: Thursday, July 24, 2025 Voting Period Starts: Wednesday, August 13, 2025 Voting Period Ends: Friday, September 12, 2025

Critical Dates for SEMI Standards Ballots – 2025

2025	Ballot Submission Deadline	Voting Opens	Voting Closes
Cycle 2	January 23	February 11	March 13
Cycle 3	March 5	March 19	April 18
Cycle 4	March 20	April 9	May 9
Cycle 5	May 8	May 28	June 27
Cycle 6	June 19	July 9	August 8
Cycle 7	July 24	August 13	September 12

SEMI Standards Publications

- Total SEMI Standards in portfolio: 1,098
    - Includes 356 Inactive Standards

Regulations & Procedure Manual Updates

- Regulations (Feb 20, 2024)
    - New definition of “Standards Document”
    - Clarification of confidential presentation materials
        - https://www.semi.org/sites/semi.org/files/2024-02/Standards%20Regulations%20February%2020%202024.pdf
- Procedure Manual (Sept 27, 2024)
    - Clarification of § 6.4.5.10 for discharging of a TF
    - New ¶ 6.4.5.11 Designation of a TF as Dormant.
        - https://www.semi.org/sites/semi.org/files/2024-09/Procedure%20Manual%20September%2027%2C%202024.pdf

Connect@SEMI Communities for all SEMI Standards Task Forces [1/5]

- By Feb 2025, all Standards Task Forces shall use Connect@SEMI to host documents that are currently in development.
- Each Standards Task Force will have its own Community Page on Connect@SEMI.
- All Program Members may log in at:
    - https://connect.semi.org
    - Enter their username and password (same as program membership log-in)

SNARF 3-Year Status

Date	Doc	Description
12/08/2021	6894	Line Item Revision to E33-0217E, Guide for Semiconductor Manufacturing Equipment Electromagnetic Compatibility (EMC) and E176-1017, Guide to Assess and Minimize Electromagnetic Interference (EMI) in a Semiconductor Manufacturing Environment
12/06/2021	6971	Revision to SEMI E163-0212, Guide for the Handling of Reticles and Other Extremely Electrostatic Sensitive (EES) Items Within Specially Designated Areas

Attachment: Metrics-Staff Report Feb 2025 v2

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.

4.1 Document #7130C, New Standard: Test Method Using Adhesive Replacement Substrates to Assess Particulate Surface Contamination of Critical Chamber Components

Motion:	This Document passed TC Chapter review with technical changes and with or without editorial changes and will be forwarded to the ISC A&R SC for procedural review. A Ratification Ballot will be issued to verify the technical changes.
By / 2nd:	By: Supika Mashiro / Tokyo Electron Ltd. Second: Takayuki Nishimura
Discussion:	None
Vote:	6-Y 0-N

Attachment: AR - 7130C_R1.3

4.2 Document #7324, New Standard: Guide to Using a Liquid Particle Counter to Assess Particulate Surface Contamination on Critical Chamber Components and Coupons

Motion:	This Document passed TC Chapter review with editorial changes and will be forwarded to the ISC A&R SC for procedural review.
By / 2nd:	By: Supika Mashiro / Tokyo Electron Ltd. Second: Takayuki Nishimura
Discussion:	None
Vote:	9-Y 0-N

Attachment: AR - 7324R1.2

5 Subcommittee and Task Force Reports

5.1 *EMC Task Force*

Vladimir Kraz (OnFilter) reported for the EMC Task Force. Of note:

- Mark Montrose (Montrose Consulting) reviewed the summary of his proposed changes to SEMI E33 and E176. The TF decided that it did not have the bandwidth to evaluate all of the changes.
- Intel recommended to move ELF/VLF section from E.33 to E.176. There was originally a SNARF proposed to do this, but further discussion led the TF to decide that a new SNARF with an expanded scope will be created once a consensus was reached on the new ELF/VLF section.
- Currently there is no regulatory or other engineering body that governs ELF/VLF to the degree usable by semi manufacturers. The TF co-leader proposed the suggestion was that in absence of that we (SEMI) could become one, and if some other organization wants to step in, we will work with them
- Intel will provide the TF with the "sanitized" data from their FAB(s) on max./typical ELF/VLD levels and their properties. Given that this may be considered typical environment, we can use this data as the reference to update, if needed, appropriate section(s) in our documents.

Attachment: EMC-TF-Feb2025

6 Next Meeting and Adjournment

The next meeting is scheduled for Thursday, June 5, 2025, from 3:00-5:00 PM Pacific, in conjunction with NA Standards Summer Meetings. See http://www.semi.org/standards-events for the current list of events.

Adjournment: 6:12.

Respectfully submitted by:

Michelle Sun

Coordinator
SEMI North America
Phone: 408.943.7982
Email: msun@semi.org

Minutes tentatively approved by:

<Name> (<Company>), Co-chair	<Date approved>
<Name> (<Company>), Co-chair	<Date approved>

Table 14 Index of Available Attachments#1

Title	*Title*
Required Meeting Elements March 2024	AR - 7130C_R1.3
Metrics-Minutes-Feb-2025	AR - 7324R1.2
20250213_MetricsJapan_Liaison_Report_R0.1	EMC-TF-Feb2025
Metrics-Staff Report Feb 2025 v2	

#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.