3D Packaging and Integration Japan TC Chapter

Meeting Summary and Minutes

Japan Standards Winter Meetings 2025

Monday, February 3, 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

Monday, May 19, 2025 2:00 PM – 4:00 PM JST

SEMI Japan, Tokyo, Japan/ Official Virtual TC Chapter Meeting (Hybrid)

Table 1 Meeting Attendees

Italics indicate virtual participants

Co-Chairs: Kazunori Kato (AiT), Masahiro Tsuriya (iNEMI), Haruo Shimamoto (AIST)
SEMI Staff: Akiko Yoshida (SEMI Japan)

Company	*Last*	*First*	*Company*	*Last*	*First*
AIST	*Shimamoto*	*Haruo*	Shin-Etsu Polymer	Odashima	Satoshi
AiT	*Kato*	*Kazunori*	*Yokohama National University*	*Inoue*	*Fumihiro*
Disco	*Gonsui*	*Shinobu*	*Yokohama National University*	*Sano*	*Marie*
Hitachi High-Tech	*Yoshino*	*Eiji*	*Suss Microtech Solutions Gmbh*	*Muller*	*Philppe*
iNEMI	*Tsuriya*	*Masahiro*	*SEMI HQ*	*Lok*	*Boon Keng*
Japan Display	Watanabe	Ryoichi	SEMI Japan	Hirabara	Takeaki
KOKUSAI ELECTRIC	*Matsuda*	*Mitsuhiro*	SEMI Japan	Kanejinaka	Keiko
Kanagawa Institute of Advanced Industria and Technology	*Nemoto*	*Shunsuke*	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*
7300	Line Item Revision to SEMI G96-1014 (Reapproved 1019), Test Method for Measurement of Chip (Die) Strength by mean of Cantilever Bending	**Passed** as balloted

#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*
7300	Letter Ballot Authorization for Cycle 9, 2024	3D Packaging & Integration 5-Year Review	Line Item Revision to SEMI G96-1014 (Reapproved 1019), TEST METHOD FOR MEASUREMENT OF CHIP (DIE) STRENGTH BY MEAN OF CANTILEVER BENDING - *Approved by GCS on 11/19/2024*
7331	SNARF	3DP&I Inspection & Metrology TF	New Standard: Guide for Peel Testing of RDLs and Other Traces Used within HDI, WLP, and PLPs Structures - *Approved by GCS on 02/01/2025*

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*
3DP&I_20250203-01	SEMI Staff	To forward the result of ballot review for Doc.#7300 to the ISC A&R SC for procedural review.
3DP&I_20250203-02	SEMI Staff/ 5-Year Review TF	To check all the documents listed for 5-year review whether they are compliant with Style Manual.

Table 13 Previous Meeting Action Items

Item #	*Assigned to*	*Details*
3DP&I_20241028-01	SEMI Staff	To forward the result of ballot review for Doc.#7252 to the ISC A&R SC for procedural review. →Closed
3DP&I_20241028-02	5 year review TF	To submit G98 Line Item Revision ballot for Cycle 9. →Closed

1 Welcome, Reminders, and Introductions

Kazunori Kato (AiT) 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: 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 with two corrections.
By / 2nd:	Haruo Shimamoto (AIST)/ Satoshi Odashima (Shin-Etsu Polymer)
Discussion:	None.
Vote:	9-Y 0-N. Motion passed.

Attachment: 02_3DP&I_JA_Minutes_20241028_R1

3 Liaison Reports

3.1 *Japan Regional Standards Committee (JRSC)*

Kazunori Kato (AiT) reported for the JRSC that there had been no updates related to 3D packaging and Integration Japan TC Chapter from the previous meeting.

3.2 *Global Coordinating Subcommittee (GCS)*

Akiko Yoshida (SEMI Japan) reported that the following items were approved by the GCS between meetings of the 3D Packaging and Integration Japan TC Chapter.

- Authorizing Doc.#7300, Line Item Revision to SEMI G96-1014 (Reapproved 1019), TEST METHOD FOR MEASUREMENT OF CHIP (DIE) STRENGTH BY MEAN OF CANTILEVER BENDING Letter Ballot for Cycle 9, 2024 (proposal was made by the 3D Packaging & Integration 5-Year Review TF under the Japan TC Chapter).

- SNARF 7331 for New Standard: Guide for Peel Testing of RDLs and Other Traces Used within HDI, WLP, and PLPs Structures (proposal was made by the 3DP&I Inspection & Metrology TF under the 3D Packaging & Integration NA TC Chapter).

3.3 *3D Packaging and Integration North America TC Chapter*

Akiko Yoshida (SEMI Japan) reported for the 3D Packaging and Integration North America TC Chapter. Of note.

- Last meeting was held on November 7, 2024 during NA Fall Meetings and next meeting will be held on February 27, 2024 during NA Winter Meetings.
- Ilona Schmidt Corning) stepped down from the leader of the 3DP&I Inspection and Metrology TF, and Steve Martell (Nordson SONOSCAN) and Masahiro Tsuriya (iNEMI) become new co-leaders of the TF.
- Doc.#7286, Reapproval of SEMI 3D21-1019, Guide for Describing Glass-Based Material for Use in 3DS-IC Process passed TC review as balloted.
- TFOF for 3DP&I Inspection and Metrology TF was revised.
- SNARF 7307, Reapproval of SEMI 3D22-1219, Guide on Measurements of Openings and Vias was approved and its Letter Ballot submission for Cycle 9, 2024 was authorized.
- SEMI 3D1-0519, Terminology for Through Silicon via Geometrical Metrology received Inactive Status.

3.4 *3D Packaging and Integration Taiwan TC Chapter*

Akiko Yoshida (SEMI Japan) reported for the 3D Packaging and Integration Taiwan TC Chapter that there had been no updates from the previous meeting.

4 SEMI Staff Report

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

- SEMICON Japan 2024 was successfully held with more than 100,000 attendees. The panel introducing activities of the 3D Packaging and Integration Technical Committee was posted at SEMI IS MORE Path at Exhibition site.
- During SEMICON Japan, the first “Global Standards Summit” was successfully held with more than 100 participants. This inaugural Summit aims to identify standards-critical areas and work towards an industry standardization strategy for the next 3- and 7-year time horizons, instead of addressing the current challenges. Kazunori Kato (AiT) and Haruo Shimamoto (AIST) from the 3D Packaging and Integration Japan TC Chapter contributed a lot to its success.
- By Feburyrary 2025, all Standards TFs shall use Connect@SEMI to host documents that are currently in development. Each Standards TF will have its own Community Page on Connect@SEMI.
- SEMIViews 4.0 was launched in August, 2024. SEMIViews 4.0 features include upgraded user interface, improved company user administration functions, dynamic landing page, enhanced search functionality and navigation panel, new SEMI volumes library, and user defined shortcuts. Additional features are planned in the pipeline.

Kazunori Kato (AiT) commented that there will be time for an explanation about Connect@SEMI after the TC meeting, and that hose who have time are encouraged to attend.

Attachment: 03_Staff Report January 2025_R0

5 Ballot Review

NOTE 1: TC Chapter adjudication of ballots 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 file name for each balloted document is provided.

5.1 *Doc.#7300, Line Item Revision to SEMI G96-1014 (Reapproved 1019), Test Method for Measurement of Chip (Die) Strength by mean of Cantilever Bending*

- Line Item 1 Passed the TC Chapter review as balloted. Refer to the attachment below for full details.

Attachment: 04_7300_Ballot Review

6 Subcommittee and Task Force Reports

6.1 *3DS IC Bonded Layer Inspection Metrology Task Force*

Haruo Shimamoto (AIST) reported for the 3DS IC Bonded Layer Inspection Metrology Task Force. Not much progress has been made in the drafting Doc.#7299, New Standard: Guide for 3DIS IC Bonded Layer Inspection Metrology. They would work further to complete drafting the document.

6.2 *Wafer Bond Strength Measurement by Double-cantilever Beam Task Force*

Fumihiko Inoue (Yokohama National University) reported for the Wafer Bond Strength Measurement by Double-cantilever Beam Task Force. Drafting SNARF has been delayed due to lack of resources.

6.3 *3D Packaging & Integration 5-Year Review Task Force*

Masahiro Tsuriya (iNEMI) reported for the 3D Packaging and Integration 5-year Review TF. The TF completed all documents that required 5-year review for 2024. They also reviewed the list of documents which require 5-year review in 2025. The TF aims to reapprove all the documents listed. However, they will thoroughly review each document to determine if revisions are needed to ensure compliance with the Style Manual and submit appropriate SNARFs at the next TC Chapter meeting.

Attachment: 05_TF Report - 5yrs Review TF v2025_2

6.4 *3D Packaging & Integration Steering Group*

Masahiro Tsuriya (iNEMI) reported for the Steering Group. The TF cooperated with SEMI Japan to make a panel introducing 3D Packaging and Integration Technical Committee activities which was displayed at SEMI IS MORE Path during SEMICON Japan 2024. The package technical workshop will be held at Mitsutoyo on April 14, 2025. This event will be sponsored by iNEMI and JIEP with support from the Steering Group. Members of the 3D Packaging and Integration Japan TC Chapter who are interested in this workshop are welcome to participate.

7 Old Business

7.1 *Project Period Review*

No SNARF will be expiring soon.

7.2 *Project Period Review*

Please refer to 6.3 for details.

8 New Business

None.

9 Action Item Review

9.1 *Open Action Items*

Item #	*Assigned to*	*Details*
3DP&I_20241028-01	SEMI Staff	To forward the result of ballot review for Doc.#7252 to the ISC A&R SC for procedural review. →Closed
3DP&I_20241028-02	5 year review TF	To submit G98 Line Item Revision ballot for Cycle 9. →Closed

9.2 *New Action Items*

Item #	*Assigned to*	*Details*
3DP&I_20250203-01	SEMI Staff	To forward the result of ballot review for Doc.#7300 to the ISC A&R SC for procedural review.
3DP&I_20250203-02	SEMI Staff/ 5-Year Review TF	To check all the documents listed for 5-year review whether they are compliant with Style Manual.

10 Next Meeting and Adjournment

The next meeting is scheduled for Monday, May 19, 2025 2:00 PM – 4:00 PM JST via Official Virtual TC Chapter Meeting and at SEMI Japan Office, Tokyo, Japan (Hybrid). See http://www.semi.org/standards-events for the current list of events.

Adjournment: [16:00].

Respectfully submitted by:

Akiko Yoshida

Standards & EHS, SEMI Japan

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Minutes tentatively approved by:

Kazunori Kato (AiT), Co-chair	February 10, 2025
Masahiro Tsuriya (iNEMI), Co-chair	February 11, 2025
Haruo Shimamoto (AIST), Co-chair	February 12, 2025

Table 14 Index of Available Attachments[#1]

Title	*Title*
01_Required Meeting Elements March 2024_J	04_7300_Ballot Review
02_3DP&I_JA_Minutes_20241028_R1	05_TF Report - 5yrs Review TF v2025_2
03_Staff Report January 2025_R0	06_TF Report - Steering WG v2025_2

#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.