



3D Packaging and Integration Japan TC Chapter

Meeting Summary and Minutes

Japan Standards Fall Meetings 2025

Monday, October 6, 2025 2:00 PM – 5:00 PM JST

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

TC Chapter Announcements

Next TC Chapter Meeting

Monday, March 9, 2025 2:00 PM – 5:00 PM JST

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

Table 1 Meeting Attendees

Italics indicates virtual participants.

Co-Chairs: Kazunori Kato (AiT), Masahiro Tsuruya (iNEMI), Haruo Shimamoto (AIST)

SEMI Staff: Akiko Yoshida (SEMI Japan)

<i>Company</i>	<i>Last</i>	<i>First</i>	<i>Company</i>	<i>Last</i>	<i>First</i>
<i>Acteon NEXT</i>	<i>Komatsu</i>	<i>Shoji</i>	<i>KOKUSAI ELECTRIC</i>	<i>Matsuda</i>	<i>Mitsuhiro</i>
<i>AIST</i>	<i>Shimamoto</i>	<i>Haruo</i>	<i>NAURA</i>	<i>Cao</i>	<i>Clark</i>
<i>AiT</i>	<i>Kato</i>	<i>Kazunori</i>	<i>NOA</i>	<i>Takahashi</i>	<i>Kazuo</i>
<i>Chung King Enterprise</i>	<i>Yang</i>	<i>Jiechao</i>	<i>Shin-Etsu Polymer</i>	<i>Odashima</i>	<i>Satoshi</i>
<i>DISCO</i>	<i>Gonsui</i>	<i>Shinobu</i>	<i>Yokohama National University</i>	<i>Inoue</i>	<i>Fumihiro</i>
<i>EV Group Japan</i>	<i>Kurotaki</i>	<i>Hirokazu</i>	<i>Suss Microtech Solutions Gmbh</i>	<i>Ishida</i>	<i>Hiroyuki</i>
<i>FUJIFILM</i>	<i>Aoshima</i>	<i>Toshihide</i>	<i>TACHIBANA ELETECH</i>	<i>Ota</i>	<i>Shun</i>
<i>iNEMI</i>	<i>Tsuruya</i>	<i>Masahiro</i>	<i>SEMI Japan</i>	<i>Koga</i>	<i>Nahoko</i>
<i>Kanagawa Institute of Advanced Industry and Technology</i>	<i>Nemoto</i>	<i>Shunsuke</i>	<i>SEMI Japan</i>	<i>Yoshida</i>	<i>Akiko</i>

Table 2 Leadership Changes

<i>WG/TF/SC/TC Name</i>	<i>Previous Leader</i>	<i>New Leader</i>
Wafer Bonding Pressure Evaluation TF	N/A	Toshihide Aoshima (FUJIFILM)

Table 3 TC Chapter Structure Changes

<i>Previous WG/TF/SC Name</i>	<i>New WG/TF/SC Name or Status Change</i>
N/A	Wafer Bonding Pressure Evaluation TF

Table 4 Ballot Results

<i>Document #</i>	<i>Document Title</i>	<i>Committee Action</i>
7359	Reapproval of SEMI G11-0519, Practice for RAM Follower Gel Time and Spiral Flow of Thermal Setting Molding Compounds	Passed as balloted

Table 4 Ballot Results

<i>Document #</i>	<i>Document Title</i>	<i>Committee Action</i>
7360	Reapproval of SEMI G73-0519, Test Method for Pull Strength for Wire Bonding	Passed as balloted
7361	Reapproval of SEMI G77-0699 (Reapproved 1020), Specification for Frame Cassette for 300 mm Wafers	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

<i>Document #</i>	<i>Document Title</i>	<i>ISC A&R Action</i>	<i>A&R Forms</i>
None			

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

#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

<i>#</i>	<i>Type</i>	<i>SC/TF/WG</i>	<i>Details</i>
None			

Table 7 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>
7398	SNARF	Wafer Bond Strength Measurement by Doublecantilever Beam TF	New Standard: Test method for Wafer Bond Strength Measurement by Double-Cantilever Beam

#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

<i>#</i>	<i>When</i>	<i>TF</i>	<i>Details</i>
7398	Cycle 1 or 2, 2026	Wafer Bond Strength Measurement by Doublecantilever Beam TF	New Standard: Test method for Wafer Bond Strength Measurement by Double-Cantilever Beam

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

<i>#</i>	<i>TF</i>	<i>Title</i>	<i>Expiration Date</i>
None			

Table 10 SNARF(s) Cancelled

#	TF	Title	Expiration Date
None			

Table 11 Standard(s) to receive Inactive Status

Standard Designation	Title
None	

Table 12 New Action Items

Item #	Assigned to	Details
3DP&I_20251006-01	Wafer Bond Strength Measurement by Double-cantilever Beam Task Force	To submit the Letter Ballot for Doc.#7331 in Cycle 1 or 2, 2026.
3DP&I_20251006-02	SEMI Staff	To send the ballot review results of Doc.#7359, 7360, 7361 to the ISC A&R SC for procedural review.
3DP&I_20251006-03	Wafer Bonding Pressure TF	To have a TF kick off meeting and reconsider the TF name.

Table 13 Previous Meeting Action Items

Item #	Assigned to	Details
3DP&I_20250519-01	SEMI Staff/ 5-Year Review TF	To submit SEMI G11, G73, and G77 Reapproval Ballots for Cycle 6, 2025. →Closed
3DP&I_20250519-02	SEMI Staff	To inform SEMI Standards Publication Staff to make SEMI G52 and G92 “Inactive.” →Closed
3DP&I_20250519-03	5-Year Review TF	To prepare Line Item/ Major Revision SNARFs for SEMI G74 and G87. →Open
3DP&I_20250519-04	5-Year Review TF	To prepare Line Item Revision SNARFs for SEMI G82 and G95. →Open

1 Welcome, Reminders, and Introductions

Masahiro Tsuruya (iNEMI) 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 as written.

By / 2nd: Mitsuhiro Matsuda (KOKUSAI ELECTRIC)/ Shoji Komatsu (Acteon NEXT)

Discussion: None.

Vote: 10-Y 0-N. Motion passed.

Attachment: 02_3DP&I_JA_Minutes_20250519_R0

3 Liaison Reports

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 3D Packaging and Integration Japan TC Chapter were:

- 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.
- 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.”

Attachment: 03_JRSC Report_October 2025_R0

3.2 Global Coordinating Subcommittee (GCS)

Akiko Yoshida (SEMI Japan) reported for the 3D Packaging and Integration GCS. Of note:

- The 3D Packaging and Integration Taiwan TC Chapter approved a proposal from 3D Packaging Smart Manufacturing TF to have a Type II liaison with JEDEC. As required by Regulation 18.3.2.3, GCS approved it as well.
- The GCS approved Doc.#7391, New Standard: Guide for 387.6 x 380 mm² Trays Accommodating IC Packages to be submitted for Cycle 9, 2025.

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 June 5, 2025 during NA Summer Meetings and next meeting will be held on October 15, 2025 via OVTCCM.
- SNARF 7331, New Standard: Guide for Peel Testing of RDLs and Other Traces Used within HDI, WLP, and PLPs Structures, proposed by the 3DP&I Inspection & Metrology TF was approved by the GCS on January 31, 2025.
- The following Letter Ballots all passed TC Chapter review as balloted:
 - Doc.#7337, Reapproval of SEMI 3D9-0914 (Reapproved 0420), Guide for Describing Materials Properties for a 300 mm 3DS-IC Wafer Stack
 - Doc.#7338, Reapproval of SEMI 3D10-0814 (Reapproved 0420), Guide to Describing Materials Properties for Intermediate Wafers for Use in a 300 mm 3DS-IC Wafer Stack
 - Doc.#7339, Reapproval of SEMI 3D11-1214 (Reapproved 0420), Terminology for Through Glass Via and Blind Via in Glass Geometrical Metrology

- SNARF 7368, Reapproval of SEMI 3D12-1020, Guide for Measuring Flatness and Shape of Low Stiffness Wafers was approved and its Letter Ballot submission for Cycle 7 was authorized.
- SNARF 7369, Line-Item Revision to SEMI 3D20-0921, Specification for Panel Characteristics for Panel Level Packaging (PLP) Applications was approved to include additional panel size.

Attachment: 04_NA 3DP&I Liaison Report June2025 v1

3.4 3D Packaging and Integration Taiwan TC Chapter

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

- Last meeting was held on August 14, 2025 via OVTCCM.
- The 3D Packaging Smart Manufacturing TF is newly formed with four TF leaders from TSMC.
- SNARF 7391, New Standard: Guide for 387.6 x 380 mm² Trays Accommodating IC Packages by 3D Packaging Smart Manufacturing TF as well as Type II Liaison with JEDEC were approved.

Kazunori Kato (AiT) asked whether it is OK to have 4 TF co-leaders in total from the same organization. Mitsuhiro Matsuda (KOKUSAI ELECTRIC) suggested that having TF co-leaders from various companies or organizations would ensure balanced interests and categories, but it is accepted from Regulations point of view. Shoji Komatsu (Acteon NEXT) added that more than 20 companies are involved in the TF, and they work well together, including members from ITRI.

Attachment: 05_3D P&I Taiwan Liaison Report_20250818_V1

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.”
- SEMICON Japan 2025 will have irregular venue arrangements because of renovations at Tokyo Big Sight. Standards meetings will be held at TFT Building, not the Conference Tower.
- Procedure Manual was 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: 06_Staff Report_August 2025_R2

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.#7359, Reapproval of SEMI G11-0519, Practice for RAM Follower Gel Time and Spiral Flow of Thermal Setting Molding Compounds*

- This document **passed** as balloted. Refer to attachment for more details.

5.2 *Doc.#7360, Reapproval of SEMI G73-0519, Test Method for Pull Strength for Wire Bonding*

- This document **passed** as balloted. Refer to attachment for more details.

5.3 Doc.#7361, Reapproval of SEMI G77-0699 (Reapproved 1020), Specification for Frame Cassette for 300 mm Wafers

- This document **passed** as balloted. Refer to attachment for more details.

Attachment: 07_7359_Ballot Review
08_7360_Ballot Review
09_7361_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 TF. The TF is still working on drafting Doc.#7299, New Standard: Guide for 3DIS IC Bonded Layer Inspection Metrology. They would work further to complete it.

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

Fumihiro Inoue (Yokohama National University) reported for the Wafer Bond Strength Measurement by Double-cantilever Beam TF. The TF completed the SNARF draft and submitted it to the 3D Packaging and Integration GTC members for a two-week review and feedback.

Motion: Approve the SNARF for New Standard: Test Method for Wafer Bond Strength Measurement by Double-Cantilever Beam.
By / 2nd: Fumihiro Inoue (Yokohama National University)/ Kazunori Kato (AiT)
Discussion: None.
Vote: 14-Y 0-N. Motion passed.

They are also continuing to develop the document through multiple technical discussions during TF meetings. They expect the work would be completed in December and it would be ready for being balloted.

Motion: Authorize the above document for Letter Ballot in Cycle 1 or 2, 2026.
By / 2nd: Fumihiro Inoue (Yokohama National University)/ Shoji Komatsu (Acteon NEXT)
Discussion: None.
Vote: 12-Y 0-N. Motion passed.

Attachment: 10_SNARF_Test method_Wafer Bond Strength Measurement by Double-cantilever Beam

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

Kazunori Kato (AiT) reported for the 3D Packaging and Integration 5-year Review TF that they are still preparing for the next steps.

6.4 3D Packaging & Integration Steering Group

No report was provided.

7 Old Business

7.1 Project Period Review

No SNARF will be expiring soon.

7.2 5-year Review

Akiko Yoshida (SEMI Japan) reported that below document will be due for 5-year review.

- SEMI 3D23-0721, Specification for Glass Carrier Characteristics for Panel Level Packaging (PLP) Applications

Kazunori Kato (AiT) said the 5-year review TF will check the document and decide the course of action by the next meeting.

8 New Business

8.1 New TFOF for Wafer Bonding Pressure Task Force

Toshihide Aoshima (FUJIFILM) proposed to form a new Task Force to standardize the Guide for evaluating load uniformity of wafer bonding equipment using pressure measurement films and presented SNARF draft.

Motion: Approve the TFOF to form the Wafer Bonding Pressure Evaluation TF.

By / 2nd: Toshihide Aoshima (FUJIFILM)/ Kazunori Kato (AiT)

Discussion: (Fumihiro Inoue) Will the TF standardize Guide for pressure evaluation of Wafer to Wafer bonding, or Wafer to Chip bonding? Also, in terms of bonding, would it be permanent bonding or temporary bonding? The name of the TF may vary depending on the type of evaluation.

(Shoji Komatsu) The name of the TF can be changed after discussion within the TF.

(Mitsuhiro Matsuda) In that case, it is recommended that the TF will revise its TFOF.

Vote: 11-Y 0-N. Motion passed.

Attachment: 11_TFOF_Sept2024_Toshihide Aoshima (FUJIFILM) v2

9 Action Item Review

9.1 Open Action Items

Item #	Assigned to	Details
3DP&I_20250519-01	SEMI Staff/ 5-Year Review TF	To submit SEMI G11, G73, and G77 Reapproval Ballots for Cycle 6, 2025. →Closed
3DP&I_20250519-02	SEMI Staff	To inform SEMI Standards Publication Staff to make SEMI G52 and G92 “Inactive.” →Closed
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9.2 New Action Items

Item #	Assigned to	Details
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3DP&I_20251006-02	SEMI Staff	To send the ballot review results of Doc.#7359, 7360, 7361 to the ISC A&R SC for procedural review.
3DP&I_20251006-03	Wafer Bonding Pressure TF	To have a TF kick off meeting and reconsider the TF name.



10 Next Meeting and Adjournment

The next meeting is scheduled for Monday, March 9, 2026 2:00 PM – 5:00 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: [17:00].

Respectfully submitted by:

Akiko Yoshida

Standards & EHS, SEMI Japan

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Minutes tentatively approved by:

Kazunori Kato (AiT), Co-chair	October 17, 2025
Masahiro Tsuriya (iNEMI), Co-chair	October 20, 2025
Haruo Shimamoto (AIST), Co-chair	October 20, 2025

Table 14 Index of Available Attachments#1

<i>Title</i>	<i>Title</i>
01_Required Meeting Elements March 2024_J	07_7359_Ballot Review
02_3DP&I_JA_Minutes_20250519_R0	08_7360_Ballot Review
03_JRSC Rport_October 2025_R0	09_7361_Ballot Review
04_NA 3DP&I Liaison Report June2025 v1	10_SNARF_Test method_Wafer Bond Strength Measurement by Double-cantilever Beam
05_3D P&I Taiwan Liaison Report_20250818_V1	11_TFOF_Sept2024_Toshihide Aoshima (FUJIFILM) v2
06_Staff Report_August 2025_R2	

#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.