



Physical Interfaces & Carriers Japan TC Chapter

Meeting Summary and Minutes

SEMICON Japan Meetings 2025

Thursday, December 18, 2025

Room 905, East 9F, TFT Building / OVTCCM (Hybrid)

9:00am – 12:00pm JST

TC Chapter Announcements

Next TC Chapter Meeting

9:00am – 11:00am (JST), March 4, 2026 @ SEMI Japan office and OVTCCM (Hybrid)

Table 1 Meeting Attendees

Italics indicate virtual participants

Co-Chairs: Tsuyoshi Nagashima (Miraial), Daisuke Sado (EAGLE INDUSTRY), Yasuhisa Ito (Murata Machinery)

SEMI Staff: Takeaki Hirabara

<i>Company</i>	<i>Last</i>	<i>First</i>	<i>Company</i>	<i>Last</i>	<i>First</i>
Acteon NEXT	Komatsu	Shoji	EAGLE INDUSTRY	Sado	Daisuke
Miraial	Nagashima	Tsuyoshi	JEOL	Asayama	Kyoichiro
Murata Machinery	Ito	Yasuhisa	TDK	Okabe	Tsutomu
Intel	Morimoto	Shoko	<i>Achilles Corporation</i>	<i>Suzuki</i>	<i>Toshiki</i>
DAIHEN	Kishi	Daisuke	ASE	Ping Feng	Yang
Tokyo Electron	Mashiro	Supika	SCREEN Semiconductor Solutions	Nishimura	Takayuki
Hirata Corporation	Kanazawa	Keiji	Shin-Etsu Polymer	Odashima	Satoshi
SINFONIA TECHNOLOGY	Matsukubo	Taisuke	DAIFUKU	Nishizawa	Naoyuki
KOKUSAI ELECTRIC	Matsuda	Mitsuhirou	Intel	Rudolph	John
Intel	Radloff	Stefan	Murata Machinery	Kuchiya	Masami
SINFONIA TECHNOLOGY	Taniyama	Yasushi	<i>Intel</i>	<i>Kartik</i>	<i>Raman</i>
<i>ASE</i>	<i>Mulder</i>	<i>Shen</i>	<i>CKplas</i>	<i>Wu</i>	<i>Cono</i>
<i>DAIFUKU</i>	<i>Nishibayashi</i>	<i>Yoshitaka</i>	<i>CKplas</i>	<i>Chen</i>	<i>Candy</i>
Intel	Shimizu	Takashi	<i>CKplas</i>	<i>Li</i>	<i>Josephine</i>
<i>Lam Research</i>	<i>Gould</i>	<i>Richard</i>			
<i>CKplas</i>	<i>Ng</i>	<i>Angie</i>	<i>SEMI HQ</i>	<i>BK</i>	<i>Lok</i>
Tokyo Electron	Hayashi	Haruna	SEMI Japan	Koga	Nahoko
DISCO	Gonsui	Shinobu	SEMI Japan	Hirabara	Takeaki

Table 2 Leadership Changes

<i>WG/TF/SC/TC Name</i>	<i>Previous Leader</i>	<i>New Leader</i>
None		

Table 3 TC Chapter 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>
7373A	Line Item Revision to SEMI E182- 0925 - Specification for Panel FOUF Loadport for Panel Level Packaging	Passed
7402	Line Item Revision to SEMI E181.1 — Specification for Panel FOUF for 510 to 515 mm Panel Size and 12 Slots, SEMI E181.2 — Specification for Panel FOUF for 510 to 515 mm Panel Size and 6 Slots, SEMI E181.3 — Specification for Panel FOUF for 600 to 600 mm Panel Size and 12 Slots and SEMI E181.4 — Specification for Panel FOUF for 600 to 600 mm Panel Size and 6 Slots	Passed

#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			

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

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

Table 7 Preliminary Standard GCS Approval Result

<i>Document #</i>	<i>Document Title</i>	<i>ISC A&R Action</i>	<i>A&R Forms</i>
7375	New Preliminary Standard: Specification for Large Tray Stack FOUF (LTSF)	Passed *Y-4 / N-0	-

Table 8 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>
-	SNARF	Next Gen Assembly / Test	New Preliminary Standard: Specification for Enhanced Handoff Interface

Table 8 Authorized Activities

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

#	Type	SC/TF/WG	Details
		Material Handling TF	
-	SNARF	Next Gen Assembly / Test Material Handling TF	New Preliminary Subordinate Standard: TCP/IP Communication for Enhanced Handoff Interface to Specification for Enhanced Handoff Interface

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

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

Table 9 Authorized Ballots

#	When	TF	Details
7332	Cycle 1, 2026	Next Gen Assembly / Test Material Handling TF	New Standard: Specification for Large JEDEC™ Tray Stack Load Port

Table 10 SNARF(s) Granted a One-Year Extension

#	TF	Title	Expiration Date
None			

Table 11 SNARF(s) Cancelled

#	TF	Title
None		

Table 12 Standard(s) to receive Inactive Status

Standard Designation	Title
None	

Table 13 New Action Items

Item #	Assigned to	Details
PIC_20251218_1	SEMI Staff	Report and request an action for E100 modification to have to NA PIC

Table 14 Previous Meeting Action Items

Item #	Assigned to	Details
PIC_20250926_1	SEMI Staff	Distribution the two SNARFs to TC members. (NGAT TF) → Close
PIC_20250926_2	SEMI Staff	Preliminary Standards: GCS Approval → Close
PIC_20250926_3	Shoji Komatsu	Submission updated TFOF and SNARF about 310mm square Panel FOUP TF → Close



1 Welcome, Reminders, and Introductions

Tsuyoshi Nagashima called the meeting to order at 9:00am JST. The meeting reminders on antitrust issues, intellectual property issues and holding meetings with international attendance were reviewed. Attendees introduced themselves.

Attachment: 1. Required_Meeting_Element Dec 2024_JPupdated

2 SEMI Japan Technical Committee Award Ceremony

Tsuyoshi Nagashima presented the certificates to the following two award recipients.

- Shoji Komatsu (Acteon NEXT)
- Stefan Radloff (Intel)

3 Review of Previous Meeting Minutes

The TC Chapter reviewed the minutes of the previous meeting.

Motion: Approve the minutes as written

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

Discussion: None

Vote: 11-Y 0-N Voting Result: Pass - 100.00%. Voting Rule: Majority

Attachment: 2. 20250926 Japan PIC Committee Minutes

4 Liaison Reports

4.1 *Physical Interfaces & Carriers North America TC Chapter*

Takeaki Hirabara (SEMI Staff) reported for the Physical Interfaces & Carriers *North America* TC Chapter. Of note:

- Last Meeting: Thursday, December 11, 2025 / Virtual | NA Fall meetings via OVTCCM
- Next Meeting: Wednesday, February 11, 2026 / Virtual | NA Winter meetings via OVTCCM

Attachment: 3. NA PIC Liaison Report Dec2025 v1

4.2 *JRSC*

Takeaki Hirabara (SEMI Staff) reported for the JRSC verbally. Of note:

- Planning Meeting 2026 was decided to be held. Theme of the Planning Meeting 2026 will be discussed in SPI TF as a first step.

5 SEMI Staff Report

Takeaki Hirabara (SEMI Staff) gave the SEMI Staff Report. Of note:

- Introduced of 2026 calendar of SEMICON events.
- NA Winter Meeting will be held in February with full virtual, and NA Spring meeting will take place in May in conjunction with ASMC, which will be held in New York.

Attachment: 4. Staff Report_December 2025_R4

6 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.

6.1 Document # 7373A, Line Item Revision to SEMI E182- 0925 - Specification for Panel FOUP Loadport for Panel Level Packaging → Passed as balloted

Attachment: 5. A&R_7373A

6.2 Document # 7402, Line Item Revision to SEMI E181.1 — Specification for Panel FOUP for 510 to 515 mm Panel Size and 12 Slots, SEMI E181.2 — Specification for Panel FOUP for 510 to 515 mm Panel Size and 6 Slots, SEMI E181.3 — Specification for Panel FOUP for 600 to 600 mm Panel Size and 12 Slots and SEMI E181.4 — Specification for Panel FOUP for 600 to 600 mm Panel Size and 6 Slots → Passed as balloted

Attachment: 6. A&R_7402

7 Preliminary Standard GCS Approval Result

7.1 Document # 7375, Specification for Large Tray Stack FOUP (LTSF) → Passed (Y-4, N-0)

*Proceed with the ISC A&R Action

8 Subcommittee and Task Force Reports

8.1 *Global PIC Standards Maintenance TF*

There are no matters to report.

8.2 *Japan Electron Microscopy Workflow Liaison TF*

Kyoichiro Asayama (JEOL) reported for the Japan Electron Microscopy Workflow Liaison Task Force. Of note:

- Sharing plan and status of LCC prototype.

Attachment: 7. SEMI EMWF TF -PIC Update December 18 2025

8.3 *Panel Level Packaging Panel FOUP TF*

There are no matters to report.

8.4 *Next Gen Assembly / Test Material Handling TF*

Stefan Radloff (Intel) reported the Next Gen Assembly / Test Material Handling TF report. FFF TF activities were also reported.

Attachment: 8. NGAT FFF TF Dec J-PIC

8.5 *310mm Square Panel FOUP TF*

Shoji Komatsu (Acteon NEXT) reported the 310mm Square Panel FOUP TF based on the TF minutes.

Attachment: 9. 310 Panel FOUP TF meeting minutes rev0-20251217



8.6 [Liaison: 3D Packaging & Integration JA TCC] Panel Level Packaging Glass Carrier TF

There are no matters to report.

8.7 [Liaison: 3D Packaging & Integration NA TCC] Panel Level Packaging Panel TF

There are no matters to report.

9 Old Business

9.1 *Project Period Review* - None

9.2 *5 Year Review* - None

10 New Business

10.1 *SNARF Approval*

10.1.1 New Preliminary Standard: Specification for Enhanced Handoff Interface

Motion: Approve the SNARF for New Preliminary Standard: Specification for Enhanced Handoff Interface

By / 2nd: Stefan Radloff (Intel) / Shoji Komatsu (Acteon NEXT LLC)

Discussion: None

Vote: 12-Y 0-N Voting Result: Pass - 100.00%. Voting Rule: Majority

10.1.2 New Preliminary Subordinate Standard: TCP/IP Communication for Enhanced Handoff Interface to Specification for Enhanced Handoff Interface

Motion: Approve the SNARF for New Preliminary Subordinate Standard: TCP/IP Communication for Enhanced Handoff Interface to Specification for Enhanced Handoff Interface

By / 2nd: Stefan Radloff (Intel) / Shoji Komatsu (Acteon NEXT LLC)

Discussion: None

Vote: 13-Y 0-N Voting Result: Pass - 100.00%. Voting Rule: Majority

10.2 *Letter Ballot Approval*

10.2.1 Doc#7332: New Standard: Specification for Large JEDEC™ Tray Stack Load Port

Motion: Authorize the Document for Letter Ballot Cycle 1, 2026: New Standard: Specification for Large JEDEC™ Tray Stack Load Port

By / 2nd: Stefan Radloff (Intel) / Shoji Komatsu (Acteon NEXT LLC)

Discussion: None

Vote: Result: 13-Y 0-N Voting Result: Pass - 100.00%. Voting Rule: Majority

11 Next Meeting and Adjournment

The next meeting is scheduled at 9:00am – 11:00am (JST), March 4, 2026 @ SEMI Japan office and OVTCCM (Hybrid). See <http://www.semi.org/standards-events> for the current list of events.

Adjournment: 11:55am JST



Respectfully submitted by:

Takeaki Hirabara

Standards & EHS

SEMI Japan

Email: thirabara@semi.org

Minutes tentatively approved by:

Tsuyoshi Nagashima (Miraial)	January 30, 2026
Daisuke Sado (EAGLE INDUSTRY)	January 29, 2026
Yasuhisa Ito (Murata Machinery)	January 29, 2026

Table 15 Index of Available Attachments^{#1}

<i>Title</i>	<i>Title</i>
1. Required_Meeting_Element Dec 2024_JPupdated	2. 20250926 Japan PIC Committee Minutes
3. NA PIC Liaison Report Dec2025 v1	4. Staff Report_December 2025_R4
5. A&R_7373A	6. A&R_7402
7. SEMI EMWF TF -PIC Update December 18 2025	8. NGAT FFF TF Dec J-PIC
9. 310 Panel FOUP TF meeting minutes rev0-20251217	

#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 Takeaki Hirabara at the contact information above.