



Physical Interfaces & Carriers Japan TC Chapter

Meeting Summary and Minutes

Japan Spring Meetings 2025
Friday, April 18, 2025

Room 1, SEMI Japan office / OVTCCM (Hybrid)

9:00am – 12:00pm JST

TC Chapter Announcements

Next TC Chapter Meeting

Friday 10:00am – 1:00pm (JST), September 26, 2025 @ SEMI Japan office and OVTCCM (Hybrid)

Table 1 Meeting Attendees

Italics indicate virtual participants

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

SEMI Staff: Takeaki Hirabara

<i>Company</i>	<i>First</i>	<i>Last</i>	<i>Company</i>	<i>First</i>	<i>Last</i>
Acteon NEXT LLC	Shoji	Komatsu	<i>JEOL Ltd.</i>	<i>Kyoichiro</i>	<i>Asayama</i>
<i>Miraial Co., Ltd.</i>	<i>Tsuyoshi</i>	<i>Nagashima</i>	<i>TDK Corporation</i>	<i>Tsutomu</i>	<i>Okabe</i>
DAIHEN Corporation	Daisuke	Sado	<i>TDK Corporation</i>	<i>Kiyoshi</i>	<i>Kanashiro</i>
<i>Tokyo Electron Ltd.</i>	<i>Supika</i>	<i>Mashiro</i>	SCREEN Semiconductor Solutions Co., Ltd.	Takayuki	Nishimura
<i>Hirata Corporation</i>	<i>Keiji</i>	<i>Kanazawa</i>	DAIHEN Corporation	Daisuke	Kishi
SINFONIA TECHNOLOGY CO., LTD.	Taisuke	Matsukubo	DAIFUKU	Tomoko	Suzuki
MURATA MACHINERY, LTD.	Yasuhisa	Ito	DAIFUKU	Naoyuki	Nishizawa
<i>KOKUSAI ELECTRIC CORPORATION</i>	<i>Mitsuhiro</i>	<i>Matsuda</i>	<i>DISCO Corporation</i>	<i>Shinobu</i>	<i>Gonsui</i>
<i>Marubeni Plax Corporation</i>	<i>Luke</i>	<i>Igeta</i>	<i>SINFONIA TECHNOLOGY CO., LTD.</i>	<i>Yasushi</i>	<i>Taniyama</i>
<i>Intel Corporation</i>	<i>Takashi</i>	<i>Shimizu</i>	<i>PEER Group Inc.</i>	<i>Albert</i>	<i>Fuchigami</i>
<i>Intel</i>	<i>Kartik</i>	<i>Raman</i>	SEMI Japan	Hirofumi	Kanno
<i>Daewon SPIC</i>	<i>Trevor</i>	<i>Sanders</i>	SEMI Japan	Nahoko	Koga
<i>Intel</i>	<i>Stefan</i>	<i>Radloff</i>	SEMI Japan	Takeaki	Hirabara

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>
7329	Line Item Revision to SEMI E181-0424 - Specification for Panel FOUP for Panel Level Packaging	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>
7332	SNARF	Next Gen Assembly / Test Material Handling TF	New Standard: Specification for Large JEDEC™ Tray Stack Loadport
7333	SNARF	Panel Level Packaging Panel FOUP TF	Revision to add a new Subordinate Standard, SPECIFICATION FOR PANEL FOUP LOADPORT GROUND BASED VEHICLE DELIVERY EXCLUSION VOLUME to SEMI E182 SPECIFICATION FOR PANEL FOUP LOADPORT FOR PANEL LEVEL PACKAGING'

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>
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

<i>#</i>	<i>When</i>	<i>TF</i>	<i>Details</i>
7333	Cycle 6 or 7, 2025	Panel Level Packaging Panel FOUP TF	Revision to add a new Subordinate Standard, SPECIFICATION FOR PANEL FOUP LOADPORT GROUND BASED VEHICLE DELIVERY EXCLUSION VOLUME

Table 8 Authorized Ballots

#	When	TF	Details
			to SEMI E182 SPECIFICATION FOR PANEL FOUR LOADPORT FOR PANEL LEVEL PACKAGING'
7172	Cycle 7 or 8, 2025	Next Gen Assembly / Test Material Handling TF	New Standard: Specification for Next Gen Assembly / Test Carrier

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
PIC_2025041 8-1	SEMI Staff	Ask Minutes format update for the part of leader change to HQ
PIC_2025041 8-2	SEMI Staff	Doc#6896: Contact HQ to get the details (what we do for future)

Table 13 Previous Meeting Action Items

Item #	Assigned to	Details
20241212-1	SEMI Staff and Komatsu san	Contact the publish division to improve check the quality of image of Standards, especially E182 (Doc # 7290) -> Done
20241212-2	SEMI Staff	Update the part "(see Regulations ¶ 16.3.1.1)" of bias on Ballot Sheet and check other points too. -> Done
20241212-3	SEMI Staff	Question about the regulations *E182: Check the regulations whether it is possible to get SNARF approval for main revision before published the standard or should be got after publication. -> Done
20241212-4	SEMI Staff	3 SNARF (1: PLP FOUP TF / 2: Next Gen TF) 2-week review -> GCS Approval -> Done



1 Welcome, Reminders, and Introductions

Yasuhisa Ito (MURATA MACHINERY, LTD.) called the meeting to order at 9:00. 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 Review of Previous Meeting Minutes

The TC Chapter reviewed the minutes of the previous meeting.

Motion:	Approve the minutes with Amended “Table 1 and 2”
By / 2nd:	Takayuki Nishimura, SCREEN Semiconductor Solutions Co., Ltd. / Daisuke Sado, DAIHEN Corporation
Discussion:	None
Vote:	Result: 13-Y 0-N, Motion Passed

Attachment: 2_ 20241212 Japan PIC Committee Minutes_updated0418

3 Liaison Reports

3.1 *PI&C North America TC Chapter*

Takeaki Hirabara (SEMI Japan) reported for the TC Chapter as attached slides.

Attachment: 3_ NA PIC Liaison Report Feb2025 v1

3.2 *JRSC Report*

Hirofumi Kanno (SEMI Japan) reported points related to the Physical Interfaces & Carriers Japan TC Chapter verbally.

4 SEMI Staff Report

Takeaki Hirabara gave the SEMI Staff Report. Of notes:

- Introduction of 2025 calendar of SEMICON events.
- Announcement that postponement of enforcement of Connect@SEMI transition implementation

Attachment: 4_ Staff Report Feb 2025 v3_AprilJ

5 Ballot Review

5.1 Document # 7329, Line Item Revision to SEMI E181-0424 - Specification for Panel FOUNDED for Panel Level Packaging

5.1.1 Line Item #1: Correction of inequality sign in Figure 2 and add the extended flange area to Figure 18 → Pass as balloted. Refer attachment for more details.

Attachment: 5_ A&R_7329

6 Subcommittee and Task Force Reports

6.1 *Global PIC Standards Maintenance TF*

No reportable matters. TF will check 5 years review for the next meeting.



6.2 Japan Electron Microscopy Workflow liaison TF

Kyoichiro Asayama reported based on the attached slides.

Attachment: 6_SEMI EMWF TF -PIC Update April 18 2025

6.3 Panel Level Packaging Panel FOUP TF

Shoji Komatsu reported based on the attached slides.

Attachment: 7_Panel FOUP TF report_20250418

6.4 Next Gen Assembly / Test Material Handling TF

Stefan Radloff and Shoji Komatsu reported based on the attached slides.

Attachment: 8_NGAT TF April J-PIC update

6.5 [Liaison: 3D Packaging & Integration JA TC Chapter] Panel Level Packaging Glass Carrier TF

No reportable matters.

6.6 [Liaison: 3D Packaging & Integration NA TC Chapter] Panel Level Packaging Panel TF

No reportable matters.

7 Old Business

7.1 Project Period Review

None.

7.2 5 Year Review

None.

8 New Business

8.1 Voting for IP check, safety check of 2 PCR's (Corrected the title of the figure - SEMI E181.3 Specification for Panel FOUP for 600 to 600 mm Panel Size and 12 Slots / Corrected the title of the figure - SEMI E181.4 Specification for Panel FOUP for 600 to 600 mm Panel Size and 6 Slots Having) will be held on next meeting.

- E181.3 Specification for Panel FOUP for 600 to 600 mm Panel Size and 12 Slots / Corrected the title of the figure: Skipped to next meeting because Section 5.1 description needs to change. It is necessary to align the document title, section 5 header, and description 5.1.
- SEMI E181.4 Specification for Panel FOUP for 600 to 600 mm Panel Size and 6 Slots Having: Skipped to next meeting because Section 5.1 description needs to change. It is necessary to align the document title, section 5 header, and description 5.1.

8.2 Daisuke Sado announced his career change, and he told his intention keeping the role of co-chairs of PIC Japan TC chapter.

9 Next Meeting and Adjournment

10:00am – 1:00pm (JST), Friday, September 26, 2025 @ SEMI Japan office and OVTCCM. See <http://www.semi.org/standards-events> for the current list of events.

Adjournment: 12:10



Respectfully submitted by:

Takeaki Hirabara

Standards & EHS

SEMI Japan

Email: thirabara@semi.org

Minutes tentatively approved by:

Tsuyoshi Nagashima (Miraial)	May 16, 2025
Daisuke Sado (DAIHEN)	May 20, 2025
Yasuhisa Ito (MURATA MACHINERY)	May 20, 2025

Table 14 Index of Available Attachments#1

<i>Title</i>	<i>Title</i>
1 Required_Meeting_Element Dec 2024_JPupdated	2 20241212 Japan PIC Committee Minutes_updated0418
3 NA PIC Liaison Report Feb2025 v1	4 Staff Report Feb 2025 v3_AprilJ
5 A&R_7329	6 SEMI EMWF TF -PIC Update April 18 2025
7 Panel FOUP TF report_20250418	8 NGAT TF April J-PIC update

#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.