Physical Interfaces & Carriers Japan TC Chapter
Meeting Summary and Minutes

Japan Summer Meetings 2023

Friday, July 21, 2023, 13:30-16:30 (JST)
SEMI Japan office (via OVTCCM) Hybrid

TC Chapter Announcements

Next TC Chapter Meeting

Thursday, December 14, 2023,13:00-16:00[JST] @Tokyo Big Sight (via OVTCCM) Hybrid in conjunction with the SEMICON Japan

Table 1 Meeting Attendees

Italics indicate virtual participants.

Co-Chairs: Ito Yasuhisa (MURATA MACHINERY), Tsuyoshi Nagashima (Miraial Co., Ltd.), Daisuke Sado (DAIHEN Corporation)

SEMI Staff: Mami Nakajo

Company	*Last*	*First*	*Company*	*Last*	*First*
Hirata Corporation	*Toyoda*	*Noriyoshi*	TOKYO SEIMITSU CO., LTD.	Taniguchi	Naomune
DAIFUKU	Suzuki	Tomoko	Global Net Corp	Shida	Hiroyuki
Hirata Corporation	*Kanazawa*	*Kenji*	*SINFONIA TECHNOLOGY CO., LTD.*	*Suzuki*	*Atsushi*
Daihen Corporation	Sado	Daisuke	MURATA MACHINERY	Ito	Yasuhisa
Acteon NEXT LLC	*Komatsu*	*Shoji*	*TDK*	*Okabe*	*Tsutomu*
KOKUSAI ELECTRIC CORPORATION	*Matsuda*	*Mitsuhiro*	SINFONIA TECHNOLOGY	Matsukubo	Taisuke
Miraial Co., Ltd.	Nagashima	Tsuyoshi	SEMI Japan	Nakajo	Mami
Hirata Corporation	Toyoda	Noriyoshi			

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*
None		

#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*
R6897	Ratification Ballot Revision to SEMI E92-0302E(Reapproved 0615), SPECIFICATION FOR 300 MM LIGHT WEIGHT AND COMPACT BOX OPENER/LOADER TO TOOL-INTEROPERABILITY STANDARD (Bolts/Light)	**Passed**	

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*
TBD	SNARF	Panel Level Packaging (PLP) Panel FOUP Task Force	Line Item Revision to SEMI E181-0423 - SPECIFICATION FOR PANEL FOUP FOR PANEL LEVEL PACKAGING, SEMI E181.1-0423 - SPECIFICATION FOR PANEL FOUP FOR 510 mm – 515 mm PANEL SIZE and 12 SLOTS, SEMI E181.2-0423 - SPECIFICATION FOR PANEL FOUP FOR 510 mm – 515 mm PANEL SIZE and 6 SLOTS, SEMI E181.3-0423 - SPECIFICATION FOR PANEL FOUP FOR 600 mm – 600 mm PANEL SIZE and 12 SLOTS, and SEMI E181.4-0423 - SPECIFICATION FOR PANEL FOUP FOR 600 mm – 600 mm PANEL SIZE and 6 SLOTS
TBD	SNARF	Panel Level Packaging (PLP) Panel FOUP Task Force	Line Item Revision to Line Item Revision to SEMI E182-0621 - SPECIFICATION FOR PANEL FOUP LOADPORT FOR PANEL LEVEL PACKAGING

#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*
TBD	Cycle7-2023	Panel Level Packaging (PLP) Panel FOUP Task Force	Line Item Revision to SEMI E181-0423 - SPECIFICATION FOR PANEL FOUP FOR PANEL LEVEL PACKAGING, SEMI E181.1-0423 - SPECIFICATION FOR PANEL FOUP FOR 510 mm – 515 mm PANEL SIZE and 12 SLOTS, SEMI E181.2-0423 - SPECIFICATION FOR PANEL FOUP FOR 510 mm – 515 mm PANEL SIZE and 6 SLOTS, SEMI E181.3-0423 - SPECIFICATION FOR PANEL FOUP FOR 600 mm – 600 mm PANEL SIZE and 12 SLOTS, and SEMI E181.4-0423 - SPECIFICATION FOR PANEL FOUP FOR 600 mm – 600 mm PANEL SIZE and 6 SLOTS
TBD	Cycle7-2023	Panel Level Packaging (PLP) Panel	Line Item Revision to Line Item Revision to SEMI E182-0621 - SPECIFICATION FOR PANEL FOUP LOADPORT FOR PANEL LEVEL PACKAGING

Table 8 Authorized Ballots

#	When	TF	Details
		FOUP Task Force	

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

#	TF	Title	Expiration Date
None			

Table 10 SNARF(s) Abolished

#	TF	Title
None		

Table 11 Standard(s) to receive Inactive Status

Standard Designation	Title
None	

Table 12 New Action Items

Item #	Assigned to	Details
20230721-01	SEMI Staff	To notify SEMI NA Staff that the approval results regarding Reapproval of SEMI E72-1016 are missing in the NA Liaison Report.
20230721-02	SEMI Staff	To change the Initiating Region of SEMI E152-0619 from Japan to NA in the 5-year List
20230721-03	Global PIC Standards Maintenance TF	To prepare and submit Line Item Revision to SEMI E181-0423, E181.1-0423, E181.2-0423, E181.3-0423, E181.4-0423 and Line Item Revision to SMI E182-0621 in Cycle 07-2023
20230721-04	Global PIC Standards Maintenance TF	To prepare SNARF and Document of revision to SEMI E185 by the next TC chapter meeting

Table 13 Previous Meeting Action Items

Item #	Assigned to	Details
20230323-01	SEMI Staff	To submit A&R forms of 7000, Line Item Revision of SEMI E84-1109 (Reapproved 1217) - Specification for Enhanced Carrier Handoff Parallel I/O Interface>Closed
20230323-02	SEMI Staff	To propose HQ to replace the word “SEE”, which is a biased term, on SEMI® Standards Required Meeting Elements Slide 6 with “Refer to”. Other biased terms should be replaced as well.>Closed

1 Welcome, Reminders, and Introductions

Daisuke Sado (DAIHEN Corporation) called the meeting to order at 13:30. The meeting reminders on antitrust issues, intellectual property issues and holding meetings with international attendance were reviewed. Attendees introduced themselves.

Attachment: 01-02_Required Element Nov 2022_E+J (new template),

2 Review of Previous Meeting Minutes

The TC Chapter reviewed the minutes of the previous meeting.

Motion:	Approve the previous minutes as edited
By / 2nd:	Shoji Komatsu /(Acteon NEXT LLC) / Noriyoshi Toyoda (Hirata Corporation)
Discussion:	None
Vote:	12 in favor and 0 opposed. **Motion Passed.**

Attachment: PIC Mins_20230323_draft_r1.1,

3 Liaison Reports

3.1 *PIC North America TC Chapter*

Mami Nakajo (SEMI) gave the SEMI Staff Report. based on the material.

Action Item: 20230721-01(SEMI Staff) To notify SEMI NA Staff that the approval results regarding Reapproval of SEMI E72-1016 are missing in the NA Liaison Report.

Attachment: NA PIC Liaison Report July2023 v1

4 SEMI Sta*ff Report*

Mami Nakajo (SEMI) gave the SEMI Staff Report. based on the material.

Attachment: 4_Staff Report July 2023 v1,

5 Ballot Review

None

6 Subcommittee and Task Force Reports

6.1 Global PIC Standards Maintenance TF

Shoji Komatsu (Acteon NEXT LLC) reported for the task force. Of note:

As of the following document, Shoji Komatsu (Acteon NEXT LLC) pointed out its Initiating Region is America not Japan.

- SEMI E152-0619, Specification for Mechanical Features of EUV Pod for 150 mm EUVL Reticles

Action Item: 20230721-02(SEMI Staff) To change the Initiating Region of SEMI E152-0619 from Japan to NA in the 5-year List t.

Mami Nakajo (SEMI) reported the Ratification Ballot Result.

Doc.R6897 Ratification Ballot Revision to SEMI E92-0302E(Reapproved 0615),SPECIFICATION FOR 300 MM LIGHT WEIGHT AND COMPACT BOX OPENER/LOADER TO TOOL-INTEROPERABILITY STANDARD (Bolts/Light)

ISC Audits & Reviews SC Summary (Oct 12, 2022) Passed

6.2 Japan Electron Microscopy Workflow liaison TF

Mami Nakajo (SEMI) reported for the task force on be half of Kyoichiro Asayama (JEOL) .

- The TF was divided into two groups to discuss the ID mark to be written on the LCC and the Standard for the pocket to hold the LC after the TF meeting at the end of May 2023.
- The first draft was reported at the TF meeting on July 11.
- Discussed modifications and changes and concluded by August 24
- The TF will document the draft and aim to launch the ballot at the end of this year.

6.3 Panel Level Packaging Panel FOUP TF

Shoji Komatsu (Acteon NEXT LLC) reported for the task force as attached slides.

Attachment: Panel FOUP TF report_20230712

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

There is no update.

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

There is no update.

7 Old Business

7.1 Project Period Review – None

7.2 *5 years review – Please see §6.1*

8 New Business

8.1 Proposal of New Activity

Shoji Komatsu (Acteon NEXT) reported on this topic.

SNARF Proposal for Line Item Revision to SEMI E181-0423 SPECIFICATION FOR PANEL FOUP FOR PANEL LEVEL PACKAGING, SEMI E181.1-0423 - SPECIFICATION FOR PANEL FOUP FOR 510 mm – 515 mm PANEL SIZE and 12 SLOTS, SEMI E181.2-0423 - SPECIFICATION FOR PANEL FOUP FOR 510 mm – 515 mm PANEL SIZE and 6 SLOTS, SEMI E181.3-0423 - SPECIFICATION FOR PANEL FOUP FOR 600 mm – 600 mm PANEL SIZE and 12 SLOTS, SEMI E181.4-0423 - SPECIFICATION FOR PANEL FOUP FOR 600 mm – 600 mm PANEL SIZE and 6 SLOTS

Motion:	Approve the SNARF for: Line Item Revision to SEMI E181-0423 SPECIFICATION FOR PANEL FOUP FOR PANEL LEVEL PACKAGING, SEMI E181.1-0423 - SPECIFICATION FOR PANEL FOUP FOR 510 mm – 515 mm PANEL SIZE and 12 SLOTS, SEMI E181.2-0423 - SPECIFICATION FOR PANEL FOUP FOR 510 mm – 515 mm PANEL SIZE and 6 SLOTS, SEMI E181.3-0423 - SPECIFICATION FOR PANEL FOUP FOR 600 mm – 600 mm PANEL SIZE and 12 SLOTS, SEMI E181.4-0423 - SPECIFICATION FOR PANEL FOUP FOR 600 mm – 600 mm PANEL SIZE and 6 SLOTS
By / 2nd:	Shoji Komatsu (Acteon NEXT) / Mitsuhiro Matsuda (KOKUSAI ELECTRIC CORPORATION)
Discussion:	None
Vote:	12 in favor and 0 opposed. **Motion Passed.**

Attachment: SNARF_E181_R1.1

8.1.1 SNARF Proposal for Line Item Revision to Line Item Revision to SEMI E182-0621 - SPECIFICATION FOR PANEL FOUP LOADPORT FOR PANEL LEVEL PACKAGING

Motion:	Approve the SNARF for: Line Item Revision to Line Item Revision to SEMI E182-0621 - SPECIFICATION FOR PANEL FOUP LOADPORT FOR PANEL LEVEL PACKAGING
By / 2nd:	Shoji Komatsu (Acteon NEXT) / Mitsuhiro Matsuda (KOKUSAI ELECTRIC CORPORATION)
Discussion:	None
Vote:	12 in favor and 0 opposed. **Motion Passed.**

Attachment: SNARF_E182_R1.1

Motion:	Authorize the Document for Letter Ballot for Line Item Revision to SEMI E181-0423 SPECIFICATION FOR PANEL FOUP FOR PANEL LEVEL PACKAGING, SEMI E181.1-0423 - SPECIFICATION FOR PANEL FOUP FOR 510 mm – 515 mm PANEL SIZE and 12 SLOTS, SEMI E181.2-0423 - SPECIFICATION FOR PANEL FOUP FOR 510 mm – 515 mm PANEL SIZE and 6 SLOTS, SEMI E181.3-0423 - SPECIFICATION FOR PANEL FOUP FOR 600 mm – 600 mm PANEL SIZE and 12 SLOTS, SEMI E181.4-0423 - SPECIFICATION FOR PANEL FOUP FOR 600 mm – 600 mm PANEL SIZE and 6 SLOTS and Line Item Revision to Line Item Revision to SEMI E182-0621 - SPECIFICATION FOR PANEL FOUP LOADPORT FOR PANEL LEVEL PACKAGING for Cycle7-2023
By / 2nd:	Shoji Komatsu (Acteon NEXT) / Mitsuhiro Matsuda (KOKUSAI ELECTRIC CORPORATION)
Discussion:	None
Vote:	12 in favor and 0 opposed. **Motion Passed.**

Action Item: 20230721-03 (Global PIC Standards Maintenance TF) To prepare and submit Line Item Revision to SEMI E181-0423, E181.1-0423, E181.2-0423, E181.3-0423, E181.4-0423 and Line Item Revision to SMI E182-0621 in Cycle 07-2023

8.2 *Proposed Revision to SEMI E185-1222, Specification for 300 mm Tape Frame FOUP*

Shoji Komatsu (Acteon NEXT) addressed the committee on this topic.

1) Correct the value of Z0 for the maximum height of the FOUP
2) Add y6 to §7.4.3 as the wall (back) of the FOUP is not End effecter exclusion area is not Specified.

Action Item: **20230721-04**,(*Global PIC Standards Maintenance TF*) to prepare SNARF and ballot by the next TC meeting.

9 Action Item Review

9.1 Open Action Items

Item #	*Assigned to*	*Details*
20230323-01	SEMI Staff	To submit A&R forms of 7000, Line Item Revision of SEMI E84-1109 (Reapproved 1217) - Specification for Enhanced Carrier Handoff Parallel I/O Interface>Closed
20230323-02	SEMI Staff	To propose HQ to replace the word “SEE”, which is a biased term, on SEMI® Standards Required Meeting Elements Slide 6 with “Refer to”. Other biased terms should be replaced as well.>Closed

9.2 New Action Items

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Item #	*Assigned to*	*Details*
20230721-02	SEMI Staff	To change the Initiating Region of SEMI E152-0619 from Japan to NA in the 5-year List
20230721-03	Global PIC Standards Maintenance TF	To prepare and submit Line Item Revision to SEMI E181-0423, E181.1-0423, E181.2-0423, E181.3-0423, E181.4-0423 and Line Item Revision to SMI E182-0621 in Cycle 07-2023
20230721-04	Global PIC Standards Maintenance TF	To prepare SNARF and Document of revision to SEMI E185 by the next TC chapter meeting

10 Next Meeting and Adjournment

The next meeting is scheduled for Thursday December 14, 13:00-16:00[JST] @Tokyo Big Sight (via OVTCCM) Hybrid in conjunction with the SEMICON Japan.

See http://www.semi.org/standards-events for the current list of events.

Adjournment: [15:00]>.

Respectfully submitted by:

Mami Nakajo
Standards & EHS
SEMI Japan
Phone: 81.3.3222.5949
Email: mnakajo@semi.org

Minutes tentatively approved by:

Tsuyoshi Nagashima (Miraial), Co-chair	August 16, 2023
Daisuke Sado (DAIHEN), Co-chair	August 17, 2023
Yasuhisa Ito (MURATA MACHINERY), Co-chair	August 17, 2023

Table 14 Index of Available Attachments#1

Title	*Title*
01-02_Required Element Nov 2022_E+J (new template)	Panel FOUP TF report_20230712
PIC Mins_20230323_draft_r1.1	SNARF_E181_R1.1
NA PIC Liaison Report July2023 v1	SNARF_E182_R1.1
4_Staff Report July 2023 v1,	

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.