



# Physical Interfaces & Carriers Japan TC Chapter

## Meeting Summary and Minutes

Japan Winter Meetings 2022 in conjunction with SEMICON Japan 2022

Thursday, December 15, 2022, 13:30-16:30 (JST)

via OVTCCM

### TC Chapter Announcements

*Next TC Chapter Meeting*

Thursday, March 23, 2023, 13:30-16:30 [JST] @ SEMI Japan office (via OVTCCM) Hybrid

### Table 1 Meeting Attendees

*Italics indicate virtual participants*

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

**SEMI Staff:** Mami Nakajo

<i>Company</i>	<i>Last</i>	<i>First</i>	<i>Company</i>	<i>Last</i>	<i>First</i>
DAIFUKU	Suzuki	Tomoko	TOKYO SEIMITSU	Taniguchi	Naomune
Acteon NEXT	Komatsu	Shoji	JEOL	Asayama	Kyoichiro
Marubeni Plax	Igeta	Luke	SINFONIA TECHNOLOGY CO., LTD.	Suzuki	Atsushi
TDK Corporation	Okabe	Tsutomu	Hirata Corporation	Kanazawa	Keiji
<i>KOKUSAI ELECTRIC CORPORATION</i>	<i>Matsuda</i>	<i>Mitsuhiro</i>	DISCO Corporation	Kobinata	Kyosuke
Shin-Etsu Polymer Co., Ltd.	Shida	Hiroyuki	Sony Corporation	Gotoh	Hisashi
Mirai Co., Ltd.	Nagashima	Tsuyoshi	<i>Gudeng Precision Industrial Co., Ltd.</i>	<i>Lin</i>	<i>Kevin</i>
MURATA MACHINERY	Ito	Yasuhisa	SEMI Japan	Nakajo	Mami
DAIHEN	Sado	Daisuke			

### Table 2 Leadership Changes

None

### Table 3 Committee Structure Changes

None

### Table 4 Ballot Results

<i>Document #</i>	<i>Document Title</i>	<i>Committee Action</i>
6936	Line Item Revision of SEMI E182-0621 - Specification for Panel FOUP Loadport for Panel Level Packaging	
LI-1	Optimize the resolution of figures	<b>Passed as ballot</b>
LI-2	Redefinition of LB and clarification of lower space for Loadport	<b>Passed with editorial changes</b>
LI-3	Replace the biased terms	<b>Passed as ballot</b>
LI-4	Relaxing BOLTS screw position tolerances	<b>Passed as ballot</b>

**Table 4 Ballot Results**

<i>Document #</i>	<i>Document Title</i>	<i>Committee Action</i>
6936	Add Related Information in SEMI E182-0621: SPECIFICATION FOR PANEL FOUPL LOADPORT 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 Activities Approved by the GCS between meetings of the TC Chapter**

None

**Table 6 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>
TBD	SNARF	Global PIC Maintenance Task Force	SEMI E84-1109 (Reapproved 1217): Specification for Enhanced Carrier Handoff Parallel I/O Interface

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

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

**Table 7 Authorized Ballots**

<i>#</i>	<i>Type</i>	<i>SC/TF/WG</i>	<i>Details</i>
TBD	Cycle1or/2-2023	Global PIC Maintenance Task Force	SEMI E84-1109 (Reapproved 1217): Specification for Enhanced Carrier Handoff Parallel I/O Interface

**Table 8 SNARF(s) Granted a One-Year Extension**

None

**Table 9 SNARF(s) Abolished**

None

**Table 10 Standard(s) to receive Inactive Status**

<i>Standard Designation</i>	<i>Title</i>
None	

**Table 11 New Action Items**

<i>Item #</i>	<i>Assigned to</i>	<i>Details</i>
20221215-01	SEMI Staff	To submit A&R forms of 6936, Line Item Revision of SEMI E182-0621 to ISC A&R
20221215-02	SEMI Staff	To submit Letter Ballot SNARF for Line Item Revision of SEMI E84-1109(Reapproved 1217) for Cycle1 or 2,2023
20221215-03	SEMI Staff	To send GCS vote regarding adding Related Information to SEMI E182 and submit A&R forms after pass of GCS.

**Table 12 Previous Meeting Action Items**

<i>Item #</i>	<i>Assigned to</i>	<i>Details</i>
20220527-01	Global PIC Standards Maintenance TF	To prepare SNARF for Reapproval of SEMI E84-1109 (Reapproved 1217), Specification for Enhanced Carrier Handoff Parallel I/O Interface > Closed
20220902-01	SEMI Staff	To submit A&R forms of 6898,6899,6900,6901 & 6902 to ISC A&R>Closed

## 1 Welcome, Reminders, and Introductions

Tsuyoshi Nagashima (Miraial Co., Ltd.) 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.

<b>Motion:</b>	Approve the previous meeting minutes of the PIC Japan TC Chapter on December 17,2021 as written.
<b>By / 2<sup>nd</sup>:</b>	Shoji Komatsu (Acteon NEXT) / Naomune Taniguchi ( TOKYO SEIMITSU CO., LTD.)
<b>Discussion:</b>	None
<b>Vote:</b>	15 in favor and 0 opposed. <b>Motion Passed.</b>

**Attachment:** 02-01\_PIC Mins\_20220902\_v1.1\_approved

## 3 Liaison Reports

### 3.1 PIC North America TC Chapter

Shoji Komatsu (Acteon NEXT) gave the report based on the materials.

**Attachment:** 03-01\_NA PIC Liaison Report Nov2022 v1

## 4 SEMI Staff Report

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

**Attachment:** 04-01 Staff Report 2022Dec + Awards

## 5 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.

### 5.1 Cycle 7-2022 submitted by the Japan TC Chapter

#### 5.1.1 Doc6936, Line Item Revision of SEMI E182-0621 - Specification for Panel FOUP Loadport for Panel Level Packaging

- Line Item #1: Optimize the resolution of figures
- Line Item #2: Redefinition of LB and clarification of lower space for Loadport
- Line Item #3: Replace the biased terms

- Line Item #4: Relaxing BOLTS screw position tolerances

<b>Motion:</b>	This is not a Safety Document, when all safety-related information is removed, the Document is still technically sound and complete. (Regulations ¶ 8.7.1)
<b>By / 2<sup>nd</sup>:</b>	Shoji Komatsu (Acteon NEXT) / Daisuke Sado (DAIHEN Corporation)
<b>Discussion:</b>	None
<b>Vote:</b>	14 in favor and 0 opposed. <b>Motion Passed.</b>

<b>Motion:</b>	Line item(s) [1], [2] [3]and [4] passed TC Chapter review with editorial changes and will be forwarded to the ISC A&R SC for procedural review.
<b>By / 2<sup>nd</sup>:</b>	Shoji Komatsu (Acteon NEXT) / Daisuke Sado (DAIHEN Corporation)
<b>Discussion:</b>	None
<b>Vote:</b>	14 in favor and 0 opposed. <b>Motion Passed.</b>

**Attachment:** 6936\_A&R\_final

## 6 Subcommittee and Task Force Reports

### 6.1 300 mm Tape Frame PI&C TF

Hisashi Gotoh ( Sony Corporation) requested to disband the TF as the document was published and the activity was completed.

<b>Motion:</b>	To disband disband the 300 mm Tape Frame PI&C TF.
<b>By / 2<sup>nd</sup>:</b>	Naomune Taniguchi ( TOKYO SEIMITSU CO., LTD.) / Shoji Komatsu (Acteon NEXT)
<b>Discussion:</b>	None
<b>Vote:</b>	15 in favor and 0 opposed. <b>Motion passed.</b>

### 6.2 Global PIC Standards Maintenance TF

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

- 6.2.1 SEMI E84-1109 (Reapproved 1217): Specification for Enhanced Carrier Handoff Parallel I/O Interface  
→The TF prepared SNARF for the reapproval this Standard.

<b>Motion:</b>	Approve the SNARF for: Line Item Revision to SEMI E84-1109, Specification for Enhanced Carrier Handoff Parallel I/O Interface
<b>By / 2<sup>nd</sup>:</b>	Shoji Komatsu (Acteon NEXT) / Mitsuhiro Matsuda ( KOKUSAI ELECTRIC CORPORATION)
<b>Discussion:</b>	None
<b>Vote:</b>	12 in favor and 0 opposed. <b>Motion Passed.</b>

<b>Motion:</b>	Authorize the Document for Letter Ballot SNARF for: Line Item Revision to SEMI E84-1109, Specification for Enhanced Carrier Handoff Parallel I/O Interface for Cycle1 or 2 /2023
<b>By / 2<sup>nd</sup>:</b>	Shoji Komatsu (Acteon NEXT) / Mitsuhiro Matsuda ( KOKUSAI ELECTRIC CORPORATION)
<b>Discussion:</b>	None
<b>Vote:</b>	12 in favor and 0 opposed. <b>Motion Passed.</b>

**Attachment:** SNARF\_E84\_ACT\_LNN\_r1



6.3 Japan Electron Microscopy Workflow liaison TF

Kyoichiro Asayama (JEOL) reported for the task force as attached slides.

Attachment: 06-03\_221215\_PI&C EMWF

6.4 Panel Level Packaging Panel FOUP TF

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

Attachment: 06-04\_Panel FOUP TF meeting minutes rev0-20221215

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

Mami Nakajo (SEMI) reported for the task force as attached slides.

Attachment: 06-05\_PLP Glass Carrier TF Status\_20221215

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

Mami Nakajo (SEMI) reported for the task force. Of note:

There is no update.

7 Old Business

7.1 Project Period Review – None

7.2 5 years review

7.2.1 SEMI E84-1109 (Reapproved 1217): Specification for Enhanced Carrier Handoff Parallel I/O Interface

→Please see Section6.2

8 New Business

8.1 Proposal of New Activity

8.1.1 SNARF Proposal for Reapproval of SEMI E84-1109 (Reapproved 1217) - Specification for Enhanced Carrier Handoff Parallel I/O Interface

→Please see Section6.2

8.2 Approval of Adding Unballoted Related Information in SEMI E182-0621, SPECIFICATION FOR PANEL FOUP LOADPORT FOR PANEL LEVEL PACKAGING

<b>Motion:</b>	This is not a Safety Document, when all safety-related information is removed, the Document is still technically sound and complete. (Regulations ¶ 8.7.1)
<b>By / 2<sup>nd</sup>:</b>	Shoji Komatsu (Acteon NEXT) / Daisuke Sado (DAIHEN Corporation)
<b>Discussion:</b>	None
<b>Vote:</b>	13 in favor and 0 opposed. <b>Motion Passed.</b>

<b>Motion:</b>	This Document passed TC Chapter review and will be forwarded to the GCS for their approval.
<b>By / 2<sup>nd</sup>:</b>	Shoji Komatsu (Acteon NEXT) / Daisuke Sado (DAIHEN Corporation)
<b>Discussion:</b>	None
<b>Vote:</b>	14 in favor and 0 opposed. <b>Motion Passed.</b>



**Attachment:** Unballoted Info \_E182\_r1

## 9 Action Item Review

### 9.1 Open Action Items

<i>Item #</i>	<i>Assigned to</i>	<i>Details</i>
20220527-01	Global PIC Standards Maintenance TF	To prepare SNARF for Reapproval of SEMI E84-1109 (Reapproved 1217), Specification for Enhanced Carrier Handoff Parallel I/O Interface > Closed
20220902-01	SEMI Staff	To submit A&R forms of 6898,6899,6900,6901 & 6902 to ISC A&R>Closed

### 9.2 New Action Items

<i>Item #</i>	<i>Assigned to</i>	<i>Details</i>
20221215-01	SEMI Staff	To submit A&R forms of 6936, Line Item Revision of SEMI E182-0621 to ISC A&R
20221215-02	SEMI Staff	To submit Letter Ballot SNARF for Line Item Revision of SEMI E84-1109(Reapproved 1217) for Cycle1 or 2,2023
20221215-03	SEMI Staff	To send GCS vote regarding adding Related Information to SEMI E182 and submit A&R forms after pass of GCS.

## 10 Next Meeting and Adjournment

The next committee meeting is scheduled for Thursday, March 23,2023,13:30-16:30 [JST] @ SEMI Japan office, Tokyo (via OVTCCM) Hybrid.

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

Adjournment: 16:30

Respectfully submitted by:

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

Minutes tentatively approved by:

Tsuyoshi Nagashima (Mirai), Co-chair	January 06, 2023
Daisuke Sado (Daihen), Co-chair	December 27, 2022
Ito Yasuhisa (Murata Machinery), Co-chair	January 12, 2023

**Table 13 Index of Available Attachments#1**

<i>Title</i>	<i>Title</i>
01-02_Required Element Nov 2022_E+J (new template)	SNARF_E84_ACT_LNN_r1
02-01_PIC Mins_20220902_v1.1_approved	06-03_221215_PI&C EMWF
03-01_NA PIC Liaison Report Nov2022 v1	06-04_Panel FOUP TF meeting minutes rev0-20221215
04-01 Staff Report 2022Dec + Awards	06-05_PLP Glass Carrier TF Status_20221215



**Table 13 Index of Available Attachments#1**

6936_A&R_final	Unballoted Info _E182_r1
----------------	--------------------------

#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](http://www.semi.org). For additional information or to obtain individual attachments, please contact [SEMI Staff Name] at the contact information above.