



## 3D Packaging and Integration Japan TC Chapter Meeting Summary and Minutes

Japan Standards Summer 2019 Meetings

Friday, June 7, 2019, 15:00–17:00

SEMI Japan office, Tokyo, Japan

### TC Chapter Announcements

Next TC Chapter Meeting

Friday, October 11, 2019, 15:00-17:00

SEMI Japan office, Tokyo, Japan

### Table 1 Meeting Attendees

*Italics indicate virtual participants*

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

**SEMI Staff:** Chie Yanagisawa (SEMI Japan)

<i>Company</i>	<i>Last</i>	<i>First</i>	<i>Company</i>	<i>Last</i>	<i>First</i>
AGC	Hashimoto	Takeshi	iNEMI	Tsuruya	Masahiro
AIST	Shimamoto	Haruo	Tokyo Seimitsu	Chiba	Kiyotaka
AiT	Kato	Kazunori	SEMI Japan	Yanagisawa	Chie

### Table 2 Leadership Changes

<i>WG/TF/SC/TC Name</i>	<i>Previous Leader</i>	<i>New Leader</i>
Panel Level Packaging (PLP) Glass Carrier Task Force	Not applicable *TF is newly formed.	Mark Takahashi (Namics Corporation)

### Table 3 Committee Structure Changes

<i>Previous WG/TF/SC Name</i>	<i>New WG/TF/SC Name or Status Change</i>
The TF is newly formed.	Panel Level Packaging (PLP) Glass Carrier TF

### Table 4 Ballot Results

<i>Document #</i>	<i>Document Title</i>	<i>Committee Action</i>
6497	Line Item Revision to SEMI G95-0314 with non-conforming title change to "Specification for Mechanical Features of 450 mm Load Port for Tape Frame Cassettes in The Backend Process"	
Line Item 1	Document title is changed based on A4-1-4 of procedure manual	<b>Passed</b> , with editorial change
6498	Reapproval of SEMI G96-1014 Test Method for Measurement of Chip (Die) Strength by Mean of Cantilever Bending	<b>Passed</b> , as balloted

Note 1: **Passed** ballots and line items will be submitted to the ISC Audit & Review Subcommittee for procedural review.

Note 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 prior to the Originating TC Chapter meeting**

#	Type	SC/TF/WG	Details
None			

**Table 6 Authorized Activities**

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

#	SC/TF/WG	Details
None		

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**

#	When	TF	Details
None			

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

#	TF	Title	Expiration Date
None			

**Table 9 SNARF(s) Abolished**

#	TF	Title
None		

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

Standard Designation	Title
SEMI G75-0698 (Reapproved 0615)	Standard Test Method of the Properties of Leadframe Tape
SEMI G81-0307 (Reapproved 0315)	Specification for Map Data Items

**Table 11 New Action Items**

Item #	Assigned to	Details
20190607-01	SEMI Staff	To forward the Ballot Review Reports to A&R.
20190607-02	SEMI Staff	To make announcement for Kick-off meeting of Panel Level Packaging (PLP) Glass Carrier Task Force

**Table 12 Previous Meeting Action Items**

Item #	Assigned to	Details
20190222-01	Chie Yanagisawa (SEMI Japan)	To check if SEMI HQ Standards assigns someone for proof reading for a ballot before entering the voting cycle in order to improve Standards document quality-> <b>OPEN</b>
20181015-01	Kazunori Kato (AiT)	To raise a necessity to manage SNARF revisions at the SPI Task Force. -> <b>CLOSE</b>

**Table 12 Previous Meeting Action Items**

<i>Item #</i>	<i>Assigned to</i>	<i>Details</i>
20181015-02	Kazunori Kato (AiT)	To bring the issue at the SPI Task force to improve the system that a document should be co-related with the one originally developed by a different GTC. This could let the related TC members aware of its development before the document release. -> <b>CLOSE</b>

## 1 Welcome, Reminders, and Introductions

Masahiro Tsuriya (iNEMI) called the meeting to order at 15:00. The meeting reminders on antitrust issues, intellectual property issues and holding meetings with international attendance were reviewed. Attendees introduced themselves.

**Attachment:** 01\_SEMI Standards Required Elements\_August2018\_E+J

## 2 Review of Previous Meeting Minutes

The TC Chapter reviewed the minutes of the previous meeting.

<b>Motion:</b>	To approve the previous meeting minutes of the 3D Packaging & Integration Japan TC Chapter on February 22, 2019 as written.
<b>By / 2<sup>nd</sup>:</b>	Kazunori Kato (AiT) / Haruo Shimamoto (AIST)
<b>Discussion:</b>	None
<b>Vote:</b>	4 in favor and 0 opposed. <b>Motion passed.</b>

**Attachment:** 02\_20190222\_3DPI-Japan\_MeetingMinutes\_Final

## 3 Liaison Reports

### 3.1 3D Packaging & Integration North America (NA) TC Chapter

Chie Yanagisawa (SEMI Japan) reported the 3D Packaging & Integration North America TC Chapter based on the report as attached.

**Attachment:** 03\_NA 3DP&I Liaison Report Apr2019 v4.1

### 3.2 3D Packaging & Integration Taiwan TC Chapter

Chie Yanagisawa (SEMI Japan) reported the 3D Packaging & Integration Taiwan TC Chapter based on the report as attached.

**Attachment:** 04\_20190326\_TW\_ 3D P&I TC Liaison Report v1.1

### 3.3 SEMI Staff Report

Chie Yanagisawa (SEMI Japan) gave the SEMI Staff Report. Of note:

- Japan Regional Standards Committee (JRSC) Topics – Standards Awards
- SEMI Japan Newsletter – Standards topics
- SEMI Global 2019 Calendar of Events

- Global Standards Meeting Schedule
- NA Standards Spring 2019 Meetings
- 2019 Critical Dates for SEMI Standards Ballots
- A&R Ballot Review
- SEMI Standards Publications, New Standards Published during the last 12 months

Kazunori Kato (AiT) introduced the SPI TF discussion on Connected@semi that SEMI HQ should provide the operation guideline and should improve functions per Regulations in order that the site to be used properly among Standards members. The follow-up is expected at the planning meeting to be held on August 30.

**Attachment:** 05\_SEMI Staff Report 2019\_0530\_v0.1

#### 4 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.

4.1 #6497 - Line Item Revision to SEMI G95-0314 with non-conforming title change to "Specification for Mechanical Features of 450 mm Load Port for Tape Frame Cassettes in The Backend Process"

4.1.1 Document title is changed based on A4-1-4 of procedure manual

4.2 #6498 - Reapproval of SEMI G96-1014 Test Method for Measurement of Chip (Die) Strength by Mean of Cantilever Bending

**Action Item:** 20190607-01, SEMI Staff to forward the Ballot Review Reports to A&R.

**Attachment:** 06\_#6497\_BallotReviewSheet, 07\_#6498\_BallotReviewSheet

#### 5 Subcommittee and Task Force Reports

##### 5.1 GCS Report

There has been no GCS voting between the previous TC Chapter meeting on February 22, 2019 and this meeting.

##### 5.2 3D Packaging & Integration 5 Year Review Task Force

Masahiro Tsuruya (iNEMI) reported that there are a few documents due for 5-year review and actions to those documents will be proposed at the Old Business section and the New Business section of this meeting later.

##### 5.3 JA 450mm Assembly and Test Die Preparation Task Force

Chie Yanagisawa (SEMI Japan) reported as follows on behalf of Sumio Masuchi (DISCO), the TF co-leader

- Ballot ##6497: Line Item Revision to SEMI G95-0314 with non-conforming title change to "Specification for Mechanical Features of 450 mm Load Port for Tape Frame Cassettes in The Backend Process"
  - Passed with editorial change at Ballot Review section of this meeting.

#### 5.4 Thin Chip Handling Task Force

Haruo Shimamoto (AIST) reported the task force that there has been no activity. Chie Yanagisawa (SEMI Japan) added the following information.

- Ballot #6424: New Standard: Test Method for Adhesive Strength for Adhesive Tray Used for Thin Chip Handling
  - Under proofing.

#### 5.5 3D Packaging & Integration Steering Group

Masahiro Tsuriya (iNEMI), the co-leader, reported as attached.

- New TFOF to be proposed at the New Business section of this meeting.

**Attachment:** 08\_3D-PKG SWG Meeting Minutes - 2019-04-08

#### 5.6 <PI&C liaison> Panel Level Packaging (PLP) Panel FOUP TF

Hiroyuki Shida (Shin-Etsu Polymer) reported the task force as attached. Of note:

- The following two SNARFs were approved at the PI&C Japan TC Chapter meeting held on December 12, 2018.
  - #6485: SNARF for: New Standard - SPECIFICATION FOR PANEL FOUP FOR PANEL LEVEL PACKAGING
  - #6486: SNARF for: New Standard - SPECIFICATION FOR PANEL FOUP LOADPORT FOR PANEL LEVEL PACKAGING
- Revision to the SNARFs and the ballot submission for Cycle 6-2019 to be proposed to GCS for approval.

**Attachment:** 09\_Panel FOUP TF report\_20190531

### 6 Old Business

#### 6.1 Project Period Review

There is no open SNARF to work.

#### 6.2 5-Year Review Check

The TC Chapter reviewed the documents list and the required actions will be proposed at the next meeting. The TC Chapter agreed to let the following two Standards inactive.

- SEMI G75-0698 (Reapproved 0615): Standard Test Method of the Properties of Leadframe Tape
- SEMI G81-0307 (Reapproved 0315): Specification for Map Data Items

### 7 New Business

#### 7.1 New Proposal for Panel Level Packaging (PLP) Glass Carrier

Takeshi Hashimoto (AGC) address the TC Chapter on this topic and it reviewed the TFOF.

<b>Motion:</b>	To approve the New TFOF of Panel Level Packaging (PLP) Glass Carrier with the leadership of Mark Takahashi (Namic Corporation)
<b>By / 2<sup>nd</sup>:</b>	Takeshi Hashimoto (AGC) / Kazunori Kato (AiT)
<b>Discussion:</b>	The TF needs to invite more participants.
<b>Vote:</b>	4 in favor and 0 opposed. <b>Motion passed.</b>

The kick-off meeting will be held on July 1, 2019 at SEMI Japan.

**Action Item:** 20190607-02, SEMI Staff to make announcement for Kick-off meeting of Panel Level Packaging (PLP) Glass Carrier Task Force

## 7.2 Collaboration with JEITA update

Kazunori Kato (AiT) reported that JEITA may ask for a collaboration with regards to the activity of thermal management and solder adhesive strength.

## 8 Action Item Review

### 8.1 Open Action Item

The TC Chapter reviewed the action items from the previous TC Chapter meetings held on October 15, 2018 and on February 22, 2019.

<i>Item #</i>	<i>Assigned to</i>	<i>Details</i>
20190222-01	Chie Yanagisawa (SEMI Japan)	To check if SEMI HQ Standards assigns someone for proof reading for a ballot before entering the voting cycle in order to improve Standards document quality-> <b>OPEN</b>
20181015-01	Kazunori Kato (AiT)	To raise a necessity to manage SNARF revisions at the SPI Task Force. -> <b>CLOSE, Details are provided as follows.</b>
20181015-02	Kazunori Kato (AiT)	To bring the issue at the SPI Task force to improve the system that a document should be co-related with the one originally developed by a different GTC. This could let the related TC members aware of its development before the document release. -> <b>CLOSE, Details are provided as follows.</b>

**8.1.1 Action Item 20181015-01:** Kazunori Kato (AiT) to raise a necessity to manage SNARF revisions at the SPI Task Force.

Background of this action item raised is as quoted from the meeting minutes on October 15, 2018.

*On introducing the following item as a revised part of the Procedure Manuals, a discussion was raised as below.*

*2.2.6 Conditions to Choose Revision of a SNARF or Creation of a New SNARF - The SNARF should be revised if the Draft Document deviates technically from the scope described in the SNARF or changes in the 'Intellectual Property Considerations' section, however in the following cases a new SNARF is required:*

- expected result of activity changes from Line Item revision(s) to a major revision, or*
- scope change beyond modification of existing scope items (i.e., deleting existing or adding new scope items), or*

- change of ballot type (i.e., reapproval to revision or vice versa), or
- introduction of new Line Item(s) (see ¶ 2.2.7.6.1).

*Hideaki Ogiwara (NaiGai Tech) commented that if a SNARF is created as a new one because it should be changed per the PM above cited, the new SNARF is given a new number, so it could be difficult to link with a new number assigned document with the old one.*

Kazunori Kato shared the result of Action Item 20181015-01 as follows.

The SPI TF suggested, as a solution, each TC Chapter should actively review SNARF by the other TC Chapter and/or by the related GCT at <http://downloads.semi.org/web/wstdsbal.nsf/NTS> periodically. In addition to that, chairs communicate with other GTC for SNARF revision if necessary.

**8.1.2 Action Item 20181015-02:** Kazunori Kato (AiT) to bring the issue at the SPI Task force to improve the system that a document should be co-related with the one originally developed by a different GTC. This could let the related TC members aware of its development before the document release.

Background of this action item raised is as quoted from the meeting minutes on October 15, 2018.

*The discussion comes from the action item, 20180205-04. SEMI E142 was firstly developed by the I&C NA TC Chapter and recently the I&C Korea TC Chapter makes a proposal for a revision. Because this document is closely related to backend, a notice should be given to the related TC(s) or TC members in such a case. The concerned TC members are afraid that such a document is published before they are aware of that. This kind of things happened before.*

*(Action Item 20180205-04 is Kazunori Kato (AiT) to invite the related companies to SEMI E142 revision activity.)*

Kazunori Kato said the result of Action Item 20181015-02 is the same suggestion by the SPI TF as Action Item 20181015-01.

## 8.2 New Action Item

The TC Chapter reviewed the following new action item.

Item #	Assigned to	Details
20190607-01	SEMI Staff	To forward the Ballot Review Reports to A&R.
20190607-02	SEMI Staff	To make announcement for Kick-off meeting of Panel Level Packaging (PLP) Glass Carrier Task Force

## 9 Next Meeting and Adjournment

The next meeting is scheduled for Friday, October 11, 2019, 15:00-17:00 at SEMI Japan office. See <http://www.semi.org/en/events> for the current list of meeting schedules.

Having no further business, a motion was made to adjourn. Adjournment was at 17:30.



Respectfully submitted by:

Chie Yanagisawa

Manager

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Minutes tentatively approved by:

Kazunori Kato (AiT), Co-chair	August 9, 2019
Masahiro Tsuruya (iNEMI), Co-chair	<Date approved>
Haruo Shimamoto (ASIT), Co-chair	<Date approved>

**Table 13 Index of Available Attachments<sup>#1</sup>**

<i>Title</i>	<i>Title</i>
01_SEMI Standards Required Elements_August2018_E+J	06_#6497_BallotReviewSheet
02_20190222_3DPI-Japan_MeetingMinutes_Final	07_#6498_BallotReviewSheet
03_NA 3DP&I Liaison Report Apr2019 v4.1	08_3D-PKG SWG Meeting Minutes - 2019-04-08
04_20190326_TW_3D P&I TC Liaison Report v1.1	09_Panel FOUP TF report_20190531
05_SEMI Staff Report 2019_0530_v0.1	

<sup>#1</sup> 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.