



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

Japan Standards Winter 2019 Meetings
Friday, February 22, 2019, 15:00–17:00
SEMI Japan office, Tokyo, Japan

TC Chapter Announcements

Next TC Chapter Meeting
Friday, June 7, 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>
AIST	<i>Shimamoto</i>	<i>Haruo</i>	NaiGai Tech	Ogihara	Hideaki
AiT	Kato	Kazunori	Shin-Etsu Polymer	Fukunaga	Tsukasa
Hitachi Chemical	Ikeda	Kenichi	Shin-Etsu Polymer	Shida	Hiroyuki
Hitachi Chemical	Nakamura	Yukio	Tokyo Seimitsu	Chiba	Kiyotaka
iNEMI	Tsuruya	Masahiro			
KOKUSAI ELECTRIC	Matsuda	Mitsuhiro	SEMI Japan	Yanagisawa	Chie

Table 2 Leadership Changes

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

Table 3 Committee 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>
None		

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

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

Table 6 Authorized Activities

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

#	SC/TF/WG	Details
6496	3D Packaging & Integration 5 Year Review TF	New SNARF for Line Item Revision to SEMI G63-95 (Reapproved 0811): "Test Method for Measurement of Die Shear Strength"
6497	JA 450mm Assembly and Test Die Preparation TF	New SNARF for Line Item Revision to SEMI G95-0314: "Mechanical Interface Specification for 450 mm Load Port for Tape Frame Cassettes in the Backend Process" with non-conforming title change to "Specification for Mechanical Features of 450 mm Load Port for Tape Frame Cassettes in the Backend Process"
6498	--	New SNARF for Reapproval of SEMI G96-1014 "Test Method for Measurement of Chip (Die) Strength by Mean of Cantilever Bending"

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
6497	Cycle 3-2019	JA 450mm Assembly and Test Die Preparation TF	Line Item Revision to SEMI G95-0314: "Mechanical Interface Specification for 450 mm Load Port for Tape Frame Cassettes in the Backend Process" with non-conforming title change to "Specification for Mechanical Features of 450 mm Load Port for Tape Frame Cassettes in the Backend Process"
6498	Cycle 3-2019	--	Reapproval of SEMI G96-1014 "Test Method for Measurement of Chip (Die) Strength by Mean of Cantilever Bending"

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
None	

Table 11 New Action Items

Item #	Assigned to	Details
20180222-01	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

Table 12 Previous Meeting Action Items

Item #	Assigned to	Details
20181015-01	Kazunori Kato (AiT)	To raise a necessity to manage SNARF revisions at the SPI Task Force. -> OPEN
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. -> OPEN

Table 12 Previous Meeting Action Items

<i>Item #</i>	<i>Assigned to</i>	<i>Details</i>
20180205-03	Haruo Shimamoto (AIST)	To review SEMI G63 to decide for the next action to it by the next 3D Packaging & Integration Japan TC Chapter meeting. -> OPEN This action is on the “New Business” section of this meeting.

1 Welcome, Reminders, and Introductions

Masahiro Tsuruya (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 of 3D Packaging & Integration Japan TC Chapter

2.1 Review and Approval of Previous Meeting Minutes of 3D Packaging & Integration Japan TC Chapter.

The TC Chapter reviewed the minutes of the previous meeting.

Motion:	To approve the previous meeting minutes of the 3D Packaging & Integration Japan TC Chapter on October 15, 2018 with editorial change.
By / 2nd:	Mitsuhiro Matsuda (Kokusai Electric) / Hiroyuki Shida (Shin-Etsu Polymer)
Discussion:	None
Vote:	7 in favor and 0 opposed. Motion passed.

Attachment: 02_20181015_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. Of note:

- FO-PLP Panel TF
 - Document 6332: New Standard: Specification for Panel substrate Characteristics for Fan-Out Panel Level Packaging (FO-PLP) Applications
 - Ballot was submitted in Cycle 7-2018 and failed the ballot review at the TC Chapter meeting during NA Fall 2018 Meetings.
 - Ballot 6332A was submitted in Cycle 1-2019 and the results are to be reviewed at NA Spring 2019 Meetings in April.

Masahiro Tsuruya (iNEMI) commented that on one of the reject reasons for Ballot 6332A was use of “will” in sentences. It is regulated that Standard Documents should not include “will” but “shall”. The TC Chapter raised an issue that SEMI should take any action to improve SEMI Standards document quality.

Action Item: 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

Attachment: 03_NA 3DP&I Liaison Report Nov2018 v1

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. Of note:

- 3DI & Packaging Testing Task Force decided to withdraw the new SNARF of “Guideline for Chip ID registering and tracing”. Owing to overlap with the CAST standard.

Attachment: 04_3D P&I TW Liaison Report_20181218

3.3 SEMI Staff Report

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

- 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
- Japan Regional Standards Committee (JRSC) Topics – Standards Awards
- SEMI Japan Newsletter – Standards topics

Attachment: 05_SEMI Staff Report 2019_0205 v1.0a

4 Ballot Review

None

5 Subcommittee and Task Force Reports

5.1 GCS Report

There has been no GCS voting between the previous TC Chapter meeting on May 21, 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 that, on behalf of Sumio Masuchi (DISCO), the TF co-leader, that Line Item Revision to SEMI G95 will be proposed at the New Business 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 passed A&R in December 2018

5.5 3D Packaging & Integration Steering Group

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

- The TC Chapter promoted its activity at SEMICON Japan 2018 and organized the panel discussion and exhibited the PLP panels and technical information.
 - Exhibited the related materials at “SEMI Standards” Booth.
 - Panel discussion at TechSPOT with more than 30 participants

Attachment: 06_3D-PKG SWG Meeting Minutes - 2019-01-24

5.6 <PI&C liaison> Fan-Out Panel Level Packaging (FO-PLP) Panel FOUP TF

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

- The following proposals were approved at the PI&C Japan TC Chapter meeting held on December 12, 2018.
 - The revised TFOF with removing “Fan-Out” from the name of the TF and the scope.
 - #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

Attachment: 07_Panel FOUP TF report_20190221

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 as the following sections.

7 New Business

7.1 New proposal for SEMI G63-95 (Reapproved 0811)

Haruo Shimamoto (AIST) explained the SNARF to the committee and the TC Chapter reviewed his proposal.

Motion:	To approve the New SNARF for Line Item Revision to SEMI G63-95 (Reapproved 0811): “Test Method for Measurement of Die Shear Strength”
By / 2nd:	Masahiro Tsuruya (iNEMI) / Mitsuhiro Matsuda (KOKUSAI ELECTRIC)
Discussion:	None
Vote:	8 in favor and 0 opposed. Motion passed.

7.2 New proposals for SEMI G95-0314

Masahiro Tsuruya (iNEMI) explained the SNARF to the committee and the TC Chapter reviewed this proposal.

Motion:	To approve the New SNARF for Line Item Revision to G95-0314: “Mechanical Interface Specification for 450 mm Load Port for Tape Frame Cassettes in the Backend Process”
By / 2nd:	Masahiro Tsuruya (iNEMI) / Mitsuhiro Matsuda (KOKUSAI ELECTRIC)
Discussion:	None
Vote:	8 in favor and 0 opposed. Motion passed.

He continued the following proposal of this document.

Motion:	To authorize the ballot submission in Cycle 3
By / 2nd:	Masahiro Tsuruya (iNEMI) / Mitsuhiro Matsuda (KOKUSAI ELECTRIC)
Discussion:	None
Vote:	8 in favor and 0 opposed. Motion passed.

7.3 New proposals for SEMI G96-1014

Masahiro Tsuruya (iNEMI) explained the SNARF to the committee and the TC Chapter reviewed the proposed SNARF.

Motion:	To approve the New SNARF for Reapproval of G96-1014: “Test Method for Measurement of Chip (Die) Strength by Mean of Cantilever Bending”
By / 2nd:	Masahiro Tsuruya (iNEMI) / Mitsuhiro Matsuda (KOKUSAI ELECTRIC)
Discussion:	None
Vote:	8 in favor and 0 opposed. Motion passed.

He continued the following proposal of this document.

Motion:	To authorize the ballot submission in Cycle 3
By / 2nd:	Masahiro Tsuruya (iNEMI) / Mitsuhiro Matsuda (KOKUSAI ELECTRIC)
Discussion:	None
Vote:	8 in favor and 0 opposed. Motion passed.

8 Action Item Review

8.1 Open Action Item

The TC Chapter reviewed the action items from the previous TC Chapter meetings held on May 21 and on October 15, 2018.

<i>Item #</i>	<i>Assigned to</i>	<i>Details</i>
20180205-03	Haruo Shimamoto (AIST)	To review SEMI G63 to decide for the next action to it by the next 3D Packaging & Integration Japan TC Chapter meeting. -> CLOSE It was executed as a new proposal at New Business section of this meeting.
20181015-01	Kazunori Kato (AiT)	To raise a necessity to manage SNARF revisions at the SPI Task Force. -> OPEN, SPI Task Force has not been held.
20181015-02	Kazunori Kato (AiT)	To bring the issue at the SPI Task force to improve the system that a document should be correlated with the one originally developed by a different GTC. This could let the related TC members aware of its development before the document release. -> OPEN, SPI Task Force has not been held.



8.2 New Action Item

The TC Chapter reviewed the following new action item.

<i>Item #</i>	<i>Assigned to</i>	<i>Details</i>
20180222-01	Chie Yanagisawa (SEMI Japan)	To check if SEMI HQ Standards assigns someone for proof reading for a ballot in order to improve Standards document quality

9 Next Meeting and Adjournment

The next meeting is scheduled for Friday, June 7, 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 16:30.



Respectfully submitted by:

Chie Yanagisawa

Manager

SEMI Japan

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Minutes tentatively approved by:

Kazunori Kato (AiT), Co-chair	March 26, 2019
Masahiro Tsuruya (iNEMI), Co-chair	March 26, 2019
Haruo Shimamoto (ASIT), Co-chair	MMDD, 2018

Table 13 Index of Available Attachments#1

<i>Title</i>	<i>Title</i>
01_SEMI Standards Required Elements_August2018_E+J	05_SEMI Staff Report 2019_0205 v1.0a
02_20181015_3DPI-Japan_MeetingMinutes_Final	06_3D-PKG SWG Meeting Minutes - 2019-01-24
03_NA 3DP&I Liaison Report Nov2018 v1	07_Panel FOUP TF report_20190221
04_3D P&I TW Liaison Report_20181218	

#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 [SEMI Staff Name] at the contact information above.