

## Japan TC Chapter of Assembly & Packaging Global Technical Committee Meeting Summary and Minutes

Japan Standards Spring 2015 Meetings  
Monday, May 11, 2015, 3:00 p.m. - 5:00 p.m. [JST]  
SEMI Japan office, Tokyo, Japan

### Next Committee Meeting

Friday, October 16, 2015, 3:00 p.m. – 5:00 p.m. [JST]  
Japan Standards Fall Meetings, Tokyo, Japan

### Committee Announcements (optional)

None

### Table 1 Meeting Attendees

*Italics indicates virtual participants*

**Co-Chairs:** Kazunori Kato (AiT), Yutaka Koma (Consultant), Masahiro Tsuruya (iNEMI)

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

**Attendee:** 10 + **SEMI:** 2

<i>Company</i>	<i>Last</i>	<i>First</i>	<i>Company</i>	<i>Last</i>	<i>First</i>
AIST	Shimamoto	Haruo	Micron Memory Japan	Sonobe	Kaoru
AiT	Kato	Kazunori	Shin-Etsu Polymer	Suzuki	Hideki
Asahi Glass	Takahashi	Mamoru	Shin-Etsu Polymer	Shinozuka	Nobuhiro
DISCO	Masuchi	Sumio	Shin-Etsu Polymer	Maekawa	Mitsunori
iNEMI	Tsuruya	Masahiro	SEMI Japan	Collins	Junko
Lintec	Murakami	Yukinori	SEMI Japan	Yanagisawa	Chie

*\* alphabetical order by company name*

### Table 2 Leadership Changes

<i>Group</i>	<i>Previous Leader</i>	<i>New Leader</i>
Japan TC Chapter of Assembly & Packaging Global Technical Committee	Yutaka Koma stepped down from the co-chair	No one was newly appointed.

### Table 3 Ballot Results (or move to Section 4, Ballot Review)

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

**Failed** ballots and line items were returned to the originating task forces for re-work and re-balloting.

<i>Document #</i>	<i>Document Title</i>	<i>Committee Action</i>
5837	Reapproval of SEMI G57-0302, Guide for Standardization of Leadframe Terminology	<b>Passed as balloted</b>
5838	Revision to SEMI G52-90 (Reapproved 1104), Standard Test Method for Measurement of Ionic Contamination on Semiconductor Leadframes (Proposed) with title change to: Test Method for Measurement of Ionic Contamination on Semiconductor Leadframes	<b>Passed as balloted</b>
5839	Revision to SEMI G82-0301E (Reapproved 0706), Provisional Specification for 300 mm Load Port for Frame Cassettes in Backend Process with title change to: Specification for 300 mm Load Port for Frame Cassettes in Backend Process	<b>Passed as balloted</b>

**Table 4 Authorized Ballots (or move to Section 7, New Business)**

#	When	SC/TF/WG	Details
5835	Cycle 6/7	Thin Chip Handling TF	New Standard: Specification for adhesive tray used for 3D-IC manufacturing and shipping
5836	Cycle 6/7	Thin Chip Handling TF	New Standard: Test Method for Adhesive Strength for Adhesive Tray Used for 3D-IC Manufacturing and Shipping
5878	Cycle 6	Packaging 5 Year Review TF	Line Item Revision to SEMI G20-96: SPECIFICATION FOR LEAD FINISHES FOR PLASTIC PACKAGES
5879	Cycle 6	Packaging 5 Year Review TF	Line Item Revision to SEMI G21-94: SPECIFICATION FOR PLATING INTEGRATED CIRCUIT LEADFRAMES
5880	Cycle 6	Packaging 5 Year Review TF	Line Item Revision to SEMI G41-87: SPECIFICATION FOR DUAL STRIP SOIC LEADFRAME
5881	Cycle 6	Packaging 5 Year Review TF	Reapproval of SEMI G83-0912: SPECIFICATION FOR BAR CODE MARKING OF PRODUCT PACKAGES

**Table 5 Authorized Activities (or move to Section 7, New Business)**

#	Type	SC/TF/WG	Details
5878	SNARF	Packaging 5 Year Review TF	Line Item Revision to SEMI G20-96: SPECIFICATION FOR LEAD FINISHES FOR PLASTIC PACKAGES
5879	SNARF	Packaging 5 Year Review TF	Line Item Revision to SEMI G21-94: SPECIFICATION FOR PLATING INTEGRATED CIRCUIT LEADFRAMES
5880	SNARF	Packaging 5 Year Review TF	Line Item Revision to SEMI G41-87: SPECIFICATION FOR DUAL STRIP SOIC LEADFRAME
5881	SNARF	Packaging 5 Year Review TF	Reapproval of SEMI G83-0912: SPECIFICATION FOR BAR CODE MARKING OF PRODUCT PACKAGES

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

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

**Table 6 New Action Items (or move to Section 8, Action Item Review)**

Item #	Assigned to	Details
20150511-1	SEMI Staff	To send a message to Yutaka Koma that his stepping down from the co-chair was approved at Assembly & Packaging Japan TC Chapter meeting on May 11, 2015.

\*Normal procedures for Standards activities are not written as action items in the meeting minutes of any global technical committee.

**Table 7 Previous Meeting Actions Items (or move to Section 8, Action item Review)**

Item #	Assigned to	Details
PKG140929-5	Masahiro Tsuruya	To prepare TFOF of the Adhesive Strength Measurement TF and submit it GCS via SEMI staff. =>CLOSE
PKG150120-1	SEMI Staff	To send New SNARF for New Standard: Specification for Adhesive Tray Used for 3D-IC Manufacturing and Shipping to Global TC Members to review for 2 weeks, and get approval from GCS.=>CLOSE
PKG150120-2	SEMI Staff	To send New SNARF for New Standard: Test Method for Adhesive Strength for Adhesive Tray Used for 3D-IC Manufacturing and Shipping to Global TC Members to review for 2 weeks, and get approval from GCS. =>CLOSE
*1 PKG150120-3	SEMI Staff	To send New SNARF for Revision to SEMI G20-96 Specification for Lead Finishes for Plastic Packages to Global TC Members to review for 2 weeks, and get approval from GCS. =>CLOSE

**Table 7 Previous Meeting Actions Items (or move to Section 8, Action item Review)**

<i>Item #</i>	<i>Assigned to</i>	<i>Details</i>
*1 PKG150120-4	SEMI Staff	To send New SNARF for Revision to SEMI G21-94, Specification for Plating Integrated Circuit Leadframes to Global TC Members to review for 2 weeks, and get approval from GCS. =>CLOSE
*1 PKG150120-5	Packaging 5 Year Review Task Force	To submit the ballot for Revision to SEMI G21-94, Specification for Plating Integrated Circuit Leadframes for Cycle 3, 2015. =>CLOSE
*1 PKG150120-6	SEMI Staff	To send New SNARF for Revision to SEMI G41-87, Specification for Dual Strip Soic Leadframe to Global TC Members to review for 2 weeks, and get approval from GCS. =>CLOSE
*1 PKG150120-7	Packaging 5 Year Review Task Force	To submit the ballot for Revision to SEMI G41-87, Specification for Dual Strip Soic Leadframe for Cycle 3, 2015. =>CLOSE
PKG150120-8	SEMI Staff	To send New SNARF for Revision of SEMI G52-90 (Reapproved 1104), Standard Test Method for Measurement of Ionic Contamination on Semiconductor Leadframes (Proposed) to Global TC Members to review for 2 weeks, and get approval from GCS. =>CLOSE
PKG150120-9	Packaging 5 Year Review Task Force	To submit the ballot for Revision of SEMI G52-90 (Reapproved 1104), Standard Test Method for Measurement of Ionic Contamination on Semiconductor Leadframes (Proposed) for Cycle 3, 2015. =>CLOSE
PKG150120-10	SEMI Staff	To prepare SNARF for SEMI G57-0302, Guide for Standardization of Leadframe Terminology Reapproval ballot and submit it for Cycle 3, 2015. =>CLOSE
PKG150120-11	SEMI Staff	To send New SNARF for Revision to SEMI G82-0301, Provisional Specification for 300 mm Tool Port for Frame Cassettes in Backend Process to Global TC Members to review for 2 weeks, and get approval from GCS. =>CLOSE
PKG150120-12	Packaging 5 Year Review Task Force	TF to submit the ballot for Revision to SEMI G82-0301, Provisional Specification for 300 mm Tool Port for Frame Cassettes in Backend Process for Cycle 3, 2015. =>CLOSE
PKG150120-13	Kazunori Kato	Regarding "NOTE" about deletion of SnPb of G20-96, check to SPI TF. =>CLOSE

\*1...Activities of the development of Revision to SEMI G20-96, G21-94 and G41-87 were suspended, and sent back to the Task Force to re-discuss about the following issues at GCS's discretion on January 29..

- G20-96: Deletion of SnPb
- G20-96, G21-94, G41-87: Deletion of unit "Inch"

## 1 Welcome, Reminders, and Introductions

Masahiro Tsuruya (iNEMI) called the meeting to order at 3:00 p.m. The meeting reminders on antitrust issues, intellectual property issues and holding meetings with international attendance were reviewed. Attendees introduced themselves.

## 2 Review of Previous Meeting Minutes

The committee reviewed the minutes of the previous meeting.

<b>Motion:</b>	To approve the minutes of the previous meeting as written.
<b>By / 2<sup>nd</sup>:</b>	Kazunori Kato (AiT) / Kaoru Sonobe (Micron Memory Japan)
<b>Discussion:</b>	None
<b>Vote:</b>	9 in favor and 0 opposed. <b>Motion passed.</b>

## 3 Liaison Reports

### 3.1 3DS-IC North America TC Chapter

Chie Yanagisawa (SEMI Japan) reported for 3DS-IC North America TC Chapter as attached.

**Attachment:** [01\\_NA 3DS-IC report April 2015](#)

### 3.2 3DS-IC Taiwan TC Chapter

Chie Yanagisawa (SEMI Japan) reported for 3DS-IC North America TC Chapter as attached.

**Attachment:** [02\\_Taiwan 3DS-IC Liaison Report March 2015](#)

### 3.3 SEMI Staff Report

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

- Global SEMI Events
- Global SEMI Standards Meetings Schedule
- Ballot Critical Dates
- Publication Update
- A&R Ballot Review
- Contact Information

**Attachment:** [03\\_SEMI Staff Report 2015 April R0.4a, 04\\_Regs\\_SC\\_to\\_JRSC2015\\_0416\\_rev0.3](#)

## 4 Ballot Review

There were three ballots reviewed at this meeting and the committee actions for each document are listed in the Table 3 Ballot Results in the meeting minutes. The details of ballot reviews are found in the attachments.

**Attachment:** [05\\_5837\\_LetterBallotReviewSheet](#), [06\\_5838\\_LetterBallotReviewSheet](#), [07\\_5839\\_LetterBallotReviewSheet](#)

## 5 Subcommittee & Task Force Reports

### 5.1 GCS

Kazunori Kato (AiT) reported for the Assembly & Packaging GCS.

The following two SNARFs were proposed at the last meeting of Assembly & Packaging Japan TC Chapter held on January 20, 2015 and were approved officially by GCS later.

- Doc. 5835: New Standard, “Specification for adhesive Tray Used for 3D-IC Manufacturing and Shipping”
- Doc. 5836: New Standard, “Adhesive Strength Test Method for Adhesive Tray Used for 3D-IC Manufacturing and Shipping”

### 5.2 Electromagnetic Characterization Study Group

No report was made at this TC Chapter meeting.

### 5.3 Japan 450mm Assembly & Test Die Preparation Task Force

Sumio Masuchi (DISCO) reported for Japan 450mm Assembly & Test Die Preparation Task Force as attached.

**Attachment:** [08\\_19th\\_ATDP-TF\\_Minutes](#)

### 5.4 Thin Chip Handling Task Force

Hideki Suzuki (Shin-Etsu Polymer) reported for Thin Chip Handling Task Force as following.

- The task force decided to submit Doc. 5835 and Doc. 5836 from Assembly & Packaging Japan TC Chapter.
- The proposal to submit those two ballots would be made at the New Business section later at this meeting.

### 5.5 Packaging 5 Year Review Task Force

Masahiro Tsuruya (iNEMI) reported for Packaging 5 Year Review Task Force as following.

- The task force would make a proposal of the SNARFs and the ballots submission of SEMI G20-96, SEMI G21-94, SEMI G41-87 and SEMI G83-0912 at the New Business section later at this meeting.

### 5.6 3D-IC Study Group

Masahiro Tsuruya (iNEMI) reported for 3D-IC Study Group that the next meeting of 3D-IC Study Group would be held on July 31 and be the last meeting as the 3D-IC Study Group as forming the Japan TC Chapter under 3DS-IC Global Technical Committee would be approved at the JRSC (Japan Region Standards Committee) meeting at the end of August 2015.

He also continued that the study group planned to send some members to attend the 3DS-IC Taiwan TC Chapter meeting at the beginning of July and to build the relationship with the Taiwan TC Chapter for future activities of the Japan TC Chapter.

**Attachment:** [09\\_3D-IC SG Meeting 2015\\_4\\_24](#)

### 5.7 Fiducial Mark Interoperability Task Force

Sumio Masuchi reported for Fiducial Mark Interoperability Task Force as attached. He also stated that the task force wished to make the issue respecting the alignment of notchless wafer orientation in backend to be realized.

He addressed the TC Chapter that for this issue the 450ATDP Task Force would prepare for an article and the TC Chapter agreed to the idea.

**Attachment:** [10\\_20150427FMI-TF\\_r0.4](#)

## 6 Old Business

### 6.1 Stepping down of Yutaka Koma from the co-chair

Kazunori Kato addressed the committee on this topic.

<b>Motion:</b>	To approve that Yutaka Koma would step down from the co-chair of the Japan TC Chapter
<b>By / 2<sup>nd</sup>:</b>	Kazunori Kato (AiT) / Sumio Masuchi (DISCO)
<b>Discussion:</b>	None
<b>Vote:</b>	9 in favor and 0 opposed. <b>Motion passed.</b>

**Action Item 1:** SEMI Staff to send a message to Yutaka Koma that his stepping down from the co-chair was approved at Assembly & Packaging Japan TC Chapter meeting on May 11, 2015.

## 7 New Business

### 7.1 Proposal of SNARFs

#### 7.1.1 Revision to SEMI G20-96 (Doc. 5878)

Kaoru Sonobe (Micron Memory Japan) addressed the committee on this topic.

<b>Motion:</b>	To approve the SNARF for Revision to SEMI G20-96: SPECIFICATION FOR LEAD FINISHES FOR PLASTIC PACKAGES
<b>By / 2<sup>nd</sup>:</b>	Kaoru Sonobe (Micron Memory Japan) / Haruo Shimamoto (AIST)
<b>Discussion:</b>	None
<b>Vote:</b>	8 in favor and 0 opposed. <b>Motion passed.</b>

#### 7.1.2 Revision to SEMI G21-94 (Doc. 5879)

Kaoru Sonobe (Micron Memory Japan) addressed the committee on this topic.

<b>Motion:</b>	To approve the SNARF for Revision to SEMI G21-94: SPECIFICATION FOR PLATING INTEGRATED CIRCUIT LEADFRAMES
<b>By / 2<sup>nd</sup>:</b>	Kaoru Sonobe (Micron Memory Japan) / Haruo Shimamoto (AIST)
<b>Discussion:</b>	None
<b>Vote:</b>	8 in favor and 0 opposed. <b>Motion passed.</b>

#### 7.1.3 Revision to SEMI G41-87 (Doc. 5880)

Kaoru Sonobe (Micron Memory Japan) addressed the committee on this topic.

<b>Motion:</b>	To approve the SNARF for Revision to G41-87: SPECIFICATION FOR DUAL STRIP SOIC LEADFRAME
<b>By / 2<sup>nd</sup>:</b>	Kaoru Sonobe (Micron Memory Japan) / Haruo Shimamoto (AIST)
<b>Discussion:</b>	None
<b>Vote:</b>	7 in favor and 0 opposed. <b>Motion passed.</b>

#### 7.1.4 Reapproval of SEMI G83-0912 (Doc. 5881)

Haruo Shimamoto (AIST) addressed the committee on this topic.

<b>Motion:</b>	To approve the SNARF for Reapproval of SEMI G83-0912: SPECIFICATION FOR BAR CODE MARKING OF PRODUCT PACKAGES
<b>By / 2<sup>nd</sup>:</b>	Haruo Shimamoto (AIST) / Sumio Masuchi (DISCO)
<b>Discussion:</b>	None

<b>Vote:</b>	7 in favor and 0 opposed. <b>Motion passed.</b>
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## 7.2 Proposal of ballot submission

### 7.2.1 Doc. 5835: New Standard: Specification for adhesive tray used for 3D-IC manufacturing and shipping

Hideki Suzuki (Shin-Etsu Polymer) addressed the committee on this topic.

<b>Motion:</b>	To approve the ballot submission of Doc. 5835: New Standard: Specification for adhesive tray used for 3D-IC manufacturing and shipping for Cycle 6/7-2015
<b>By / 2<sup>nd</sup>:</b>	Hideki Suzuki (Shin-Etsu Polymer) / Haruo Shimamoto (AIST)
<b>Discussion:</b>	None
<b>Vote:</b>	8 in favor and 0 opposed. <b>Motion passed.</b>

### 7.2.2 Doc. 5836: New Standard: Test Method for Adhesive Strength for Adhesive Tray Used for 3D-IC Manufacturing and Shipping

Hideki Suzuki (Shin-Etsu Polymer) addressed the committee on this topic.

<b>Motion:</b>	To approve the ballot submission of Doc. 5836: New Standard: Test Method for Adhesive Strength for Adhesive Tray Used for 3D-IC Manufacturing and Shipping for Cycle 6/7-2015
<b>By / 2<sup>nd</sup>:</b>	Hideki Suzuki (Shin-Etsu Polymer) / Haruo Shimamoto (AIST)
<b>Discussion:</b>	None
<b>Vote:</b>	8 in favor and 0 opposed. <b>Motion passed.</b>

### 7.2.3 Revision to SEMI G20-96 (Doc. 5878)

Haruo Shimamoto (AIST) addressed the committee on this topic.

<b>Motion:</b>	To approve the ballot submission of Revision to SEMI G20-96: SPECIFICATION FOR LEAD FINISHES FOR PLASTIC PACKAGES
<b>By / 2<sup>nd</sup>:</b>	Haruo Shimamoto (AIST) / Sumio Masuchi (DISCO)
<b>Discussion:</b>	None
<b>Vote:</b>	7 in favor and 0 opposed. <b>Motion passed.</b>

### 7.2.4 Revision to SEMI G21-94 (Doc. 5879)

Haruo Shimamoto (AIST) addressed the committee on this topic.

<b>Motion:</b>	To approve the ballot submission of Revision to SEMI G21-94: SPECIFICATION FOR PLATING INTEGRATED CIRCUIT LEADFRAMES
<b>By / 2<sup>nd</sup>:</b>	Haruo Shimamoto (AIST) / Sumio Masuchi (DISCO)
<b>Discussion:</b>	None
<b>Vote:</b>	7 in favor and 0 opposed. <b>Motion passed.</b>

### 7.2.5 Revision to SEMI G41-87 (Doc. 5880)

Haruo Shimamoto (AIST) addressed the committee on this topic.

<b>Motion:</b>	To approve the ballot submission of Revision to G41-87: SPECIFICATION FOR DUAL STRIP SOIC LEADFRAME
<b>By / 2<sup>nd</sup>:</b>	Haruo Shimamoto (AIST) / Sumio Masuchi (DISCO)
<b>Discussion:</b>	None
<b>Vote:</b>	7 in favor and 0 opposed. <b>Motion passed.</b>

### 7.2.6 Reapproval of SEMI G83-0912 (Doc. 5881)

Haruo Shimamoto (AIST) addressed the committee on this topic.

<b>Motion:</b>	To approve the ballot submission of Reapproval of SEMI G83-0912: SPECIFICATION FOR BAR CODE MARKING OF PRODUCT PACKAGES
<b>By / 2<sup>nd</sup>:</b>	Haruo Shimamoto (AIST) / Sumio Masuchi (DISCO)
<b>Discussion:</b>	None
<b>Vote:</b>	7 in favor and 0 opposed. <b>Motion passed.</b>

## 8 Action Item Review

### 8.1 Open Action Items

Chie Yanagisawa (SEMI Japan) reviewed the open action items. The TC Chapter found there was nothing for the Open Action Items.

### 8.2 New Action Items

Chie Yanagisawa (SEMI Japan) reviewed the new action items. These can be found in the New Action Items table at the beginning of these minutes.

## 9 Next Meeting and Adjournment

The next meeting of the Assembly & Packaging Japan TC Chapter is scheduled for Friday, October 16, 2015 at Japan Standards Fall Meetings at SEMI Japan office in Tokyo, Japan.



Respectfully submitted by:  
 Chie Yanagisawa  
 Senior Standard Coordinator  
 SEMI Japan  
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Minutes approved by:

Kazunori Kato (AiT), Co-chair	August 20, 2015
Masahiro Tsuruya (iNEMI), Co-chair	August 19, 2015

**Table 8 Index of Available Attachments #1**

#	<i>Title</i>	#	<i>Title</i>
01	NA 3DS-IC report April 2015	06	5838_LetterBallotReviewSheet
02	Taiwan 3DS-IC Liaison Report March 2015	07	5839_LetterBallotReviewSheet
03	SEMI Staff Report 2015 April R0.4a	08	19th_ATDP-TF_Minutes
04	Regs_SC_to_JRSC2015_0416_rev0.3	09	3D-IC SG Meeting 2015_4_24
05	5837_LetterBallotReviewSheet	10	20150427FMI-TF_r0.4

#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.