

## Japan TC Chapter of 3 DS-IC Global Technical Committee Meeting Summary and Minutes (Kick off)

Japan Standards Fall 2015 Meetings  
Monday, September 7, 2015, 10:30 a.m. - 11:45 a.m. [JST]  
SEMI Japan office, Tokyo, Japan

### Next Committee Meeting

Friday, October 16, 2015, 3:30 p.m. – 5:30 p.m. [JST]  
Japan Standards Fall 2015 Meetings, Tokyo, Japan

### Committee Announcements (optional)

None

### Table 1 Meeting Attendees

*Italics indicates virtual participants*

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

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

**Attendee:** 23 + **SEMI:** 2

<i>Company</i>	<i>Last</i>	<i>First</i>	<i>Company</i>	<i>Last</i>	<i>First</i>
Acteon	Komatsu	Shoji	Miraial	Umeda	Toshiya
Advantest	Ichikawa	Masayoshi	Nidec-Read Corporation	Miyazaki	Yoko
AIST	Shimamoto	Haruo	Nihon Entegris	Fukunaga	Tsukasa
Applied Materials	Ogawa	Toru	Senju Metal Industry	Roppoingi	Takahiro
Asahi Glass	Takahashi	Mamoru	Shin-Etsu Polymer	Odajima	Satoshi
ASE Group	Hayashida	Sumito	Shin-Etsu Polymer	Shida	Hiroyuki
Corning Japan	Yamazaki	Kuniaki	SUMCO	Nakai	Tetsuya
Fujifilm	Abe	Hirofumi	Takaoka Toko	Ishihara	Mitsuhiro
Hitachi High-Technologies	Yoshino	Eiji	Toray Engineering	Funahashi	Takanori
iNEMI	Tsuruya	Masahiro	Self	Yoshise	Masanori
Intel	Tomita	Yoshihiro			
Lintec	Murakami	Yukinori	SEMI Japan	Nakamura	Osamu
Micron Memory Japan	Sonobe	Kaoru	SEMI Japan	Yanagisawa	Chie

*\* alphabetical order by company name*

### Table 2 Leadership Changes

<i>Group</i>	<i>Previous Leader</i>	<i>New Leader</i>
3DS-IC Japan TC Chapter	--	Masahiro Tsuruya (iNEMI), Haruo Shimamoto (AIST)
Steering Study Group	--	Masahiro Tsuruya (iNEMI) Yoshihiro Tomita (Intel)

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

None

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

None

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

#	Type	SC/TF/WG	Details
--	Study Group	Steering Study Group	Planning the Items which promote the 3DS-IC Standardization activity.

Note: SNARFs and TFOFs are available for review on the SEMI Web site at:  
<http://downloads.semi.org/web/wstdsbal.nsf/TFOFSNARE>

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

None

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

This was the kick off TC Chapter meeting, so there was no previous one.

## 1 Welcome, Reminders, and Introductions

Masahiro Tsuruya (iNEMI) called the meeting to order at 10:30 a.m. The meeting reminders on antitrust issues, intellectual property issues and holding meetings with international attendance were reviewed. Attendees introduced themselves.

Chie Yanagisawa (SEMI Japan) also outlined the basics of the SEMI Standards Regulations such as Technical Committee Meetings and voting at SEMI Standards meetings as attached.

**Attachment:** [01\\_150907\\_J\\_SEMIStandardsNewMbrTraining\\_3DSIC](#)

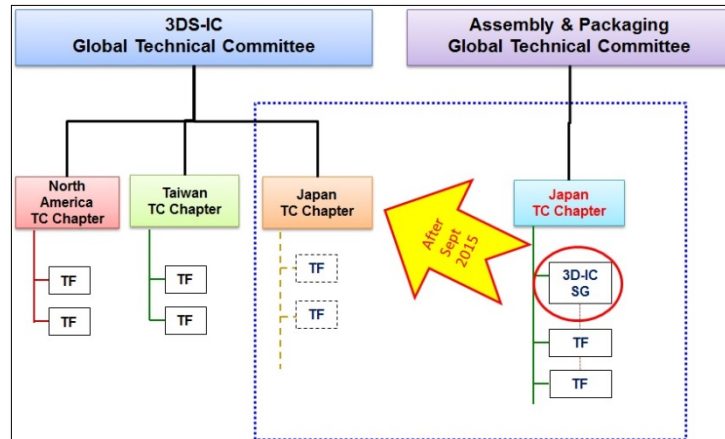
## 2 Announcement of TC Chapter Formation

### 2.1 Introduction of the formation of Japan TC Chapter of 3DS-IC Global Technical Committee

Chie Yanagisawa (SEMI Japan) announced that the formation of Japan TC Chapter under the 3DS-IC Global Technical Committee was officially approved by JRSC (Japan Regional Standards Committee) at the JRSC meeting held on August 31, 2015 at SEMI Japan office. The JRSC also approved Masahiro Tsuruya (iNEMI) and Haruo Shimamoto (AIST) as the co-chairs of the TC Chapter.

Masahiro Tsuruya (iNEMI) explained the purpose of the formation and the charter of the 3DS-IC Global Technical Committee as attached. Of note:

- The purpose of the formation of Japan TC Chapter of 3DS-IC Global Technical Committee
  - To enhance and reinforce the standard development activities as to solicit inputs from Japan members.
  - By soliciting proposals and inputs from Japanese members, to enhance and reinforce the 3DS-IC Standard Development Activities
  - To interact with N.A. and TWN TC directly for further collaborations under the global 3DS-IC technical committee.
- The current organization chart regarding 3DS-IC issue



- Charter of Global 3DS-IC Committee
  - 3DS-IC (Three-dimensional Stacked Integrated Circuits)
    - To explore, evaluate, discuss, and create consensus-based specifications, guidelines, and practices that, through voluntary compliance, will;
    - To promote mutual understanding and improved communication between users and suppliers of 3DS-IC materials, carriers, equipment, automation systems and devices
    - To enhance the manufacturing efficiency, capability and shorten 3DS-IC time-to-market
    - To reduce manufacturing cost in the 3D-IC industry.

After the explanation, a question about the definition of “3DS-IC” here was raised from Yoshihiro Tomita (Intel). Masahiro Tsuruya (iNEMI), co-chair, explained that the “3DS-IC” of SEMI Standards activities stands for “Three-dimensional Stacked Integrated Circuits” and the activities should be within the scope of the charter of 3DS-IC Global Technical Committee as above mentioned. Haruo Shimamoto (AIST), co-chair, added that “3DS-IC” would mean not only TSV.

[Attachment: 02\\_Formation of Japan Chapter of 3DS-IC TC R1.2](#)

### 3 Liaison Reports

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

Chie Yanagisawa (SEMI Japan) reported for the North America TC Chapter. Of note:

- Leadership
  - Committee Co-chairs
    - Sesh Ramaswami (Applied Materials)
    - Rich Allen (NIST)
    - Chris Moore (BayTech-Resor)
- Overview
  - Bonded Wafer Stacks
    - Create and/or modify specifications that reflect bonded wafer stacks parameters and the wafer bonding process.
  - Inspection & Metrology
    - Develop standards for metrology and inspection methods to be used in measuring the properties of TSV’s, bonded wafer stacks, and dies used in the 3DS-IC manufacturing process.
- Meeting Information
  - Last meeting
    - July 14 for SEMICON West 2015, San Francisco, California
  - Next meeting

- November 3 for the NA Fall 2015 Meetings, San Jose, California

[Attachment: 03\\_NA 3DS-IC report September 2015](#)

### 3.2 3DS-IC Taiwan TC Chapter

Chie Yanagisawa (SEMI Japan) reported for the Taiwan TC Chapter. Of note:

- Leadership
  - Tzu-Kun Ku (ITRI)
  - Wendy Chen (King Yuan Electronics)
  - Roger Hwang (ASE)
- Organization
  - Testing Task Force
  - Middle End Process Task Force
- Meeting Information
  - Last meeting
    - July 3, 2015, SEMI Taiwan office
  - Next meeting
    - October 6, 2015, SEMI Taiwan office

[Attachment: 04\\_Taiwan 3DS-IC Liaison Report Aug 2015](#)

### 3.3 SEMI Staff Report

Chie Yanagisawa (SEMI Japan) explained that the presentation for SEMI Staff Report would be omitted due to only little time left for it and that the SEMI Staff Report would be attached to this TC Chapter meeting minutes on the SEMI website. The contents of the SEMI Staff Report are as following:

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

[Attachment: 05\\_SEMI Staff Report 20150907](#)

## 4 Ballot Review

None

## 5 Subcommittee & Task Force Reports

None

## 6 Old Business

None

## 7 New Business

### 7.1 Proposal of Formation of Steering Study Group

Masahiro Tsuruya (iNEMI) addressed the committee on this topic and explained the intention to form this group with the materials as attached.

<b>Motion:</b>	Approve the formation of the Steering Study Group
<b>By / 2<sup>nd</sup>:</b>	Masahiro Tsuruya (iNEMI) / Shoji Komatsu (Acteon)
<b>Discussion:</b>	<p>Masanori Yoshise (Self) put his idea that those kinds of discussion should be dealt at the new business section of the TC Chapter meeting, so that any member could participate in the discussion.</p> <p>Masahiro Tsuruya explained his intention that a separate group from the TC Chapter would be desirable because those kinds of discussion would need more time and need more frequency while the time at the new business section of the TC Chapter meeting would not be enough.</p> <p>Masanori Yoshise questioned if the Study Group would make technical discussions or make plans for seminars or workshops. He also asked what the feedback would be from the 3DS-IC Japan TC Chapter to the activities and the documents of Taiwan and North America TC Chapters.</p> <p>Masahiro Tsuruya explained that the feedback had been made by the 3D-IC Study Group under Japan TC Chapter of the Assembly &amp; Packaging Global Technical Committee so far.</p>
<b>Vote:</b>	13 in favor and 1 opposed. 7 abstain. <b>Motion passed.</b>

Masahiro Tsuruya (iNEMI) also made a proposal as following.

<b>Motion:</b>	Approve Yoshihiro Tomita (Intel) and Masahiro Tsuruya (iNEMI) as the leaders of the Steering Study Group
<b>By / 2<sup>nd</sup>:</b>	Masahiro Tsuruya (iNEMI) / Toshiya Umeda (Mirial)
<b>Discussion:</b>	Yoshihiro Tomita put his idea that the Study Group would like to make more discussion on what the Study Group would do in future and to make proposals to Japan TC Chapter and get agreements to those proposals.
<b>Vote:</b>	20 in favor and 0 opposed. 2 Abstain. <b>Motion passed.</b>

[Attachment: 06\\_Steering Group - Charter Members & Scope v.1](#)

## 8 Action Item Review

### 8.1 Open Action Items

None

### 8.2 New Action Items

None

## 9 Next Meeting and Adjournment

The next meeting of the 3DS-IC Japan TC Chapter is scheduled for Friday, October 16, 2015, 3:00 p.m. – 5:00 p.m. at Japan Standards Fall 2015 Meetings at SEMI Japan office in Tokyo.

\*The time was changed to 3:30 p.m. – 5:30 p.m. at a later date.

Respectfully submitted by:  
Chie Yanagisawa  
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SEMI Japan  
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Email: cyanagisawa@semi.org

Minutes approved by:

Masahiro Tsuruya (iNEMI), Co-chair	October 16, 2015
Haruo Shimamoto (AIST), Co-chair	October 16, 2015

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

#	<i>Title</i>	#	<i>Title</i>
01	150907_J_SEMIStandardsNewMbrTraining_3DSIC	04	Taiwan 3DS-IC Liaison Report Aug 2015
02	Formation of Japan Chapter of 3DS-IC TC R1.2	05	SEMI Staff Report 20150907
03	NA 3DS-IC report September 2015	06	Steering Group - Charter Members & Scope v.1

#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.