

Japan TC Chapter of Physical Interfaces & Carriers Global Technical Committee Meeting Summary and Minutes

Japan Standards Fall 2014 Meetings
Friday, September 12, 2014, 1:30 p.m. – 5 p.m.
SEMI Japan office, Tokyo, Japan

Next Committee Meeting

Thursday, December 4, 2014, Time is to be decided <Japan Standard Time>
Japan Standards Winter 2014 Meetings in conjunction with SEMICON Japan 2014
Tokyo Big Sight Conference Tower, Tokyo, Japan

Committee Announcements (optional)

None

Table 1 Meeting Attendees

Italics indicate virtual participants

Co-Chairs: Tsuyoshi Nagashima (Miraial), Tsutomu Okabe (TDK), Kenji Yamagata (Daifuku)

SEMI Staff: Chie Yanagisawa (SEMI Japan)

Attendee: 16 + **SEMI:** 1

<i>Company</i>	<i>Last</i>	<i>First</i>	<i>Company</i>	<i>Last</i>	<i>First</i>
Acteon	Komatsu	Shoji	<i>Murata Machinery</i>	<i>Murata</i>	<i>Masanao</i>
Daifuku	Yamagata	Kenji	Murata Machinery	Yamamoto	Makoto
Dainichi Shoji	Ohyama	Koji	<i>Right Mfg.</i>	<i>Nagata</i>	<i>Tatsuhiko</i>
<i>GLOBALFOUNDRIES</i>	<i>Rothe</i>	<i>Jan</i>	Sinfonia Technology	Otani	Mikio
<i>Gudeng</i>	<i>Lee</i>	<i>Nick</i>	SUMCO	Nakai	Tetsuya
Hitachi Kokusai Electric	Matsuda	Mitsuhiro	TDK	Okabe	Tsutomu
Intel	Nojima	Takao	Tokyo Electron	Mashiro	Supika
Kumai Consulting	Kumai	Sadao			
Miraial	Nagashima	Tsuyoshi	SEMI Japan	Yanagisawa	Chie

* alphabetical order by company name

Table 2 Leadership Changes

<i>Group</i>	<i>Previous Leader</i>	<i>New Leader</i>
Technical Architect	Takao Nojima (Intel)	Shoji Komatsu (Acteon)

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

None

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

#	When	SC/TF/WG	Details
5524	Cycle 7-14	450mm AMHS TF	Revisions to SEMI E156-0710, "Mechanical Specification for 450 mm AMHS Stocker to Transport Interface", with title change to "Specification for Mechanical Interfaces between 450 mm AMHS Stocker and Transport Equipment"

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

#	Type	SC/TF/WG	Details
5777	SNARF	Global PIC Maintenance Task Force	Reapproval of SEMI E92-0302E, Specification for 300 mm Light Weight and Compact Box Opener/Loader to Tool-Interoperability Standard (Bolts/Light)

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)

None

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

Item #	Assigned to	Details
140418-1	SEMI Staff	To convey the decision that no workshop for STEP/450mm Wafers will be scheduled at SEMICON Japan 2014, but Shoji Komatsu (Acteon) would give a presentation for the Overview of 450mm Wafer Standards at TechStage to the Japan Silicon Wafer TC Chapter and the Japan Packaging TC Chapter. → CLOSED.

1 Welcome, Reminders, and Introductions

Tsuyoshi Nagashima (Mirial), co-chair, called the meeting to order at 1:30 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.

Motion:	Approve the previous meeting minutes written as it is
By / 2nd:	Kenji Yamagata (DAIFUKU) / Makoto Yamamoto (Murata Machinery)
Discussion:	None
Vote:	11 in favor and 0 opposed. Motion passed.

3 Liaison Reports

3.1 Europe Equipment Automation Committee

Chie Yanagisawa (SEMI Japan) reported for the Europe Equipment Automation Committee as attached. Of note:

- SEMI E48 Revision Task Force plans to propose a new SNARF for Revision to SEMI E48 at the meeting in October 2014.

Attachment: [01_EU_EA_Liaison Report September 5, 2014](#)

3.2 North America PI&C Committee

Tsuyoshi Nagashima (Mirial) reported for the North America PI&C TC Chapter as attached. Of note:

- Meeting Information
 - NA Fall 2014 Meetings to be held during November 3 to 5 in California, but no EUV Reticle TF meeting to be held.
- Ballot Results
 - Doc. 5711 failed committee review and returned to the TF for rework

- New Activities
 - From 450 mm IPIC TF, SNARF 5759: Line item revision to SEMI E83-0714, Specification for PGV Mechanical Docking Flange
 - From 450 mm IPIC TF, SNARF 5758: Revision to SEMI AUX023-0614, Overview Guide to SEMI Standards for 450 mm Wafers
- Current/Upcoming Ballots
 - #5759: Line item revision to SEMI E83-0714, Specification for PGV Mechanical Docking Flange to be submitted for Cycle 5/6-2014

Attachment: [02_NA PIC Report Sept 2014 MT](#)

3.3 SEMI Staff Report

Chie Yanagisawa (SEMI Japan) gave the SEMI Staff Report as attached.

Attachment: [03_SEMI Staff Report 2014 September_R0.2a](#)

4 Ballot Review

None

5 Subcommittee & Task Force Reports

5.1 Global PIC Standards Maintenance Task Force

Shoji Komatsu (Acteon) stated that the task force to propose the two SNARFs at the New Business section of this meeting as below.

- Reapproval of SEMI E92-0302E, Specification for 300 mm Light Weight and Compact Box Opener/Loader to Tool-Interoperability Standard (Bolts/Light)
- Reapproval of SEMI E110-1102, Guideline for Indicator Placement Zone and Switch Placement Volume of Load Port Operation Interface for 300 mm Load Ports

5.2 International 450 mm Physical Interfaces & Carriers (IPIC) Task Force

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

- G450C input
- 450mm AUX023 update
- SEMI E83 revision (Doc.5759)

Attachment: [04_450mmIPIC-TF_Report_140912](#)

5.3 International Process Module Physical Interface (IPPI) Task Force

Shoji Komatsu reported for the task force that Doc. 5626 has been published as SEMI E166-0814.

5.4 Int'l Reticle SMIF Pod & Load Port Interoperability Task Force

Koji Oyama (Dainichi Shoji) reported that the activity was referred in the Liaison Report of North America PIC TC Chapter of this meeting.

5.5 450 mm AMHS Task Force

Kenji Yamagata (DAIFUKU) reported for the task force. This report contained information on the following items.

- Working on the development of revised SEMI E156
 - The task force to propose Doc. 5524 (Revision to SEMI E156) ballot submission for Cycle 7 at the New Business section of this meeting

- The task force to propose the withdrawal of SNARF 5632: Standardization on signal tower for AMHS at the New Business section of this meeting.

Attachment: [05_20140912 JA 450mm AMHS TF Report R0.0](#)

5.6 Fiducial Mark Interoperability Task Force

Mitsuhiro Matsuda (Hitachi Kokusai Electric) reported for the task force as following items.

- North America TC Chapter of Traceability Global Technical Committee has SNARF 5752 (Revision to SEMI T7) to adapt SEMI T7 Mark 450 mm Wafer. The TF to hold a meeting on September 29 and review the Doc. 5752 draft.

5.7 International 450mm Shipping Box Task Force and JA Shipping Box Task Force (under Silicon Wafer Global Technical Committee)

Shoji Komatsu reported for those two task forces as attached. Of note:

- Leadership change
- 450 mm Wafer Shipping System
- 450 FOSB (M80)

Attachment: [06_450mm SB-TF_Report_140911](#)

5.8 International 450mm related activities under Silicon Wafer Global Technical Committee

Tetsuya Nakai (SUMCO) reported for the 450mm related activities under Silicon Wafer Global Technical Committee as attached. Of note:

- Doc. 5604: Line Item Revision to SEMI M1-0114, Specification for Polished Single Crystal Silicon Wafer and SEMI M20-0110, Practice for Establishing a Wafer Coordinate System
- SNARF proposal of Revision to SEMI M62

Attachment: [07_Si WaferCommittee_140911](#)

6 Old Business

None

7 New Business

7.1 Proposal of Revision to SEMI E84

Jan Rothe (GLOBALFOUNDRIES) made a proposal of Revision to SEMI E84-1109 “Specification for Enhanced Carrier Handoff Parallel I/O Interface” as attached and the Japan TC Chapter discussed the proposal as following.

- Makoto Yamamoto (Murata Machinery) commented that there were the other solutions which already existed. The proposal here could be another solution as an example.
- Supika Mashiro (Tokyo Electron) suggested that this proposal to North America TC Chapter meeting to discuss on the update SEMI E84. If this is the only item to be modified SEMI E84, then the Global PIC Maintenance TF could handle it. If other issues exist in SEMI E84, it is better to bring the issue to SEMI E84 revision TF.
- Mitsuhiro Matsuda (Hitachi Kokusai Electric) suggested that he would show this proposal to the next Japan I&C TC meeting on September 18 and would ask any comment to Jan Rothe if there is.

Jan Rothe agreed to the suggestion by Supika Mashiro above mentioned.

7.2 Proposal of Reapproval of SEMI E92

Proposal of SNARF for Reapproval of SEMI E92 was made as following.

Motion:	Approve the SNARF for Reapproval of SEMI E92-0302E, “Specification for 300 mm Light Weight and Compact
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	Box Opener/Loader to Tool-Interoperability Standard (Bolts/Light)”
By / 2nd:	Shoji Komatsu (Acteon) / Mitsuhiro Matsuda (Hitachi Kokusai Electric)
Discussion:	None
Vote:	10 in favor and 0 opposed. Motion passed.

Proposal of submission of the ballot (Reapproval of SEMI E92-0302E) for Cycle 7-2014 was made as following.

Motion:	Approve the submission of ballot for Reapproval of SEMI E92-0302E, “Specification for 300 mm Light Weight and Compact Box Opener/Loader to Tool-Interoperability Standard (Bolts/Light)”
By / 2nd:	Shoji Komatsu (Acteon) / Mitsuhiro Matsuda (Hitachi Kokusai Electric)
Discussion:	None
Vote:	10 in favor and 0 opposed. Motion passed.

7.3 Proposal of Reapproval of SEMI E110-1102

Proposal of SNARF for SEMI E110 was made as following.

Motion:	Approve the SNARF for Reapproval of SEMI E110-1102, “Guideline for Indicator Placement Zone and Switch Placement Volume of Load Port Operation Interface for 300 mm Load Ports”
By / 2nd:	Shoji Komatsu (Acteon) / Mikio Otani (Sinfonia Technology)
Discussion:	The document should be inactive, which means the TC does not actively support the document. If it is reapproved, it means the TC supports the entire document. Some rejects would be voted to the ballot of this document, because it contains some impractical guidance. (Supika Mashiro)
Vote:	8 in favor and 2 opposed. => This motion was withdrawn after the discussion below.

Proposal of submission of the ballot (Reapproval of SEMI E110) for Cycle 7-2014 was made as following.

Motion:	Approve the submission of ballot for Reapproval of SEMI E110-1102, “Guideline for Indicator Placement Zone and Switch Placement Volume of Load Port Operation Interface for 300 mm Load Ports”
By / 2nd:	Shoji Komatsu (Acteon) / Mikio Otani (Sinfonia Technology)
Discussion:	The document should be a revision ballot, because the title “Guideline” violates the regulation. A&R will make a statement for some documents including the title “guideline” to be revised to appropriate equivalent title using line item ballot. TC could submit the line item ballot. If the reapproval ballot is passed by the TC Chapter it would not be acceptable by A&R. (Supika Mashiro) This document cannot use the special treatment because it includes “Requirements”, which is forbidden for Guide. (Mitsuhiro Matsuda) Supika Mashiro (Tokyo Electron) proposed to make it inactive because if the document to become inactive no change is necessary and the document is usable.
Vote:	8 in favor and 2 opposed. => The motion was withdrawn.

The two motions about the Reapproval of SEMI E110 were withdrawn as above. The PIC Maintenance Task Force will have a further discussion for this issue.

7.4 Proposal of Ballot 5524 Submission

Proposal of submission of Ballot 5524 (Revision to SEMI E156) for Cycle 7-2014 or Cycle 8-2014

Motion:	Approve the submission of Ballot 5524 for Revisions to SEMI E156-0710, “Mechanical Specification for 450 mm AMHS Stocker to Transport Interface”, with title change to “Mechanical Interface Specification for 450 mm AMHS Stocker to Transport Equipment”
By / 2nd:	Kenji Yamagata (DAIFUKU) / Shoji Komatsu (Acteon)
Discussion:	None
Vote:	9 in favor and 0 opposed. Motion passed.

7.5 Proposal of withdrawal of SNARF 5632: "Specification for Signal Tower for 450 mm AMHS"

Proposal of submission of Ballot 5524 (Revision to SEMI E156) for Cycle 7-2014 or Cycle 8-2014

Motion:	Approve the withdrawal of SNARF 5632: "Specification for Signal Tower for 450 mm AMHS"
By / 2nd:	Kenji Yamagata (DAIFUKU) / Shoji Komatsu (Acteon)
Discussion:	The reason of the withdrawal is lack of interest for standardization.
Vote:	9 in favor and 0 opposed. Motion passed.

7.6 Change of Technical Architect

Takao Nojima (Intel) announced that he stepped down from the Technical Architect for Japan TC Chapter of PIC Global Technical Committee. Shoji Komatsu (Acteon) was recommended to be a new Technical Architect.

Motion:	TC appoints to Shoji Komatsu (Acteon) as Technical Architect of Japan TC Chapter of PIC Global Technical Committee
By / 2nd:	Sadao Kumai (Kumai Consulting) / Mitsuhiro Matsuda (Hitachi Kokusai Electric)
Discussion:	None
Vote:	10 in favor and 0 opposed. Motion passed.

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 Japan TC Chapter of PIC Global Technical Committee is scheduled for Thursday, December 4 at Japan Standards Winter 2014 Meetings in conjunction with SEMICON Japan 2014 at Tokyo Big Sight. Time is to be decided.

Respectfully submitted by:
 Chie Yanagisawa
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Minutes approved by:

Tsuyoshi Nagashima (Miraial), Co-chair	November 25, 2014
Tsutomu Okabe (TDK), Co-chair	November 26, 2014
Kenji Yamagata (DAIFUKU), Co-chair	November 25, 2014

Table 8 Index of Available Attachments #1

#	<i>Title</i>	#	<i>Title</i>
01	EU_EA_Liaison Report September 5, 2014	06	450mm SB-TF_Report_140911
02	NA PIC Report Sept 2014 MT	07	Si WaferCommittee_140911
03	SEMI Staff Report 2014 September_R0.2a	08	E84-Error-Signalling++
04	450mmIPIC-TF_Report_140912		
05	20140912 JA 450mm AMHS TF Report R0.0		

#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.