



## Information & Control Korea TC Chapter

### Meeting Summary and Minutes

April 29 2016, 14:00 – 17:00

10F KSIA Bldg, 182, Pangyoyeok-ro, Bundang-gu, Seongnam-si, Gyeonggi-do, Korea

#### TC Chapter Announcements

None

#### Next TC Chapter Meeting

October 7, 14:00 – 17:00

SEMI Korea Office, Seoul, Korea

#### Table 1 Meeting Attendees

*Italics indicate virtual participants*

**Co-Chairs:** Chulhong Ahn (SK hynix), Kevin Lee (Miracom), Hyungsu Kim (Doople)

**SEMI Staff:** Natalie Shim

<i>Company</i>	<i>Last</i>	<i>First</i>	<i>Company</i>	<i>Last</i>	<i>First</i>
ASM	Jung	IlGun	SEMES	Cho	Changyul
Doople	Kim	Hyungsu	SK Hynix	Ahn	Chulhong
Kornic Automation	Kim	Kyung Tae	SK Hynix	Choi	Yoo Ho
KSIA	Lee	Mina	TEL	Kim	Gwanwoo
Lam Research	Lee	Kevin	TEL	Im	Byoung Min
Mirae	Moon	Jin Sik	TES	Lee	Myung Sook
Miracom	Lim	Youngshin	SEMI HQ	Amano	James
SEMES	Kim	Se Hoon			

#### Table 2 Leadership Changes

None

#### Table 3 Ballot Results

**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>
5833	New Standard: Specification For Maintenance Program Model (MPM)	<b>Failed</b> ballots and rework

#### Table 4 Authorized Activities

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 5 Authorized Ballots**

None

**Table 6 New Action Items**

<i>Item #</i>	<i>Assigned to</i>	<i>Details</i>
20160429-1	Natalie Shim	Request sub-material for the Doc 5601A to Japan GEM300 TF if any
20160429-2	Hyungsu Kim & Natalie Shim	Keep members update about EDA Freeze 3 development status.
20160429-3	GEM300 TF	Review the 5833 scope by the next meeting.
20160429-4	Natalie Shim	Submit the problem state material for E87.1 revision to NA RSC and Regulation Subcommittee and get their guidance.
20160429-5	Youngshin Lim & Kevin Lee	Prepare new TFOF for the back-end activity by the next meeting.

**Table 7 Previous Meeting Action Items**

<i>Item #</i>	<i>Assigned to</i>	<i>Details</i>	<i>Status</i>
20160128-1	GEM300 TF	Review SNARF 4946, SNARF 5738 and SNARF 5320 before they are re-start the activities to make sure they are up-to-date.	Done
20160128-2	Natalie Shim	Explain what kind of discussion was made on 5320 during the meeting and forward the TC Chapter's decision on 5320 to the author.	Done
20160128-3	GEM300 TF	Double check the possible conflict between E171 and 4946 ballot draft before it issues.	On-going
20160128-1	GEM300 TF	Review SNARF 4946, SNARF 5738 and SNARF 5320 before they are re-start the activities to make sure they are up-to-date.	Done

**1 Welcome, Reminders, and Introductions**

Hyungsu Kim (Doople) called the meeting to order at 14:00. The meeting reminders on antitrust issues, intellectual property issues and holding meetings with international attendance were reviewed. Attendees introduced themselves.

**Attachment:** 01, Meeting Reminders

**2 Review of Previous Meeting Minutes**

The TC Chapter reviewed the minutes of the previous meeting.

**Motion:** Approve the previous meeting minutes as it is  
**By / 2<sup>nd</sup>:** Chulhong Ahn (SK Hynix)/ Byoung Min Im (TEL)  
**Discussion:** None  
**Vote:** 13-0, Motion Carried

**Attachment:** 02, Previous Meeting Minutes

**3 Liaison Reports**

*3.1 Information & Control Japan TC Chapter*

Natalie Shim (SEMI Korea) reported for the I&C Japan TC Chapter. Of note:

- Leadership and Structure Change
  - No change
- Document Review Summary
  - **Passed (Cycle 1, 2016)**
    - Line items 1 and 2 of Doc. 5829B (Line Item Revision to SEMI E171-05215, Specification for Predictive Carrier Logistics, PCL, and SEMI E171.1-0515 Specification for SECS-II Protocol for Predictive Carrier Logistics). 5829B is on A&R review.
- Upcoming ballots for cycle 4, 2016
  - Doc.5601A (New Standard, Specification for Wafer Job Management, WJM))
- Announcement
  - SEMI E170, SEMI E171 and #5601 document group was named “GEM300A”.
  - STEP/GEM300A to be held on Friday, May 20, 13:00-18:30 at SEMI Japan office
- Equipment System Security (EISS) TF
  - SEMI E169 was introduced in KSIA/SEMI Korea I&C Workshop on February 24, 2016.
  - The Access control with RBCA (Role Based Access Control) was discussed.
    - Two SNARFs to be prepared
      - Specification for Authentication Data Transfer
      - Specification for Role Based Access Control
- Fiducial Mark Interoperability TF
  - Doc. 5890 (Revision to SEMI T7-0415 Specification for back surface marking of double-side polished wafers with a two-dimensional matrix code symbol)
    - Ballot was passed with editorial changes at Japan TC Chapter meeting of Traceability GTC in conjunction with SEMICON Japan 2015 held on December 18 and also passed A&R. The document is waiting for the publication.
  - Assembly and Packaging: Discussing backend alignment issues with introducing fiducial mark wafer.
  - Task force leaders to start discussion about disbanding this TF if the TF doesn't have further activity.
- GEM 300 TF
  - 5973 (Line Item Revision to SEMI E170 & SEMI E170.1)
    - SNARF was approved at I&C Japan TC Chapter meeting in conjunction with SEMICON Japan 2015 on December 18.
    - It is highly probable that documentation quality issues
  - 5601(New Standards for “Wafer Job Management”)
    - Approved Change concept “Wafer Object” to “Wafer Job”
    - Revised SNARF was approved by GCS on October 14, 2015.
    - The TC Chapter granted a one-year extension of the project period for the SNARF (to June 18, 2017).
    - Doc. 5601A is submitted to Cycle 4.
  - JA GEM300TF member agreed to name SEMI E170, SEMI E171 and 5601 document group as ‘GEM300A’.

- Japan I&C Committee Maintenance TF
  - The TF meeting was held on April 14, 2016 at SEMI Japan.
  - Leadership change: Hideaki Ogihara (Affiliate unknown) stepped down.
  - 5615 (Revision to E98 & E98.1 (OBEM), To remove “provisional”) in progress.
  - SEMI E153 (AMHS SEM)
    - Technical revision is not required by review
    - Pending reapproval due to SML notation issues.
  - SEMI E99 (Carrier ID Reader/Writer)
    - Maintenance TF is assigned for this revision activity.
    - SNARF to be prepared and revision items to be listed up.
  - The activity of SEMI E107 “Specification of Electric Failure Link Data Format for Yield Management System” to be reviewed by Ogiwara-san for the next step.
  - SNARF for SEMI E91 (PSEM) to be prepared.
- Sensor Bus TF
  - The TC Chapter approved to discharge the task force at the TC Chapter meeting on March 8.
  - Japan I&C Maintenance TF will take care of their documents developed by Sensor Bus TF.
- Next meeting: Thursday, June 16, 2016 at SEMI Japan office, Tokyo
  - 2016 meetings schedule: June, September and December 16

**Action Item:** 20160429-1, Request sub-material for the Doc 5601A to Japan GEM300 TF if any (Natalie Shim)

**Attachment:** 03, Japan Liaison report

### 3.2 Information & Control North America TC Chapter

Natalie Shim reported for the I&C NA TC Chapter. Of note:

- Leadership and Structure Change
  - Lance Rist (RistTex) has stepped down as TC Chapter Co-chair.
- New Activities
  - 6005 (Line Item Revision to E30, Add SMN)
  - 6008 (New Auxiliary Information, Equipment Data Acquisition (EDA) Freeze Version Overview)
  - 6009 (Line Item Revision to E132 and E132.1)
- Document Review Summary (Reviewed in NA Spring Meeting)
  - **Passed**
    - 5274G (Revision to Add a New Subordinate Standard Specification for Sensor/Actuator Network Specific Device Model of a Generic EQUIPMENT Add-On Sensor (ADDON) to SEMI E54-0413, Sensor/Actuator Network Standard)
    - 5913 (Reapproval for SEMI E157-0611, Specification)
  - **Failed**
    - 5821B (New Standard, Specification for Subsystem Energy Savings Mode Communication (SESMC))



- 5912 (Line Item Revisions to E142.1-0211, XML Schema for Substrate Mapping, E142.2-0211, SECS II Protocol for Substrate Mapping, and E142.3-0211, Web Services for Substrate Mapping, to correct nonconforming titles).
- Upcoming ballots for cycle 4, 2016
  - R5274G (Revision to add a New SEMI E54 Subordinate Standard: Specification for Sensor/Actuator Network Specific Device Model for Generic Equipment add-on Sensor (ADDON))
  - 5716 (Revisions to SEMI E133, Specification for Automated Process Control Systems Interface and SEMI E133.1, Provisional Specification for XML Messaging for Process Control Systems (PCS))
  - 5821C (New Standard: Specification for Energy Savings Mode Communication between Semiconductor Equipment and Sub-Systems)
  - 5872 (Line Item Revisions to SEMI E172, Specification for SECS Equipment Data Dictionary (SEDD))
- Diagnostic Data Acquisition (DDA) TF
  - Reviewed and reclassified all issues tracked in the Interface A issue list
  - Task force plans
  - Continue supporting the current EDA standards suite and plan for Freeze 3
  - Maintain an active list such that it can be addressed once industry is ready for a new version
  - Next meeting: Wednesday, July 13, 2016 at SEMICON West 2016 (San Francisco, CA)
- Energy Saving Equipment Communication (ESEC) TF
  - 5821B, New Standard: Specification for Subsystem Energy Savings Mode Communication (SESMC)
  - Failed ballot review at NA Spring 2016 meeting. To be reworked and balloted in for review at SEMICON West 2016 meeting.
- GEM300 TF
  - Requesting to review GEM300 TF documents being developed by the other regions.
  - 5872 (LI Revisions to SEMI E172, Specification for SECS Equipment Data Dictionary) to be balloted in for review at SEMICON West 2016 meeting.
- Process Control Systems (PCS) TF
  - 5716: Revisions to SEMI E133, Specification for Automated Process Control Systems Interface and SEMI E133.1, Provisional Specification for XML Messaging for Process Control Systems (PCS), ballot to be issued for review at SEMICON West
  - Other Documents under development
  - 5967: Line Item changes to E133 and E133.1 to support XML alignment with XML style guide
  - 5650: other improvements related to XML implementation
- Sensor Bus TF
  - 5274G passed ballot review with technical changes at NA Spring 2016 meeting. Ratification ballot issued in Cycle 4-2016

**Action Item:** 2016049-2, Keep members update about EDA Freeze 3 development status. (Hyungsu Kim & Natalie Shim)

**Attachment:** 04, North America Liaison report

### 3.3 Information & Control Taiwan TC Chapter

Natalie Shim reported for the Information & Control Taiwan TC Chapter. Of note:

- Leadership and Structure Change
  - None
- Equipment Information Integration TF
  - No Activity
- GEM300 TF
  - No Activity
- Backend Factory Integration TF
  - SNARF (Backend Die Traceability Suite Definition) to be submitted in the next TC meeting.

**Attachment:** 05, Taiwan Liaison report

### 3.4 SEMI Staff Report

Natalie Shim gave the SEMI Staff Report. The introduction of ratification ballot process and its best practice was followed by James Amano (SEMI HQ).

- Global 2016 Calendar of Events
  - Advanced Semiconductor Manufacturing Conference (May 16-19, 2016, Saratoga Spring, NY)
  - SEMICON West (July 12-14, 2016, San Francisco, CA)
  - SEMICON Taiwan (September 7-9, 2016, Taipei, Taiwan)
  - SEMICON Europa (October 25-27, 2016, Grenoble, France)
  - SEMICON Japan (December 16-18, 2016, Tokyo)
- Critical Dates update
  - 2016 Critical dates including newly created cycle 9 is introduced. It also can be found at SEMI website ([www.semi.org/en/Standards/P\\_000788](http://www.semi.org/en/Standards/P_000788))
- SEMI Standards Publications Report

Cycle	New	Revised	Reapproved	Withdrawn
December 2015	0	3	2	0
January 2016	6	7	0	0
February 2016	4	4	3	0
March 2016	2	20	4	0

- Total SEMI Standards in portfolio: 962 including 131 Inactive Standards

**Attachment:** 06, SEMI Staff report

## 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.

NOTE 2: 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 5833, New Standard, Specification for Maintenance Program Model

- **Failed**

**Motion:** To find Mitsuhiro Matsuda negative #3 related and persuasive: *There is no requirement about parameters with event. At least, some ID (MntProgramID) shall be required to distinguish different maintenances.*

**By / 2nd:** Hyungsu Kim (Doople)/ Byoung Min Im (TEL)

**Discussion:** None

**Vote:** 13-0, Motion Carried

**Attachment:** 07, 5833 Ballot report

## 5 Subcommittee and Task Force Reports

### 5.1 GEM300 Task Force

Each project owner reported their issues. No written report provided.

- 5320 (Revision to E116)

**Motion:** To Abolish SNRAF 5320

**By / 2nd:** Chulhong Ahn (SK Hynix)/ Byoung Min Im (TEL)

**Discussion:** None

**Vote:** 13-0, Motion Carried

- 5833 (New Standard, Specification for Maintenance Program Model)

- Hyungsu Kim said that there were several reject comments asking for the clarification between 5833 and E40.
- He will discuss about these rejects with TF and will decide take action.

**Action Item:** Review the 5833 scope by the next meeting.

- E87- 0709 and E87.1- 0707 Revision

- Byoung Min Im Korea reported that he wants to do a line item revision for E87-0709 (4946) and E87.1-0707 (5738) but E87.1-0707 requires major revision due to “provisional status”. In addition, E87.1 also requires extensive revision in its limitation section 3.2.
  - 3.2 *This is a provisional specification. The following areas must be completed before the provisional status is removed:*
  - *Any additional services, or changes to existing services, in Carrier Management must be mapped to SECS-II messages.*
- As Korea GEM 300 TF doesn't have the expertise to do major revision on E87.1, TF decided to endorse the issue to Regulation Subcommittee for their guidance.

**Action Item:** 20160429-4, Submit the problem state material for E87.1 revision to NA RSC and Regulation Subcommittee and get their guidance. (Natalie Shim)

## 6 New Business

### 6.1 Back-end Automation

Natalie Shim reminded the committee to continue Back-end Automation standardization opportunity related discussion from previous meeting.



- Per discussion, the committee members agreed to extend their activity to the assembly & packaging areas. The committee asked Youngshin Lim (Miracom) and Kevin Lee (Lam Research) to study more in details and prepare TFOF for activity by next meeting.

**Action Item:** 20160429-5, Prepare new TFOF for the back-end activity by the next meeting.

## 6.2 HQ Introduction

James Amano introduced SEMI’s plan and strategy on Smart Manufacturing and FHE.

**Attachment:** 08, Manufacturing Standards Opportunities for Flexible & Hybrid Electronics

## 7 Next Meeting and Adjournment

The next meeting is scheduled for October 7 at SEMI Korea 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 17:00.

Respectfully submitted by:

Natalie Shim

Sr. Specialist, Standards

SEMI Korea

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Email: [eshim@semi.org](mailto:eshim@semi.org)

Minutes approved by:

Chulhong Ahn (SK Hynix), Co-chair	<Date approved>
Hyungsu Kim (Doople), Co-chair	<Date approved>
Kevin Lee (Lam Research), Co-chair	<Date approved>

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

<i>Title</i>	<i>Title</i>
01, Meeting Reminders	05, Taiwan Liaison report
02, Previous Meeting Minutes	06, SEMI Staff report
03, Japan Liaison report	07, 5833 Ballot report
04, North America Liaison report	08, Manufacturing Standards Opportunities for Flexible & Hybrid Electronics

#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.