

## Korea Information and Control Committee Meeting Summary and Minutes

14:00 – 17:00, Thursday, January 28, 2016  
#305, COEX, Seoul, Korea

### Next Committee Meeting

Friday, April 29, 2016

SEMI Korea office, Seoul, Korea

### Committee Announcements

None

### 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
ASM	Shim	Jong Sub	SK Hynix	Ahn	Chulhong
Cimetrix	Francis	David	SK Hynix	Choi	Yoo Ho
Doople	Kim	Hyungsu	TEL	Kim	Gwanwoo
Kornic Automation	Kim	Kyung Tae	TEL	Im	Byoung Min
KSIA	Lee	Mina	TES	Lee	Myung Sook
PSK	Lee	Wook	Windtree	Kim	Wontae
PSK	Lim	Goong Hwa			

### Table 2 Leadership Changes

None

### Table 3 Ballot Results

None

### Table 4 Authorized Activities

None

### Table 5 Authorized Ballots

None

### Table 6 New Action Items

<i>Item #</i>	<i>Assigned to</i>	<i>Details</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.
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.
20160128-3	GEM300 TF	Double check the possible conflict between E171 and 4946 ballot draft before it issues.

**Table 7 Previous Meeting Actions Items**

None

## 1 Welcome, Reminders, and Introductions

Chulhong Ahn (SK Hynix) 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, SEMI Standards Required Meeting Elements

## 2 Review of Previous Meeting Minutes

The committee reviewed the minutes of the previous meeting held September 18, 2015.

**Motion:** Approve the minutes of the previous meeting with editorial changes

**By / 2<sup>nd</sup>:** Won Tae Kim (Windtree)/ Yoo Ho Choi (SK Hynix)

**Discussion:** None

**Vote:** 13-0 in favor. Motion carried.

**Attachment:** 02, Korea I&CC meeting (September 18) minutes

## 3 Liaison Reports

### 3.1 Japan Information & Control Committee

Natalie Shim (SEMI Korea) presented the Japan I&C Committee report. Of note:

- Leadership and Structure Change
  - No change
- Document Review Summary
  - **Passed (Cycle 8, 2015)**
    - Line items 1, 2, 4, 5 and 6 of Doc. 5829A (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)
    - Doc.5388 (Revision to E170 with title changes to “Specification for Secured Foundation of Recipe Management System (SFORMS)”, and E170.1 to “Specification for Secs-II Protocol for Secured Foundation of Recipe Management System (SFORMS)”)
- Upcoming ballots for cycle 1, 2016
  - Doc.5829B (Line Item Revision to SEMI E171-0515, Specification for Predictive Carrier Logistics and SEMI E171.1-0515, Specification for SECS-II Protocol for Predictive Carrier Logistics)
- Newly Authorized Activity
  - SNARF 5601 (New Standard, Specification for Wafer Job Management)
  - SNARF 5973 (Line Item Revision to E170-MM16(SEMI Doc.5888), Specification for Secs-Ii Protocol for Secured Foundation of Recipe Management System (SFORMS) and to E170.1-MM16, Specification for SECS-II Protocol for Secured Foundation of Recipe Management System (SFORMS)
  - SNARF 5829 (Line Item Revision to SEMI E171-0515, Specification for Predictive Carrier Logistics(PC))
- Equipment System Security (EISS) TF
  - 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
  - T7 Issue
    - Task force decided to delete all position specifications from SEMI T7 because position specifications are also described on SEMI M1 and other related Silicon Standard.
  - 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.
    - The ballot is in A&R process
  - 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
  - Documents under development
    - All the 6 line items of Doc.5829A (Line Item Revision to E171 and E171.1, PCL) passed as balloted in December 18, 2015. It is on A&R process.
    - SNARF 5829 (Line Item Revision to E171, PCL) revised to correct mnemonics in some figures. Doc. 5829B completed cycle 1 of 2016 and the result will be reviewed in March 8 meeting.
    - Doc.5888 (Revision to SEMI E170 and SEMI E170.1, PRC) passed with editorial changes in December 18, 2015 meeting. It is on A&R process.
    - SNARF 5973 (Line Item Revision to SEMI E170 & E170.1, PRC to SFORMS) approved in December 18, 2015
    - SNARF 5601 (New Standard, Wafer Job Management) revised to change the document concept from “Wafer Object” to “Wafer Job”. Next ballot expects to be issued in 2016.
- Japan I&C Committee Maintenance TF
  - Doc.5615 (Revision to SEMI E98, Provisional Specification for Object-Based Equipment Model and SEMI E98.1, Provisional Specification for SECS-II Protocol for The Object-Based Equipment Model) is on-going.
  - Revision to SEMI E153-0310 (Specification for AMHS SEM (AMHS SEM)) is pending due to SML and SML notation issue.
  - SNARF for the SEMI E99-1104E revision ((Reapproved 0710) “The Carrier ID Reader/Writer Functional Standard: Specification of Concepts, Behavior, and Services” and SEMI E99.1-1104 (Reapproved 0710) “Specification for SECS-I and SECS-II Protocol for Carrier ID Reader/Writer Functional Standard”) will be prepared.
  - The action to the SEMI E107-1102 (Reapproved 0710) (Specification of Electric Failure Link Data Format for Yield Management System) is under discussion.
- Sensor Bus TF
  - No activity.
- Next meeting: Tuesday, March 8, 2016 at SEMI Japan office, Tokyo
  - 2016 meetings schedule: June, September and December 16

**Attachment:** 03, Japan Information & Control Committee Liaison Report

### 3.2 North America Information & Control Committee

Natalie Shim presented the North America Information & Control Committee report. Of note:

- Document Review Summary for Cycle 6 to 7
  - **Failed**
    - Doc.5274F (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)
    - Doc.5821A (New Standard, Specification for Subsystem Energy Savings Mode Communication, SESMC)
  - **Passed**
    - Doc.5844A (Line Item Revision to SEMI E54, Sensor/Actuator Network Standard with title change to Specification for Sensor/Actuator Network) – All 6 line items are passed.
- Upcoming ballots to be reviewed at the NA Spring meetings (cycle 8 to 9)
  - Doc.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)
  - Doc.5821B (New Standard, Specification for Subsystem Energy Savings Mode Communication, SESMC)
  - Doc.5872 (Line Item Revisions to SEMI E172, Specification for SECS Equipment Data Dictionary (SEDD))
  - Doc.5912 (Line Item Revisions to E142.1-0211, E142.2-0211 and E142.3-0211, to correct nonconforming titles)
  - Doc.5913 (Reapproval for SEMI E157-0611, Specification for Module Process Tracking)
  - Doc.5914 (Reapproval for SEMI E54.3-0698 (Reapproved 1110), Specification for Sensor/Actuator Network Specific Device Model for Mass Flow Device)
- Newly Authorized Activities for 5 –year Review
  - Doc.5913 (Reapproval for SEMI E157-0611, Specification for Module Process Tracking)
  - Doc.5914 (Reapproval for SEMI E54.3-0698 (Reapproved 1110), Specification for Sensor/Actuator Network Specific Device Model for Mass Flow Device)
- Diagnostic Data Acquisition (DDA) TF
  - Reviewed and reclassified all issues tracked in the Interface A issue list
  - To continue supporting the current EDA standards suite and plan for Freeze 3
  - To maintain an active list such that it can be addressed once industry is ready for a new version
- Energy Saving Equipment Communication (ESEC) TF
  - Doc.5821A (New standard, Specification for Subsystem Energy Saving Mode Communication, SESMS) failed ballot review at NA Fall 2015 meeting. It will be reworked and balloted for review at NA Spring 2016 meeting.
- GEM300 TF
  - Requesting to review documents being developed by the other regions.
  - Doc.5872 (Line Item Revision to E172, Specification for SECS Equipment Data Dictionary) to be balloted in cycle 2-16.
- Sensor Bus TF

- Doc.5844A (Line Item Revision to SEMI E54, Primary Standard and Subordinate Standards to correct nonconforming titles) passed ballot review at NA Fall 2015 meeting.
- Doc.5274F (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) failed ballot review at NA Fall 2015 meeting. It will be reworked and balloted for review at NA Spring 2016 meeting.
- Process Control System (PCS) TF
  - Doc.5274 (Line Item Revision to E133 and E133.1 to support XML alignment with XML style guide and other improvements related to XML implementation.)
- SECS Message Language (SML) Notation Copyright Update
  - Peer Group has donated all of its rights to SML to the public domain for free and unrestricted use without license, attribution, or fee.
  - SML-related activity that has been on hold can now be restarted.
- Next meeting: April 6 at in San Jose, California.

**Attachment:** 04, North America Information & Control Committee Liaison Report

### 3.3 *Taiwan Information & Control Committee*

- Equipment Information Integration TF Task Force
  - The Task Force currently has no activities.
- GEM300 TF
  - The Task Force currently has no activities.
- Backend Factory Integration TF
  - The Task Force will be held the first time meeting on Jan. 29 at SEMI Taiwan Office.
- Next meeting: March to April, 2016 at SEMI Taiwan office, Taipei (Tentative)

**Attachment:** 05, Taiwan Information & Control Committee Liaison Report

### 3.4 *SEMI Staff Report*

Natalie Shim gave the SEMI Staff Report. The key items were as follows:

- Global 2016 Calendar of Events
  - European 3D Summit (Jan 18-20, 2016, Grenoble, France)
  - SEMICON Korea (Jan 27-29, 2016, Seoul, Korea)
  - ISS Europe (Mar 6-8, 2016, Nice, France)
  - Solarcon China/SEMICON China (Mar 15-17, 2016, Shanghai, China)
  - 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
August 2015	3	9	8	0
September 2015	3	8	2	0
October 2015	2	13	5	1
November 2015	1	14	18	0

- Total SEMI Standards in portfolio: 950 including 114 Inactive Standards

**Attachment:** 06, SEMI Staff report

#### 4 Ballot Review

No ballot was submitted for committee adjudication.

#### 5 Subcommittee & Task Force Reports

##### 5.1 GEM300 TF

The task force leaders summarized the GEM300 task force meeting result by verbally. Of note:

- Meeting information
  - Last meeting: September 18, 2015 at SEMI Korea office, Seoul, Korea
  - Next meeting: Friday, April 1 at SEMI Korea office, Seoul, Korea
- All the activities related to SML Notation were on hold due to copyright issue.
  - Doc. 4946(Line Item Revision to SEMI E87-0708)
  - Doc. 5738(Revision to SEMI E87.1-0707)
  - Doc. 5320(Revision to E116 and E116.1)
- Doc. 5833(Maintenance Program Model)
  - The first ballot in cycle 1 is on-going. The result will be reviewed in the next TC chapter meeting.

##### Discussion 1:

As the SML issue is solved, GEM 300 TF will restart all the related activities including;

- Doc. 4946(Line Item revision to SEMI E87-0709)
- Doc. 5738(Revision to SEMI E87.1-0707)
- Doc. 5320(Revision to SEMI 116)

Before ballot authorization request made, GEM300 TF decided to check nonconforming title change procedure which is recently approved by ISC. Also they will review all the related SNARFs to make sure they contain current industry's needs. Details will be discussed in upcoming GEM300 TF meeting.

### **Discussion 2:**

Due to the 5320(E116 and E116.1 Revision) author's long absent, the activity has been on hold over two years. The TC chapter decided to send a final meeting invitation to the author to learn his future plan. Unless the author attends the next meeting, the TC chapter will make decision on this activity for him.

**Action Item:** 01, GEM300 TF will review SNARF 4946, SNARF 5738 and SNARF 5320 before they are re-start the activities to make sure they are up-to-date.

02, SEMI Staff will forward the TC Chapter's decision on 5320 activity to the author.

5.2 *DDA TF*

None

### **6 Old Business**

None



## 7 New Business

### 7.1 Automation Technology Committee Introduction

Tom Salmon (SEMI HQ) introduced the new Automation Technology technical committee and FlowMaster Forum as a new stream of SEMI. The details are;

- Automation Technology TC
  - To expand and apply SEMI Standards' know-how to the other industry area
  - Refactor SEMI I&CC related knowledge and add domain requirements for easier application to other areas which need more automation in material and data handling
  - Building block approach for wider scalability
  - Use of modern communication protocol
- FlowMaster Forum
  - To help application of the Standards from AT committee, develop and deploy FlowMaster concept which support Flow Shop manufacturing line in IIC and I4.0 era

**Attachment:** 07, Introduction of AT Committee and FlowMaster Forum

### 7.2 E170 and E171 Information sharing session

- Won Tae Kim (Windtree) shared two standards' current activities based on the author's request.

#### **Discussion:**

While 4946 activity was holding due to SML notation copyright issue, GEM300 TF wasn't able to keep comparing the possible activity overlap between E171 and 4946. Therefore before 4946 restart, the committee recommend TF to check the possible conflict for those two activities.

**Action Item** 03 Double check the possible conflict between E171 and 4946 ballot draft before it issues.

**Attachment:** 08, E170 FSORMS  
09, E171 PCL

## 8 Action Item Review

### 8.1 *Open Action Items*

None

### 8.2 *New Action Items*

Natalie Shim reviewed the new action item. It can be found in the previous meeting action Items table at the beginning of these minutes.

## 9 Next Meeting and Adjournment

The next meeting of the Korea I&C committee is scheduled for 15:00 - 17:00, April 29, 2016 at SEMI Korea office, Seoul, Korea

Respectfully submitted by:  
 Natalie Shim  
 Standards Specialist  
 SEMI Korea  
 Phone: 81.2.531.7808  
 Email: eshim@semi.org

Minutes approved by:

Chulhong Ahn (SK hynix), Co-chair	<Date approved>
Kevin Lee (Miracom), Co-chair	<Date approved>
Hyungsu Kim (Samsung SDS), Co-chair	<Date approved>

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

#	<i>Title</i>	#	<i>Title</i>
01	SEMI Standards Required Meeting Elements	06	Staff Report
02	Korea I&CC previous meeting minutes	07	Introduction of AT Committee and FlowMaster Forum
03	Japan I&CC liaison report	08	E170 SFORMS
04	NA I&CC liaison report	09	E171 PCL
05	Taiwan liaison report		

#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.