Korea Information and Control Committee
Meeting Summary and Minutes

14:00 – 17:00, Friday, September 18, 2015
SEMI Korea Office, #4205 Trade Tower, 511, Yeongdong-daero, Gangnam-gu, Seoul

Next Committee Meeting
Wednesday, January 27, 2016
#305, COEX, Seoul, Korea

Committee Announcements
None

Table 1 Meeting Attendees

<table>
<thead>
<tr>
<th>Company</th>
<th>Last</th>
<th>First</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASM</td>
<td>Jung</td>
<td>IIGun</td>
</tr>
<tr>
<td>ASM</td>
<td>Shim</td>
<td>Jong Sub</td>
</tr>
<tr>
<td>Doople</td>
<td>Kim</td>
<td>Hyungsu</td>
</tr>
<tr>
<td>Doople</td>
<td>Kim</td>
<td>Hyungsu</td>
</tr>
<tr>
<td>Kornic Automation</td>
<td>Kim</td>
<td>Kyung Tae</td>
</tr>
<tr>
<td>KSIA</td>
<td>Lee</td>
<td>Mina</td>
</tr>
<tr>
<td>Linkgenesis</td>
<td>Kim</td>
<td>Wontae</td>
</tr>
</tbody>
</table>

Table 2 Leadership Changes
None

Table 3 Ballot Results
None

Table 4 Authorized Activities
None

Table 5 Authorized Ballots

<table>
<thead>
<tr>
<th>#</th>
<th>When</th>
<th>SC/TF/WG</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>5832</td>
<td>Cycle 9 of 2015 or Cycle 1 of 2016</td>
<td>GEM300 TF</td>
<td>New Standard, Specification for Generic Counter Model</td>
</tr>
<tr>
<td>5833</td>
<td>Cycle 9 of 2015 or Cycle 1 of 2016</td>
<td>GEM300 TF</td>
<td>New Standard, Specification for Maintenance Program Model</td>
</tr>
</tbody>
</table>

Table 6 New Action Items

<table>
<thead>
<tr>
<th>Item #</th>
<th>Assigned to</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>20150918-1</td>
<td>Natalie Shim</td>
<td>Share TFOFs of Taiwan TFs with members.</td>
</tr>
<tr>
<td>20150918-2</td>
<td>Natalie Shim</td>
<td>Sending official letter to 5320 author to attend committee meeting to share the activity status.</td>
</tr>
<tr>
<td>20150918-3</td>
<td>Natalie Shim</td>
<td>Translate 5388 SNARF into Korean by Sept 21 and send it to the 5833 author._ done</td>
</tr>
</tbody>
</table>
### Table 6 New Action Items

<table>
<thead>
<tr>
<th>Item #</th>
<th>Assigned to</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>20150918-4</td>
<td>Ilgun Jeong</td>
<td>Share the latest activity introduction material with 5832 team members</td>
</tr>
<tr>
<td>20150918-5</td>
<td>Natalie Shim</td>
<td>Invite back-end related experts to the next committee meeting to get an advice for the possible standardization opportunity.</td>
</tr>
</tbody>
</table>

### Table 7 Previous Meeting Actions Items

<table>
<thead>
<tr>
<th>Item #</th>
<th>Assigned to</th>
<th>Details</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>20150619-1</td>
<td>Natalie Shim and Kevin Lee</td>
<td>Invite back-end related experts to the next committee meeting to get an advice for the possible standardization opportunity.</td>
<td>Open</td>
</tr>
</tbody>
</table>
1 Welcome, Reminders, and Introductions
Chulhong Ahn (SK Hynix) called the meeting to order at 15:00. 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 February 5, 2015.

Motion: Approve the minutes of the previous meeting with editorial changes
By / 2nd: Hyungsu Kim (Doople)/ Yoo Ho Choi (SK Hynix)
Discussion: None
Vote: 6-0 in favor. Motion carried.

Attachment: 02, Korea I&CC meeting (June 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 6, 2015)
    - Line items 1, 2, 5, 6 and 7 of Doc.5829 (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)
  - Failed (Cycle 6, 2015)
    - Line Item 3 and 4 of Doc. 5829 failed and returned to TF for rework.
- Upcoming ballots for cycle 7 through 8, 2015
  - Doc.5888 (Revision to SEMI E170-0815, Specification for Production Recipe Cache and SEMI E170.1-0815, Specification for SECS-II Protocol for Production Recipe Cache)
  - Doc.5829A (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)
- Equipment Information System Security (EISS) TF
  - The task force is considering future standardization item.
- Fiducial Mark Interoperability TF
  - SNARF 5890 (Revision to SEMI T7-0415, Specification for Back Surface Marking of Double-side Polished Wafers with a Two-Dimensional Matrix Code Symbol) was approved by GCS and the Doc.5890(Revision to SEMI T7-0415, Specification for Back Surface Marking of Double-side Polished Wafers with a Two-Dimensional Matrix Code Symbol) authorized cycle 7.
  - The Main contents of the Doc 5890 are,
• Scope Section 2.1
• Delete all the position specifications since it is already described on SEMI M1 and other related silicon standards.

• GEM 300 TF
  o Documents under development
    ▪ Doc.5601A (Specification for Wafer Object Model, WOMS) to be submitted for Cycle 1 or 2 of 2016.

• Japan I&C Committee Maintenance TF
  o 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.
  o Revision to SEMI E153-0310 (Specification for AMHS SEM (AMHS SEM)) is pending due to SML and SML notation issue
  o 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
  o No activity

• Next meeting: December 18, 2015 in conjunction with SEMICON Japan, Tokyo

**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 5
  o Failed
    ▪ Doc.5844 (Line Item Revision to SEMI E54, Sensor/Actuator Network Standard with title change to Specification for Sensor/Actuator Network) – All 6 line items are failed and sent back to task force for rework.

• Upcoming ballots to be reviewed at the NA Fall meetings (cycle 7)
  o 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)
• Doc. 5844A (Line Item Revision to SEMI E54 Primary Standard and Subordinate Standards to correct nonconforming titles)

• Newly Authorized Activities for 5-year Review
  o Doc. 5921 (Line Item Revision to SEMI 142.1-0211, 142.2-0211, AND 142.3-0211 to correct nonconforming titles)
  o Doc. 5931 (Reapproval for SEMI E157-0611, Specification for Module Process Tracking)
  o Doc. 5914 (Reapproval for SEMI E54.3-0698, Specification for Sensor/Actuator Network Specific Device Model for Mass Flow Device)

• Diagnostic Data Acquisition (DDA) TF
  o Reviewed and reclassified all issues tracked in the Interface A issue list
  o To continue supporting the current EDA standards suite and plan for Freeze 3
  o 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
  o Doc. 5821A (New standard, Specification for Subsystem Energy Saving Mode Communication, SESMC) is under development with S23 Global task force which is under EHS committee.

• GEM300 TF
  o To review documents being developed by the other regions.

• Sensor Bus TF
  o Doc. 5844A (Line Item Revision to SEMI E54, Primary Standard and Subordinate Standards to correct nonconforming titles) and 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) are on Cycle 7-2015 voting period.

• Process Control System (PCS) TF
  o Doc. 5650(Line Item 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) and Doc. 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) are under development to support XML alignment with XML style guide and other improvements related to XML implementation.

• SECS Message Language (SML) Notation Copyright Update
  o The following statement from SEMI Legal Counsel was read to the committee at the NA I&C Committee Spring 2015 meeting:
    ▪ On February 25, 2015, SEMI filed a complaint for declaratory relief against the PEER Group Inc. (“PEER”) arising from PEER’s assertion of a copyright and trademark in SML and its request for attribution and other license restrictions. We are seeking a judicial determination and order declaring that any member of the public, including SEMI, has the right in the United States to copy the expression embodied in SML, to create and exploit derivative works incorporating SML, and to use “SML” without infringing any right of PEER under copyright or trademark law. [SEMI expects that it will take some time before the Court resolves the complaint, and in the meantime, all committee activity related to SML and SML notation is being postponed.

• Next meeting: November 4, 2015 in San Jose, California.

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

- Committee Status
  - After 4 years inactivity period, the committee decided to re-activate the activity. It has been prepared since November 2014 by sharing information and taking advices with Japan and North America TC chapters.
  - The committee promotes SEMI Standards program to the industry and recruits new members.
- Organization structure proposal
  - The committee plans to form below two new task forces in the next committee meeting;
    - Equipment Information Integration task force (Leader: Robin Liao/TSMC)
    - Backend Factory Integration task force (Ivan Chen/TSMC)
- Next meeting: March to April, 2016 at SEMI Taiwan office, Taipei (Tentative)

Attachment: 05, Taiwan Information & Control Committee Liaison Report

Action Item: 01, Share TFOFs of Taiwan TFs with members.

3.4 SEMI Staff Report

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

- Global 2015 Calendar of Events
  - SEMICON Southeast Asia (April 22-24, 2015, Penang, Malaysia)
  - SEMICON West (July 14-16, 2015, San Francisco, California)
  - SEMICON Taiwan (September 2-4, 2015, Taipei)
  - SEMICON Europa (October 6-8, 2015, Dresden, Germany)
  - SEMICON Japan (December 16-18, 2015, Tokyo)
- Critical Dates update
  - 2015 Critical dates including newly created cycle 9 is introduced. It also can be found at SEMI website (www.semi.org/en/Standards/P_000788)

- SEMI Standards Publications Report

<table>
<thead>
<tr>
<th>Cycle</th>
<th>New</th>
<th>Revised</th>
<th>Reapproved</th>
<th>Withdrawn</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 2015</td>
<td>1</td>
<td>5</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>April 2015</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>May 2015</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>June 2015</td>
<td>4</td>
<td>3</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>July 2015</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

- Total SEMI Standards in portfolio: 941 including 113 Inactive Standards
- The Major SEMI Regulations and Procedure Guide updates were introduced.
  - Standards Document Development Project Period
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: Middle of November, 2015 (Tentative)

- Doc. 4946 (Line Item revision to SEMI E87-0709, Specification for Carrier Management, Adding Carrier Ready to Unload Prediction Feature) and Doc. 5738 (Revision to SEMI E87.1-0707, Specification for SECS-Ⅱ Protocol for Carrier Management)
  - Temporally these activities are pending because these documents are related to SECS Message Language (SML) Notation copyright issue.

- Doc. 5320 (E116 and E116.1 revision)
  - No updates from the author. The committee decided to send an official letter to the author to request the activity plan update in the next meeting.

Action Item: 02, Sending official letter to 5320 author to attend committee meeting to share the activity status.

- Doc. 5832 (New Standard, Specification for Generic Counter Model)
  - It will be submitted cycle 9-2015 or cycle 1-2016.

Motion: Authorize 5832 in cycle 9 of 2015 or cycle 1 of 2016
By / 2nd: Jongsub Shim(ASM)/ Gwanwoo Kim(TEL)
Discussion: None
Vote: 5-0 in favor. Motion carried.

Action Item: 03, Share the latest activity introduction material with 5832 team members

- Doc. 5833 (New Standard, Specification for Maintenance Program Modle)
  - It will be submitted cycle 9-2015 or cycle 1-2016.

Motion: Authorize 5833 in cycle 9 of 2015 or cycle 1 of 2016
By / 2nd: Jongsub Shim(ASM)/ Gwanwoo Kim(TEL)
Discussion: None
Vote: 5-0 in favor. Motion carried.

Action Item: 04, Translate 5388 SNARF into Korean by Sept 21 and send it to the 5833 author.

5.2 DDA TF

Korean versions of below standards were published.
6 Old Business
None

7 New Business
7.1 There was the discussion again for the standardization opportunity for the back-end area. Many of members agreed the potential of it. For the further discussion, members request SEMI to invite an expert to get advice in the next meeting.

**Action Item:** 05, Invite back-end related experts to the next committee meeting to get advice for the possible standardization opportunity.

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, January 27, 2016 in conjunction with SEMICON Korea 2016 in 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

<table>
<thead>
<tr>
<th>#</th>
<th>Title</th>
<th>#</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>SEMI Standards Required Meeting Elements</td>
<td>04</td>
<td>NA I&amp;CC liaison report</td>
</tr>
<tr>
<td>02</td>
<td>Korea I&amp;CC previous meeting minutes</td>
<td>05</td>
<td>Taiwan liaison report</td>
</tr>
<tr>
<td>03</td>
<td>Japan I&amp;CC liaison report</td>
<td>06</td>
<td>Staff Report</td>
</tr>
</tbody>
</table>

#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.