Korea Information and Control Committee
Meeting Summary and Minutes

15:00 – 17:00, Friday, June 19, 2015
Konjiam Resort, Gwangju-si, Gyeonggi-do, Korea

Next Committee Meeting
Friday, September 18, 2015
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

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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

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<tr>
<th>Item #</th>
<th>Assigned to</th>
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<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>
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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: Yoo Ho Choi (SK Hynix)/ Hyungsu Kim (Doople)
Discussion: None
Vote: 12-0 in favor. Motion carried.

Attachment: 02, Korea I&CC meeting (Feb 5) 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
  - PCL TF was merged into GEM300 TF along with all its activities and members. The GEM300 TF TFOF is modified to cover PCL TF activity.
  - Yuko Toyoshima (Hitachi High-Technologies) is newly appointed as the co-leader of GEM300 TF.
- Document Review Summary
  - Passed (Cycle 3, 2015)
    - Doc.5828 (Line Item Revision to SEMI E170-0215, Specification for Production Recipe Cache and SEMI E170.1-0215, Specification for SECS-Ⅱ Protocol for Production Recipe Cache)
      - Note: Doc.5828 and Doc.5888 also passed subsequent ISC A&R SC procedural review.
- New Activity
    - Note: It is approved by GCS on June 2, 2015.
• Upcoming ballots for cycle 5 through 7, 2015
  o Doc.5601A (New Standard, Specification for Wafer Object Model)
  o Doc.5829 (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
  o Doc.5779 (Line Item Revision to SEMI E169-0414, Guide for Equipment Information System Security) was completed. The task force is considering future standardization item.

• Fiducial Mark Interoperability TF
  o Doc.5752 (Revision of SEMI T7-0303 (Reapproved 0709), Specification for Back Surface Marking of Double-Side Polished Wafers with a Two-Dimensional Matrix Code Symbol) passed with editorial changes at Japan TC Chapter meeting of Traceability Global TC on Dec. 5 in conjunction with SEMICON Japan 2014 and is now on A&R.
  o Task force is assigned to following items of Doc.5752
    ▪ Revisit T7 purpose and scope
    ▪ Modify Figure 3 to align with M1
    ▪ M20 coordinate system
  o To be discussed following items related to Information & Control
    ▪ Fiducial Mark Reading Condition Report

• GEM 300 TF
  o The GEM300 task force TFOF has been modified to cover PCL TF activity. The new charter is as below.
    ▪ To maintain and improve the following SEMI equipment automation software standards:
  o Yuko Toyoshima (Hitachi High-Technologies) is newly appointed as a co-leader of the task force.
  o Documents under development
    ▪ Doc.5601A (Specification for Wafer Object Model, WOMS) to be balloted for Cycle 4 through Cycle 7.
    ▪ Doc.5730 (Line Item Revision to SEMI E170-0714, Specification for Production Recipe Cache, PRC) published as SEMI E170-0215.
    ▪ Doc.5828 (Line Item Revision to SEMI E170-0215 “Specification for Production Recipe Cache, PRC” and SEMI E170.1-0215 “Specification for SECS –II Protocol for Production Recipe Cache, PRC”): All four line items were passed at A&R in May, 2015.
    ▪ Doc.5888 (Revision to SEMI E170-mm15 “Specification for Production Recipe Cache, PRC” and SEMI E170.1-mm15 “Specification for SECS –II Protocol for Production Recipe Cache, PRC”): The SNARF was approved by GCS on June 2, 2015

• Predictive Carrier Logistics (PCL) TF
The task force was merged into GEM300 task force along with its current activities at SEMICON Japan 2014 Meetings on Dec. 5.

All the six line items of Doc.5735 (Line Item Revision to SEMI E171-0914, Specification for Predictive Carrier Logistics (PCL) passed as balloted at SEMICON Japan 2014 Meetings on Dec. 5 and are now on A&R.

Doc.5778 (Revision to E171-0914, Specification for Predictive Carrier Logistics (PCL), adding a New Subordinate Standard) passed with editorial changes at SEMICON Japan 2014 Meetings on Dec. 5 and are now on A&R.

- Sensor Bus TF
  - No activity

- Next meeting: June 30, 2015 at SEMI Japan office, 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**
  - **Passed**
    - Doc.5677 (Revision to SEMI E164, Specification for EDA Common Metadata)
    - Doc.5762 (Revision to SEMI E132.1, Specification for Soap Binding for Equipment Client Authentication and Authorization (ECA). Adding EDA freeze versions to E132.1)
    - Doc.5824 (Revision to Specification for SECS Equipment Data Dictionary (SEDD))
      - Note: All the listed ballots were passed subsequent ISC A&R SC procedural review.
  - **Failed**
    - Doc.5618A (New Standard: Specification for Preservation of Recipe Integrity (PRI))

- **Upcoming ballots to be reviewed at SEMICON West 2015 Meetings (cycle 5)**
  - Doc.5844 (Line Item Revision to SEMI E54 Primary Standard and Subordinate Standards to correct nonconforming titles)

- **Diagnostic Data Acquisition (DDA) TF**
  - Task force plans to continue collecting issues from users in the industry. No ballot plans for near future.

- **Energy Saving Equipment Communication (ESEC) TF**
  - Task force will work with S23 Global task force which is under EHS committee to agree on definitions related to energy conservation related terms.
  - Doc. 5821A (New standard, Specification for Subsystem Energy Saving Mode Communication, SESMS) is under development.
• **GEM300 TF**
  o SNARF 5871 (Revision to SEMI E172, Specification for SECS Equipment Data Dictionary (SEDD) approved.
    ▪ This activity will result in changes to the specification resulting from the approval of SEMI Document Doc.5619A. Those changes are based on potential revisions to the SEDD Specification identified previously by the GEM300 Process Control Systems (PCS) TF and those raised by voters during balloting of Doc. 5619A and Doc. 5824.
  o Doc.5618B (New Standard, Specification for Preservation of Recipe Integrity, PRI) is under development.
  o SNARF 5454 (Revision to SEMI E30, Specification for Generic Equipment Model (GEM) Standard and SEMI E5, SEMI Equipment Communications Standard 2 Message Content, SECS-II) and SNARF 5508 (Revision to SEMI E5, SEMI Equipment Communications Standard 2 Message Content (SECS-II), SEMI E90, Specification for Substrate Tracking, and SEMI E90.1, Specification for SECS-II Protocol Substrate Tracking) discontinued.

• **Sensor Bus TF**
  o Doc. 5844 (Line Item Revision to SEMI E54, Primary Standard and Subordinate Standards to correct nonconforming titles) and Doc.5274E (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 5-2015 voting period.

• **Process Control System (PCS) TF**
  o There was no meeting during NA Spring 2015 meetings.

• **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:** July 15, 2015 in conjunction with SEMICON West 2015 San Francisco, 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: June 18, 2015 at SEMI Taiwan office, Taipei

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 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)

- Global Information & Control Meetings
  - June
    - I&C Taiwan TC Chapter (June 18)
    - I&C Korea TC Chapter (June 19)
    - Automation Technology Japan TC Chapter (June 24)
    - I&C Japan TC Chapter (June 30)
  - July
    - NA Summer meetings (July 13 – 16)

- 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
  - March 2015 cycle
    - New Standards - 1, Revised Standards - 2, Reeapproval Standards - 2, Withdrawn Standards -0
  - April 2015 cycle
    - New Standards - 5, Revised Standards - 2, Reeapproval Standards - 0, Withdrawn Standards -1
  - Total SEMI Standards in portfolio: 933 including 110 Inactive Standards
The Major SEMI Regulations and Procedure Guide updates were introduced.
  o Added new Ratification ballot
  o Clarification and improvement on GCS voting period for Minority Report
  o Rename Procedure Guide to Procedure Manual
  o Clarification on Standards Document Development Project Period
  o Clarification on TC Membership requirement
  o Revision to Procedural review for consistency

Attachment: 05, 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
    o Last meeting: June 19, 2015 at Konjiam Resort, Gwangju-si, Gyeonggi-do, Korea
    o Next meeting: To be decided
  • 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)
    o 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)
    o No updates from the author.
  • Doc. 5832 (New Standard, Specification for Generic Counter Model)
    o Author requests to reschedule the ballot cycle from 6 to 8. The Committee will authorize the cycle 8 ballot in next meeting.
  • Doc. 5833 (New Standard, Specification for Maintenance Program Model)
    o It will be submitted cycle 6 as planned.

5.2 DDA TF
Task force is giving technical review to the below translated documents.
  • SEMI E120-0414 (Specification for the Common Equipment Model, CEM)
  • SEMI E125-0414 (Specification for Equipment Self Description, EqSD)

6 Old Business
None
7 New Business

7.1 Ethernet related association, POWERLINK, introduced their protocol to promote their technology to SEMI Standards. As the committee member found the proposed item is not match to the current Korea activities, the members recommend to reviewing Sensor Bus TFs and ESEC TF activities.

7.2 There was the discussion 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:** 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 14:00 - 17:00, September 18, 2015 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>

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<td>01</td>
<td>SEMI Standards Required Meeting Elements</td>
<td>04</td>
<td>NA I&amp;CC liaison report</td>
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<td>Korea I&amp;CC previous meeting minutes</td>
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#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.