Korea Information and Control Committee
Meeting Summary and Minutes

15:00 – 17:00, Friday, October 17, 2014
HS ville, Gapyeong-gun, Gyeonggi-do, Korea

Next Committee Meeting
Thursday, February 5, 2015
#304, 3Fl. conference center, Coex, Seoul, Korea

Committee Announcements
None

Table 1 Meeting Attendees
Co-Chairs: Chulhong Ahn (SK hynix), Kevin Lee (Miracom), Hyungsu Kim (Consultant)
SEMI Staff: Natalie Shim

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<td>Kornic Automation</td>
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<td>Hitachi Kokusai (via</td>
<td>Matsuda</td>
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<td>Miracom</td>
<td>Lee</td>
<td>Kevin</td>
<td>KSIA (Guest)</td>
<td>Lee</td>
<td>Chi Woo</td>
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Table 2 Leadership Changes
None

Table 3 Ballot Results
None

Table 4 Authorized Ballots
None

Table 5 Authorized Activities
None

Table 6 New Action Items
None

Table 7 Previous Meeting Actions Items

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<th>Item #</th>
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<th>Details</th>
<th>Status</th>
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<tr>
<td>20140627-1</td>
<td>Natalie Shim</td>
<td>Contact the Doc. 5320 author for its future plan and update it to the committee by next committee meeting</td>
<td>Open</td>
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</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 13, 2014.

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

By / 2nd: Hyungsu Kim (Doople) / Kevin Lee (Miracom)

Discussion: None

Vote: 8-0 in favor. Motion carried.

Attachment: 02, Korea I&CC previous meeting minutes

3 Liaison Reports

3.1 Japan Information & Control Committee

Matsuda Mitsuhiro (Hitachi Kokusai) presented the Japan I&C Committee report via teleconference. Of note:

- Document Review Summary
  - Failed (Cycle 5, 2014)
    - Doc.5601 (New Standard, Specification for Wafer Object Model)

- New Activities
  - Doc.5779 (Revision to SEMI E169-0414 “Guide for Equipment Information System Security”)
  - Doc.5730 (Line Item Revision to SEMI E170-0714 “Specification for Production Recipe Cache (PRC)"
  - Doc.5731 (Revision to add a New Subordinate Standard “Specification for SECS-II Protocol for Production Recipe Cache” to SEMI E170-0714 “Specification for Production Recipe Cache (PRC)"
  - Doc.5735 (Line Item Revision to SEMI E171-0914 “Specification for Predictive Carrier Logistics (PCL)"
  - Doc.5778 (Revision to add a New Subordinate Standard for Specification for SECS-II Protocol for SEMI E171-0914 “Specification for Predictive Carrier Logistics (PCL)"

- Upcoming ballots to be reviewed at Japan Standards Fall 2014 meetings
  - Doc.5779 (Revision to SEMI E169-0414 “Guide for Equipment Information System Security”)
  - Doc.5730 (Line Item Revision to SEMI E170-0714 “Specification for Production Recipe Cache (PRC)"
  - Doc.5731 (Revision to add a New Subordinate Standard “Specification for SECS-II Protocol for Production Recipe Cache” to SEMI E170-0714 “Specification for Production Recipe Cache (PRC)"
  - Doc.5735 (Line Item Revision to SEMI E171-0914 “Specification for Predictive Carrier Logistics (PCL)"
  - Doc.5778 (Revision to add a New Subordinate Standard for Specification for SECS-II Protocol for SEMI E171-0914 “Specification for Predictive Carrier Logistics (PCL)"

- Equipment Information System Security (EISS) task force
The revision SNARF for the SEMI E169-0414, Doc.5779 was approved and the ballot to be issued on cycle 7, 2014.

- Fiducial Mark Interoperability TF
  - Pre-ballot document related discussion on Doc.5752 (Revision to SEMI T7-0303(Reapproved 0709), Specification for Back Surface MARKING OF Double-side polished Wafers with a Two-Dimensional Matrix Code Symbol) was made. The task force is waiting for the feedback from Traceability global technical committee and Information & Control global technical committee.

- GEM 300 TF
  - Doc.5538A (New Standard, Specification for Production Recipe Cache (PRC)) published as SEMI E170-0714. The revision and the subordinate standard development activities to the SEMI E170-0714 were also approved as Doc.5730 (Line Item Revision to SEMI E170-0714, Specification for Production Recipe Cache (PRC)) and Doc.5731 (New Subordinate Standard, Specification for SECS II Protocol for Production Recipe Cache to SEMI E170-0714) relatively.
  - Doc.5600 (Line Item Revision to SEMI E5, E40, and E40.1, removal of inconsistencies) was withdrawn.
  - Doc.5601 (New Standard, Specification for Wafer Object Model) was adjudicated and failed committee review.

- Predictive Carrier Logistics (PCL) TF
  - Doc.5486A (New Standard, Specification for Predictive Carrier Logistic (PCL)) was published as SEMI E171-0914. The revision and the subordinate standard development activities to the SEMI E171-0914 were also approved as Doc.5735 (Line Item Revision to SEMI E171-0914, Specification for Predictive Carrier Logistic (PCL) and Doc.5778 (New Subordinate Standard, Specification for SECS II Protocol for Production Recipe Cache to SEMI E171-0714) relatively.

- Sensor Bus TF
  - Doc.5602 (Reapproval for SEMI E54.19-0308, Specification for Sensor/Actuator Network for Mechatrolink) was published as SEMI E54.19-0308 (Reapproved 0614)
  - Doc.5603 (Revision to SEMI E54.12-0701E (Reapproved 1211), Specification for Sensor/Actuator Network Communications for CC-Link) was published as SEMI E64.12-0614

- Japan I&CC 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 drafting

Next meeting: December 5, 2014 at Tokyo Big Sight Conference Tower, 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.5507A (Line Item Revisions to SEMI E132, Specification for Equipment Client Authentication and Authorization; Session Termination Errors)
  - Failed
- Doc.5620 (Revision to SEMI E5, SEMI Equipment Communications Standard 2 Message Content (SECS-Ⅱ), Add XML SECS-Ⅱ Message Notation and a Complementary File to SEMI E5-0813, SEMI Equipment Communications Standard 2 Message Content (SECS-Ⅱ))

- Upcoming ballots to be reviewed at North America Fall 2014 Meetings
  - Doc.5274C (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.5508 (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)
  - Doc.5618 (New Standard, Specification for Preservation of Recipe Integrity (PRI))
  - Doc.5619A (Revision to SEMI E30, Generic Model for Communications and Control of Manufacturing Equipment (GEM) and New Complimentary File: SECS-Ⅱ Equipment Data Template)
  - Doc.5620A (Revision to SEMI E5, SEMI Equipment Communications Standard 2 Message Content (SECS-Ⅱ) and New Complementary File: SECS-Ⅱ Message Notation using XML)

- Diagnostic Data Acquisition (DDA) TF
  - SNARF 5762 (Revision to SEMNI E132, Specification for Equipment Client Authentication and Authorization, Adding EDA freeze version to E132) was approved.
  - Doc.5677 (Revision to E164, EDA Common Metadata) is under development.

- Energy Saving Equipment Communication (ESEC) TF
  - TFOF was revised for Phase Ⅱ Energy Savings Communication between equipment and auxiliary subsystems.
    **Revised Charter:** This task force will:
    - Maintain and propose enhancements to SEMI E167 standard that specify communications between the factory system and production equipment to move the equipment between power saving modes as defined in S23.
    - Develop and propose standards for behavior, and communication of energy savings mode control between the production equipment and its auxiliary subsystems.
    - EHS Committee will be informed and ask to be involved when any issue related to fundamental energy savings concepts or definitions are discussed.

- Revised Scope:
  - This Task Force will focus on communication protocol and message content for the purpose of reducing energy consumption for the factory from process equipment and auxiliary subsystems.
  - The task force will identify requirements needed to communicate energy savings information from generic auxiliary subsystems (e.g., vacuum pumps, abatement systems, chillers, etc.).
  - The Task Force will collaborate with the EHS Committee to avoid conflict with definitions in S23.

- GEM300 TF
  - Below SNARFs were revised.
    - SNARF 5618 (New Standard: Preservation of Recipe Integrity)
- SNARF 5619 (New Standard, Specification for SECS Equipment Data Dictionary (SEDD))
- SNARF 5620 (New Standard, Specification for SECS-II Message Notation (SMN))

- Process Control Systems (PCS) TF
  - 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)) is under
    development.

- Sensor Bus TF
  - Doc.5274C (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) is authorized in cycle 6, 2014

- Others
  - SEMI E127 (Specification for Integrated Measurement Module Communications: Concepts, Behavior, and
    Services (IMMC)) and SEMI E127.1 (Specification for SECS-II Protocol for Integrated Measurement
    Module communications (IMMC)) change their status from active to inactive.
  - 5-Year Review SNARFs were approved.
    - SNARF 5763 (Reapproval for SEMI E30.5, Specification for Metrology Specific Equipment
      Model (MSEM))
    - SNARF 5764 (Reapprovals for SEMI E130, Specification for Prober Specific Equipment Model
      for 300 mm Environment (PSEM300) and SEMI E130.1, Specification for SECS-II Protocol for
      Prober Specific Equipment Model for 300 mm Environment (PSEM300))

- SECS Message Language (SML) Notation Copyright Update
  - The following statement from SEMI Legal Counsel was read to the committee at the NA I&C Committee
    meeting at SEMICON West 2014:
    - “SEMI’s investigation, conducted in conjunction with counsel, into PEER Group’s claimed
      copyright in SML and SML Notation is ongoing. Based upon the facts gathered to date and their
      legal assessment, our attorneys recently sent a letter to PEER requesting evidence that PEER has
      an enforceable copyright in SML and SML Notation, and we currently are awaiting a response
      from PEER. Ballot 5589A is being postponed in light of this ongoing investigation.”

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

3.3 SEMI Staff Report

Natalie Shim gave the SEMI Staff Report. Of note:

- Global 2014 and 2015 Calendar of Events
  - SEMICON Europa (October 7-9, 2014, Grenoble, France)
  - SEMICON Japan (December 3-5, 2014, Tokyo)
  - Industry Strategy Symposium (January 11-14, 2015, Half Moon Bay, California)
  - SEMICON Korea/ LED Korea (February 4-6, 2015, Seoul)
  - SEMICON China/ FPD China (March 17-19, 2015, Shanghai)
  - LED Taiwan (March 25-28, 2015, Taipei)
  - SEMICON Southeast Asia (April 22-24, 2015, Penang, Malaysia)
  - SEMICON West (July 14-16, 2015, San Francisco, California)
o SEMICON Taiwan (September 2-4, 2015, Taipei)
o SEMICON Europa (October 6-8, 2015, Dresden, Germany)
o SEMICON Japan (December 16-18, 2015, Tokyo)

• Critical Dates update
  o 2014 Critical dates is introduced. It also can be found at SEMI website (www.semi.org/en/Standards/P_000788)

• SEMI Standards Publications Report
  o August 2014 cycle
    ▪ New Standards - 2, Revised Standards - 7, Reapproval Standards - 0, Withdrawn Standards -0
  o September 2014 cycle
    ▪ New Standards - 2, Revised Standards - 7, Reapproval Standards - 1, Withdrawn Standards -1
    ▪ Total SEMI Standards in portfolio: 914 including 108 Inactive Standards

Attachment: 05, SEMI Staff report

4 Ballot Review
No ballot was submitted for committee adjudication.

5 Subcommittee & Task Force Reports

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

• Meeting information
  o Last meeting: October 17, 2014 @ HS ville, Gapyeong-gun, Gyeonggi-do, Korea
  o Next meeting: To be decided
• E87 and E87.1 Revision
  o Temporally these activities are pending because these documents are related to SML Notation copyright issue.
• The task force didn’t received the future plan of the Doc. 5320 (E116 and E116.1 Revision) from the author. The plan will be updated at the next committee meeting.

5.2 DDA task force
None

6 Old Business
None

7 New Business
None
8 Action Item Review

8.1 Open Action Items

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

8.2 New Action Items

None

9 Next Meeting and Adjournment

The next meeting of the Korea I&C committee is scheduled for 14:00 - 17:00, February 5, 2015 at #304, 3Fl. Conference center, Coex, Seoul in conjunction with SEMICON Korea 2015.
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

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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.