

Korea Information and Control Committee Meeting Summary and Minutes

10:00 – 12:00, Thursday, February 13, 2014
#305, COEX, Seoul, Korea

Next Committee Meeting

Friday, June 13, 2014

SEMI Korea office, Seoul, Korea

Committee Announcements

None

Table 1 Meeting Attendees

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

SEMI Staff: Natalie Shim

<i>Company</i>	<i>Last</i>	<i>First</i>	<i>Company</i>	<i>Last</i>	<i>First</i>
ASM	Shim	Jong Sub	SEMES	Cho	Chang Yul
ASM	Jung	Il Gun	SEMI HQ	Amano	James
IT Innovation	Kim	Won Tae	SK hynix	Ahn	Chulhong
KISA (Guest)	Lee	In-Young	PSK	Um	Ray
Kodi-S	Jung	Jin Soo	TEL	Mochizuki	Tadashi
Kyocera	Lee	Bong Min	TEL	Matsuda	Mitsuhiro
Miracom	Lee	Kevin	TEL Korea	Im	Byoung Min
Samsung SDS	Kim	Hyungsu	Hitachi Kokusai (via teleconference)	Matsuda	Mitsuhiro

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>
*Cycle 3		
5320C	Line Item Revision to SEMI E116-0707E, Specification for Equipment Performance Tracking and SEMI E116.1-0707 Specification for SECS- II Protocol for Equipment Performance Tracking (EPT): Adding New Attributes to EPTRACKER Object	Failed and returned to the task force for rework

Table 4 Authorized Ballots

<i>#</i>	<i>When</i>	<i>SC/TF/WG</i>	<i>Details</i>
4946C	Cycle 3 or 4, 2014	GEM300 TF	Line Item Revision to SEMI E87-0709, Specification for Carrier Management, CMS and SEMI E87.1-0707, Provisional Specification for SECS-II Protocol for Carrier Management (CMS)

Table 5 Authorized Activities

None

Table 6 New Action Items

<i>Item #</i>	<i>Assigned to</i>	<i>Details</i>
20140213-1	Natalie Shim	If there is any updated Fiducial Mark Interoperability TF activity, report to the committee members.
20140213-2	Natalie Shim	Collect the comments from the committee members about potential Regulation and Procedure Guide revision items and share the comments with Regulation Sub-committee.

Table 7 Previous Meeting Actions Items

None

1 Welcome, Reminders, and Introductions

Chulhong Ahn (SK hynix) called the meeting to order at 10:00. 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 November 8, 2013.

Motion: Approve the minutes of the previous meeting as written
By / 2nd: Hyungsu Kim(Samsung SDS) / Byoung Min Im (TEL Korea)
Discussion: None
Vote: 10-0 in favor. Motion carried.

Attachment: 02, Korea I&CC previous meeting minutes

3 Liaison Reports

3.1 Japan Information & Control Committee

Tadashi Mochizuki (Tokyo Electron) presented the Japan I&C Committee report. Of note:

- Leadership Changes
 - Tadashi Mochizuki (Tokyo Electron) stepped down from the co-leader of GEM300 TF. Yoshihisa Takasaki (Dainippon Screen Mfg.) remained as GEM300 TF co-leader.
- Document Review Summary
 - **Passed**
 - #5422A (New Standard, Guide for Equipment Information System Security)
 - #5602 (New Standard, Guide for Equipment Information System Security)
 - #5603 (Line-Item Revision to SEMI E54.12-0701E (Reapproved 1211), Specification for Sensor/Actuator Network Communications for CC-Link)
 - Line Item 1: Add SDM (specific device model) Mapping
 - Line Item 2: Correct existing obvious error
 - **Failed**

- #5538 (New Standard, Specification for Production Recipe Cache (PRC)) failed and was returned to the task force for rework.
 - Upcoming Authorized Ballots
 - Cycle 3, 2014
 - 5486A (New Standard, Specification for Predictive Carrier Logistics (PCL))
 - 5615 (Revision to SEMI E98, Provisional Standard for the Object-Based Equipment Model (OBEM) and SEMI E98.1 Provisional Specification for SECS-II Protocol for the Object-Based Equipment Model)
 - Cycle 3 or 4, 2014
 - 5600 (Line-item revision to SEMI E5, SEMI Equipment Communications Standard 2 Message Content (SECS-II), SEMI E40: Standard for Processing Management and E40.1: SECS-II Support for Processing Management Standard, the Removal of inconsistencies)
 - Upcoming ballots to be reviewed at Japan Standards Spring 2014 meetings
 - #5538A (New Standard, Specification for Production Recipe Cache (PRC))
 - Fiducial Mark Interoperability TF
 - Originating Global Technical Committee:
 - Traceability/ Silicon Wafer/ Physical Interfaces & Carriers/Assembly & Packaging/ Information & Control
 - Kick off meeting on December 2013:
 - Information sharing – G450C/F450C standards workshop presentation materials
 - Discussion for the potential Standardization areas.
- Discussion:** The committee requests SEMI to keep the committee posted on Fiducial Mark Interoperability TF activity. Matsuda mentioned that currently the TF is waiting for the further Fiducial Mark related information from International 450mm Wafer TF. Therefore there's no activity to report at the moment.
- GEM 300 TF
 - #5538 (New Standard, Specification for Production Recipe Cache (PRC))
 - Failed and was returned to the task force for rework at Japan I&C Committee meeting on December 6 in conjunction with SEMICON Japan 2013.
 - The reworked document #5538A to be balloted for Cycle 2 and reviewed at Japan I&C Committee meeting on April 16, 2014
 - #5600 (Line-item revision to SEMI E5, SEMI E40 and E40.1, removal of inconsistencies)
 - To remove of inconsistencies in Process Job Attributes.
 - To be balloted for Cycle 3 or Cycle 4.
 - #5601 (New Standard, Specification for Wafer Object Model)
 - Introduce Wafer Object and its behavior.
 - Proposal to NA activity #5619 (Revision to SEMI E30 (GEM))
 - Discussed Recipe Integrity & SEDD (SECS Equipment Data Dictionary) / SDT (SECS-II Data Template)
 - Predictive Carrier Logistics (PCL) TF
 - #5486A (New Standard, Specification for Predictive Carrier Logistic (PCL))

- Carrier Logistics Job (CLJ) Scenario
 - To be balloted in cycle 3, 2014
 - Sensor Bus TF
 - #5602 (Reapproval for SEMI E54.19-0308, Specification for Sensor/Actuator Network for Mechatrolink)
 - Passed A&R review on January 24, 2014.
 - #5603 (Revision to SEMI E54.12-0701E (Reapproved 1211), Specification for Sensor/Actuator Network Communications for CC-Link)
 - Passed A&R review on January 24, 2014.
 - Japan I&CC Maintenance TF
 - #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)
 - Removal provisional
 - To be balloted in cycle 3, 2014.
 - Next meeting: April 16, 2014 at SEMI Japan office, Tokyo, Japan
- Attachment:** 03, Japan Information & Control Committee Liaison Report

3.2 North America Information & Control Committee

James Amano presented the North America Information & Control Committee report. Of note:

- Leadership Changes
 - AMHS IBSEM TF and Sort Map TF were disbanded.
- Document Review Summary
 - #5454C (Line Item Revisions to SEMI E30-0611, Generic Equipment Model (GEM) Standard and SEMI E5-0712, SEMI Equipment Communications Standard 2 Message Content (SECS-II)) failed and to be reballoted
 - #5509B (Revision to SEMI E94, Specification for Control Job Management, Clarify the entry for the definition of Alarms) passed as balloted.
 - # 5507 (Line Item Revisions to, SEMI E120, E120.1, E125, E125.1, E128, E132, E132.1, E134, E134.1, E138, E145, E164,
 - Line Item 1: Complementary Files and Various Materials
 - Line Item 2: E132 Issues
 - Line Item 3: E128 Issues
 - Line Item 4 E120 Issues
 - Line Item 5 E125 Issues
 - Line Item 6: E134 Issue
 - Line Item 7: E132 Client SessionPing
 - Line Item 8: E138 Issue) passed as balloted except Line item 2 about E132.
- Upcoming ballots to be reviewed at NA Spring 2014 Meetings

- Cycle 8, 2013
 - # 5274B (New SEMI E54 Subordinate Standard, Specification for Sensor/Actuator Network Specific Device Model for Generic Equipment add-on Sensor (ADDON) to SEMI E54, Sensor/Actuator Network Standard)
 - #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 correct errors)
- Cycle 1, 2014
 - #5678 (Reapproval for SEMI 39, Object Services Standard: Concepts, Behavior, and Services)
 - #5679 (Reapproval for SEMI 91, Specification for Prober Specific Equipment Model (PSEM))
 - #5680 (Reapproval for SEMI E148, Specification for Time Synchronization and Definition of the TS-Clock Object)
- Cycle 2, 2014
 - #4507A (Revision to SEMI E133.1, Provisional Specification for XML Messaging for Process Control Systems (PCS), Fault detection enhancements)
 - #5454D (Line Item Revisions to SEMI E30, Generic Equipment Model (GEM) Standard and SEMI E5, SEMI Equipment Communications Standard 2 Message Content (SECS-II), Modifications to the definition of alarms and alarm categories)
 - #5507A (Line Item Revisions to SEMI E120, E120.1, E125, E125.1, E128, E132, E132.1, E134, E134.1, E138, E145, and E164, Address issues identified in DDA TF, minor/technical changes.)
 - #5508 (Revisions 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
 Provide generalized support for multiple substrate groups such as those used in HB-LED's material management approach.)
 - #5589A (Revision to SEMI E5, E30, E30.1, E40.1, E82, E87.1, E88, E90.1, E91, E94.1, E109, E109.1, E116.1, E122, E122.1, E123, E123.1, E138, E153, Remove references and content related to "SML" and "SML Notation")
 - #5618 (New Standard, Specification for Preservation of Recipe Integrity)
 - #5619 (Revision to SEMI E30, Generic Model for Communications and Control of Manufacturing Equipment (GEM) and New Complimentary File: SECS-II Equipment Data Template)
 - #5620 (Revision to SEMI E5, SEMI Equipment Communications Standard 2 Message Content (SECS-II) and New Complimentary File: SECS-II Message Notation using XML)
 - #5677 (Revision to SEMI E164, Specification for EDA Common Metadata Correct the reported issues in the E164 Complimentary Files and Various Materials)
- Diagnostic Data Acquisition (DDA) TF
 - New SNARF, #5677 (Revision to SEMI E164, Specification for EDA Common Metadata)

- A number of issues were reported in the E164 Complementary Files and Various Materials
- Also a conflict between E164 requirement 26 and E125 section 10.7.1 was reported.
- The task force will correct the reported issues and the ballot targeted for cycle 2, 2014.
- Process Control Systems (PCS) TF
 - #5650 (Line Item revision to SEMI E133, Specification for Automated Process Control Systems Interface and SEMI E133.1 Provisional Specification for XML Messaging for Process Control Systems (PCS))
 - The task force plans to revise E133 to recognize the use of Complementary Files (and Various Materials, as applicable).
 - Typographical and consistency errors will be also corrected. The target ballot submission schedule is cycle 2, 2014
 - #4507A (Revision to SEMI E133.1, Provisional Specification for XML Messaging for Process Control System (PCS))
 - Mainly for fault detection enhancements. The ballot targeted for cycle 2, 2014
- GEM300 TF
 - SNARF #5589 (Revision to SEMI E5, E30, E30.1, E40.1, E82, E87.1, E88, E90.1, E91, E94.1, E109.1, E116.1, E122, E122.1, E123, E123.1, E138, E153)
 - Remove references and content related to “SML” and “SML Notation”
 - The SNARF was updated to include additional Standards to be revised.
 - The ballot submission targeted for cycle 2, 2014
 - SNARF #5618 (New Standard, Specification for Preservation of Recipe Integrity)
 - The SNARF scope and Copyright sections were updated.
 - The ballot submission targeted for cycle 2, 2014
 - SNARF #5619 (Revision to SEMI E30, Generic Model for Communications and Control of Manufacturing Equipment (GEM) and New Complimentary File: SECS-II Equipment Data Template)
 - The overall SNARF was updated including submitter information, Rationale, Scope, General Milestones and Copyright sections.
 - Targeted ballot schedule is cycle 2, 2014
 - SNARF #5620 (Revision to SEMI E5, SEMI Equipment Communications Standard 2 Message Content (SECS-II) and New Complementary File: SECS-II Message Notation using XML)
 - Changed to reflect revisions will be made to SEMI E5 instead of E30 and the ballot submission targeted for cycle 2, 2014
 - #5454D (Line Item Revisions to SEMI E30, Generic Equipment Model (GEM) Standard and SEMI E5, SEMI Equipment Communications Standard 2 Message Content (SECS-II))
 - Modifications to the definition of alarms and alarm categories and the ballot submission targeted for cycle 2, 2014
 - #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)

- Provide generalized support for multiple substrate groups such as those used in HB-LED's material management approach. The target ballot submission schedule is cycle 2, 2014.
- SECS Message Language (SML) Notation Copyright Review
 - A working group that would prepare a report to facilitate the TC Chapter examining the issue according to the SEMI Standards Regulations section 15.4 was established.
 - The working group will suggest areas of potential reproduction and examine the question of technical justification.
- Next meetings: April 2 for NA Spring 2014 Meetings at San Jose, California.
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 Calendar of Events
 - European 3D TSV Summit (January 21-22, 2013, Grenoble)
 - SEMICON Korea/ LED Korea (February 12-14, 2013, Seoul)
 - SEMICON China (March 18-20, 2014, Shanghai)
 - SEMICON Singapore (April 23-25, 2014, Marina Bay Sands)
 - SEMICON West (July 8-10, 2014, San Francisco)
- Critical Dates update
 - 2014 Critical dates is introduced. It also can be found at SEMI website (www.semi.org/en/Standards/P_000788)
- SEMI Standards Publications (December 2013 cycle)
 - New Standards: 2
 - Revised Standards: 11
 - Reapproved Standards: 4
 - Withdrawn Standards: 0
 - Total SEMI Standards in portfolio: 895 (Includes 99 Inactive Standards)
- SEMICON/LED Korea 2014 Standards Programs and Meeting schedule were also introduced.
- Others
 - Natalie Shim also shared the discussion in ISC on below topics for the pre notification.
 - Project Period Proposal
 - Definition of the Project Period: Initial SNARF approval to successful adjudication of the Document identified in the SNARF
 - Period: Three years
 - Exception: The TC Chapter may grant one-year extension when the activity is found to be continuing but cannot be completed within the project period.
 - SNARF Review Period
 - SNARF approval authority moves from TC Chapter to GCS

- TC Chapter remains as SNARF pre-review body Global TC members will have chance to input their comments before the SNARF approval
- Details and exact process is still under development
- Adjudication Options (Notable differences)
 - Reject rate option
 - Final Letter Vote option
 - Technical Change option

Discussion: The committee considers that those ISC discussions will effect directly to Korea I&C Chapter activity. So the committee decided to make comments on those new potential changes before they are settled. SEM Korea staff will collect the comments from the committee members and forward it to Regulation Sub-committee.

Attachment: 05, 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 1: Committee adjudication on Cycle 7 is detailed in the Audits & Reviews (A&R) Subcommittee Forms for procedural review. This A&R form is available as attachments to these minutes. The attachment number for each document is provided below the summary table.

4.1 Cycle 7 Ballot

<i>Document #</i>	<i>Document Title</i>	<i>Committee Action</i>
5320C	Line Item Revision to SEMI E116-0707e, Specification for Equipment Performance Tracking and SEMI E116.1-0707 Specification for SECS-II Protocol for Equipment Performance Tracking (EPT)	
Line Item 1	Adding New Attributes to EPTTracker Object	Failed , to be reballoted
Line Item 2	Editorial Changes	Failed , withdrawn

Attachment: 06, 5320C A&R report

NOTICE: This document met the 90% approval condition set forth in Section 9.6.3 of the *Regulations Governing SEMI Standards Committees* at the close of balloting.

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
 - Last meeting: January 10, 2014 @ KSIA, Seongnam-si, Gyeonggi-do
 - Next meeting: TBD
- #5320C (Line Item Revision to SEMI E116-0707E, Specification for Equipment Performance Tracking and SEMI E116.1-0707 Specification for SEMICS-II Protocol for Equipment Performance (ETP): Adding New Attributes to EPTTRACKER Object)

- Line Item 1: Adding New Attributes to EPTTRACKER Object

Motion: Fail 5320C line item 1 to accept the negative submitted by Flores Rober (AMAT).

*Reference:

The variables and attributes are defined as being text 0-120 characters in length in E116. The attributes are then defined as being lists of size n of text strings in the E116.1 change.

By/2nd: Byoung Min Im (TEL Korea)/ Won Tae Kim (IT Innovation)

Discussion:

- Matsuda: He strongly recommends not to revise E116, and to use E157 “Specification for Model Process Tracking” because it covers all requirements of this ballot.
- Sakamoto: He also recommends referring Michael Baxter (Intel) negative 1 of reject 2.

*Reference:

Both tables 3 and 4 add a new attribute or data variable called “PPIDs,” and they are defined as recipe identifiers. It is not clear if this is redundant with the SEMI E5 PPExecName variable item (required by SEMI E30), or if this should specify a list of “RecIDs” per SEMI E40 and SEMI E5. It is redundant and adds ambiguity to define new attributes or data variables to a standard defined as equipment performance tracking, when such attributes or data variables already exist in commonly used standards for identifying process programs.

- Kevin Lee: Because the author didn’t attend today’s meeting, it is better to be discussed in the next meeting.
- Sakamoto: It will be better to discuss it at the next NA meeting because there are rejects from NA members.

Vote: 11-0, motion carried

- Line Item 2: Editorial Changes

Motion: Withdrawn line item 2 (editorial changes) of 5320 SNARF

*Reference:

(2) Editorial Changes:

- Change of the column name in Table 1 and Table 2 (Basic EPT State Transitions - Module Level and Basic EPT State Transitions -

Equipment Level) in order to be consistent with the other standards such as E58

- *Typos in Table 5 (Event), that is, change from 'a EPT' to 'an EPT'*

By/2nd: Ray Eom (PSK)/ Jin soo Jung (Kodi-s)

Discussion:

- Won Tae Kim: Since the TF need to evaluate the SNARF scope and purpose, it seems not necessary to remove L2 only.

Vote: 9-0, motion carried

- #4946B (Line Item Revision to SEMI E87-0709, Specification for Carrier Management, CMS and SEMI E87.1-0707, Provisional Specification for SECS-II Protocol for Carrier Management (CMS); Add Carrier Ready to Unload Prediction Feature)

- Line Item 1: Add Carrier Ready to Unload Prediction Feature

Motion: 4946C in Cycle 3 or 4, 2014

By/2nd: Byoung Min Im (TEL Korea)/ Jongsub Shim (ASM)

Discussion:

- Matsuda: The author should double check with NA GEM300 TF to avoid the 5589 ballot schedule duplication because if the ballot needs to revise “scope”, it is a major revision.
- Byoung Min Im: Need more discussion with NA GEM300 TF about it. The ballot schedule will be determined later.

Vote: 12-0, motion carried

5.2 DDA task force

No update

6 Old Business

None

7 New Business

None

8 Action Item Review

8.1 Open Action Items

None

8.2 New Action Items

Natalie Shim reviewed the new action items. These can be found in the New 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 June 13, 2014 at SEMI Korea office.

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	04	NA I&CC liaison report
02	Korea I&CC previous meeting minutes	05	Staff Report
03	Japan I&CC liaison report	06	5320C A&R 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. For additional information or to obtain individual attachments, please contact [SEMI Staff Name] at the contact information above.