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North America Information & Control Committee
Meeting Summary and Minutes

SEMI® International Standards

NA Standards Fall 2013 Meetings
30 October 2013, 0800 – 1630 Pacific Time
SEMI Headquarters in San Jose, California

Committee Announcements
Next Committee Meeting
NA Standards Spring 2014 Meetings
Wednesday, April 2, 2014; 0800 – 1630 Pacific Time
SEMI Headquarters in San Jose, California

Table 1 Meeting Attendees
Italics indicate virtual participants
Co-Chairs: Jack Ghiselli (Ghiselli Consulting), Lance Rist (SEMATECH), Brian Rubow (Cimetrix)
SEMI Staff: Paul Trio

Company	Last	First	Company	Last	First
AIS Automation	Mueller	Bert	SEMATECH	Ferrell	Jackie
Applied Materials	Park	Song	SEMATECH	Rist	Lance
Cimetrix	Rubow	Brian	Tokyo Electron	Asakawa	Terry
Consultant	*Crispieri*	*Gino*	Tokyo Electron	Mochizuki	Tadashi
Dainippon Screen	Nishimura	Takayuki	Tokyo Electron	Sakamoto	Mitch
Ghiselli Consulting	Ghiselli	Jack	Tokyo Electron	Mashiro	Supika
Hitachi Kokusai	Matsuda	Mitsuhiro	TSMC	Huang	Yen-Ching
Intel	Maloney	Chris			
IT Innovation	Kim	Won Tae	SEMI Headquarters	Amano	James
Miracom	Lee	Kevin	SEMI Japan	Kanno	Hirofumi
PEER Group	McKenzie	Alison	SEMI Korea	Shim	Natalie
PEER Group	Kropp	Mike	SEMI North America	Trio	Paul

Table 2 Leadership Changes

Group	Previous Leader	New Leader
AMHS IBSEM Task Force was disbanded.	Kevin Dandoy (Applied Materials) and Ron Denison (Consultant)	
Sort Map Task Force was disbanded. *Note: The TF would be re-chartered when its standardization efforts become active.*	Thierry deVilleneuve (STMicroelectronics) and Dave Huntley (Kinesys Software)	

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.

Document #	Document Title	Committee Action
5454C	Line Item Revision to SEMI E30-0611, Generic Model for Communications and Control of Manufacturing Equipment (GEM) and SEMI E5-0813, SEMI Equipment Communications Standard 2 Message Content (SECS-II)	
Line Item 1	Modifications to the definition of alarms and alarm categories	**Failed**, to be reballoted
5507	Line Item Revisions to: - SEMI E120-0310, Specification for the Common Equipment Model (CEM); - SEMI E120.1-0310, XML Schema for the Common Equipment Model (CEM); - SEMI E125-0710, Specification for Equipment Self Description (EqSD); - SEMI E125.1-0710, Specification for SOAP Binding for Equipment Self Description (EQSD); - SEMI E128-0310, Specification for XML Message Structures; - SEMI E132-0310E2, Specification for Equipment Client Authentication and Authorization; - SEMI E132.1-0310, Specification for SOAP Binding for Equipment Client Authentication and Authorization (ECA); - SEMI E134-0813, Specification for Data Collection Management; - SEMI E134.1-0813, Specification for SOAP Binding of Data Collection Management (DCM); - SEMI E138-0709, XML Semiconductor Common Components; - SEMI E145-0213, Classification for Measurement Unit Symbols in XML; and - SEMI E164-0313, Specification for EDA Common Metadata	
Line Item 1	Complementary Files and Various Materials	**Passed** as balloted
Line Item 2	E132 Issues	**Failed**, to be reballoted
Line Item 3	E128 Issues	**Passed** with editorial changes
Line Item 4	E120 Issues	**Passed** as balloted
Line Item 5	E125 Issues	**Passed** as balloted
Line Item 6	E134 Issue	**Passed** as balloted
Line Item 7	E132 Client SessionPing	**Passed** as balloted
Line Item 8	E138 Issue	**Passed** as balloted
5509B	Line Item Revision to SEMI E94-0713, Specification for Control Job Management	
Line Item 1	Clarify the entry for OutputRule in Table 2	**Passed** as balloted. Superclean

Table 4 Authorized Activities

#	Type	SC/TF/WG	Details
5589	Revised SNARF	GEM300 TF	Revisions to: - SEMI E30, Generic Model for Communications and Control of Manufacturing Equipment (GEM); - SEMI E30.1, Inspection and Review Specific Equipment Model (ISEM); - SEMI E82, Specification for Interbay/Intrabay AMHS SEM (IBSEM); - SEMI E88, Specification for AMHS Storage SEM (Stocker SEM); - SEMI E91, Specification for Prober Specific Equipment Model (PSEM); - SEMI E122, Standard for Tester Equipment Specific Equipment Model (TSEM); and - SEMI E123.1, Specification for SECS-II Protocol for Handler Specific Equipment Model (HSEM) Remove references and content related to SML and SML Notation. Updated to include additional Standards to be revised. - SEMI E5, SEMI Equipment Communications Standard 2 Message Content (SECS-II); - SEMI E40.1, SECS-II Support for Processing Management Standard; - SEMI E87.1, Provisional Specification for SECS-II Protocol for Carrier Management (CMS); - SEMI E90.1, Specification for SECS-II Protocol Substrate Tracking; - SEMI E94.1, Specification for SECS-II Protocol for Control Job Management (CJM); - SEMI E109, Specification for Reticle and Pod Management (RPMS); - SEMI E109.1, Specification for SECS-II Protocol for Reticle and Pod Management (RPMS); - SEMI E116.1, Specification for SECS-II Protocol for Equipment Performance Tracking (EPT); - SEMI E122.1, Specification for SECS-II Protocol for Tester Specific Equipment Model (TSEM); - SEMI E123, Standard for Handler Equipment Specific Equipment Model (HSEM); - SEMI E138, XML Semiconductor Common Components; and - SEMI E153, Specification for AMHS SEM (AMHS SEM) Revisions/updates were also made to other SNARF sections including Rationale, Scope, and General Milestones.
5618	Revised SNARF	GEM300 TF	New Standard: Specification for Preservation of Recipe Integrity Revisions/updates made to the SNARF Scope and Copyright sections.
5619	Revised SNARF	GEM300 TF	Revision to SEMI E30, Generic Model for Communications and Control of Manufacturing Equipment (GEM) and New Complimentary File: SECS-II Equipment Data Template Revisions/updates made to the SNARF include submitter information, Rationale, Scope, General Milestones, and Copyright sections.
5620	Revised SNARF	GEM300 TF	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 (including the Scope section).
5677	SNARF	Diagnostic Data Acquisition (DDA) TF	Revision to SEMI E164, Specification for EDA Common Metadata
5678	SNARF	NA I&C Committee	Reapproval for SEMI E39, Object Services Standard: Concepts, Behavior, and Services
5679	SNARF	NA I&C Committee	Reapproval for SEMI E91, Specification for Prober Specific Equipment Model (PSEM)
5680	SNARF	NA I&C Committee	Reapproval for SEMI E148, Specification for Time Synchronization and Definition of the TS-Clock Object

Note: SNARFs and TFOFs are available for review on the SEMI Web site at:
http://downloads.semi.org/web/wstdsbal.nsf/TFOFSNARF

Table 5 Authorized Ballots

#	*When*	*SC/TF/WG*	*Details*
5274B	Cycle 8, 2013	Sensor Bus TF	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, Sensor/Actuator Network Standard
5650	Cycle 8, 2013	Process Control Systems (PCS) TF	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)
5678	Cycle 1, 2014	NA I&C Committee	Reapproval for SEMI E39, Object Services Standard: Concepts, Behavior, and Services
5679	Cycle 1, 2014	NA I&C Committee	Reapproval for SEMI E91, Specification for Prober Specific Equipment Model (PSEM)
5680	Cycle 1, 2014	NA I&C Committee	Reapproval for SEMI E148, Specification for Time Synchronization and Definition of the TS-Clock Object
4507A	Cycle 2, 2014	PCS TF	Revision to SEMI E133.1, Provisional Specification for XML Messaging for Process Control Systems (PCS). For fault detection enhancements
5454D	Cycle 2, 2014	GEM300 TF	Line Item Revisions to SEMI E30, Generic Equipment Model (GEM) Standard and SEMI E5, SEMI Equipment Communications Standard 2 Message Content (SECS-II)
5507A	Cycle 2, 2014	Diagnostic Data Acquisition (DDA) TF	Line Item Revisions to: - SEMI E120-0310, Specification for the Common Equipment Model (CEM); - SEMI E120.1-0310, XML Schema for the Common Equipment Model (CEM); - SEMI E125-0710, Specification for Equipment Self Description (EqSD); - SEMI E125.1-0710, Specification for SOAP Binding for Equipment Self Description (EQSD); - SEMI E128-0310, Specification for XML Message Structures; - SEMI E132-0310E2, Specification for Equipment Client Authentication and Authorization; - SEMI E132.1-0310, Specification for SOAP Binding for Equipment Client Authentication and Authorization (ECA); - SEMI E134-0813, Specification for Data Collection Management; - SEMI E134.1-0813, Specification for SOAP Binding of Data Collection Management (DCM); - SEMI E138-0709, XML Semiconductor Common Components; - SEMI E145-0213, Classification for Measurement Unit Symbols in XML; and - SEMI E164-0313, Specification for EDA Common Metadata;
5508	Cycle 2, 2014	GEM300 TF	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

Table 5 Authorized Ballots

#	When	SC/TF/WG	Details
5589A	Cycle 2, 2014	GEM300 TF	Revisions to: - SEMI E5, SEMI Equipment Communications Standard 2 Message Content (SECS-II); - SEMI E30, Generic Model for Communications and Control of Manufacturing Equipment (GEM); - SEMI E30.1, Inspection and Review Specific Equipment Model (ISEM); - SEMI E40.1, SECS-II Support for Processing Management Standard; - SEMI E82, Specification for Interbay/Intrabay AMHS SEM (IBSEM); - SEMI E87.1, Provisional Specification for SECS-II Protocol for Carrier Management (CMS); - SEMI E88, Specification for AMHS Storage SEM (Stocker SEM); - SEMI E90.1, Specification for SECS-II Protocol Substrate Tracking; - SEMI E91, Specification for Prober Specific Equipment Model (PSEM); - SEMI E94.1, Specification for SECS-II Protocol for Control Job Management (CJM); - SEMI E109, Specification for Reticle and Pod Management (RPMS); - SEMI E109.1, Specification for SECS-II Protocol for Reticle and Pod Management (RPMS); - SEMI E116.1, Specification for SECS-II Protocol for Equipment Performance Tracking (EPT); - SEMI E122, Standard for Tester Equipment Specific Equipment Model (TSEM); - SEMI E122.1, Specification for SECS-II Protocol for Tester Specific Equipment Model (TSEM); - SEMI E123, Standard for Handler Equipment Specific Equipment Model (HSEM); - SEMI E123.1, Specification for SECS-II Protocol for Handler Specific Equipment Model (HSEM); - SEMI E138, XML Semiconductor Common Components; and - SEMI E153, Specification for AMHS SEM (AMHS SEM)
5618	Cycle 2, 2014	GEM300 TF	New Standard: Specification for Preservation of Recipe Integrity
5619	Cycle 2, 2014	GEM300 TF	Revision to SEMI E30, Generic Model for Communications and Control of Manufacturing Equipment (GEM) and New Complimentary File: SECS-II Equipment Data Template
5620	Cycle 2, 2014	GEM300 TF	Revision to SEMI E5, SEMI Equipment Communications Standard 2 Message Content (SECS-II) and New Complementary File: SECS-II Message Notation using XML
5677	Cycle 2, 2014	Diagnostic Data Acquisition (DDA) TF	Revision to SEMI E164, Specification for EDA Common Metadata

Table 6 New Action Items

Item #	Assigned to	Details
2013Oct #01	Lance Rist	Organize and schedule SML copyright working group teleconference.
2013Oct #02	Paul Trio	Send updated SNARFs #5618 and #5619 to Lance Rist.
2013Oct #03	NA I&C Cochairs	Inform the Sort Map TF and AMHS IBSEM TF leaders that the committee approved to disband their task force.

Table 7 Previous Meeting Actions Items

Item #	Assigned to	Details	Status
2013Jul #05	Paul Trio	Consult with the ISC Regulations Subcommittee on what should be done to SEMI E30 in light of the existing SML copyright issue.	Open
2012Oct #02	Paul Trio	Draft SNARF and ballot proposal for E30 revision (reorganization of introductory sections) and send to GEM300 TF leaders for review.	Open

1 Welcome, Reminders, and Introductions

Jack Ghiselli, committee co-chair, called the meeting to order at 8:05 AM. After welcoming all attendees, a round of introductions followed. The SEMI meeting reminders on membership requirements, antitrust, patentable technology, and meeting guidelines were then presented and explained.

Attachment: 01, SEMI Standards Required Meeting Elements

2 Review of Previous Meeting Minutes

The committee reviewed the minutes of the previous meeting held July 10 in conjunction with SEMICON West 2013.

Motion: Accept the minutes of the previous meeting as written.
By / 2nd: Lance Rist (SEMATECH) / Mitch Sakamoto (Tokyo Electron)
Discussion: None
Vote: 13-0 in favor. Motion passed.

Attachment: 02, NA I&CC SEMICON West 2013 meeting (July 10) minutes

3 Liaison Reports

3.1 *SEMI Staff Report*

Paul Trio (SEMI) gave the SEMI Staff Report. The key items were as follows:

- 2013 Global Calendar of Events

    o PV Taiwan (October 30 – November 1, Taipei)

    o SEMICON Japan (December 4-6, Chiba)

- [early] 2014 Global Calendar of Events

    o European 3D TSV Summit (January 21-22, Grenoble, France)

    o SEMICON Korea / LED Korea (February 12-14, Seoul)

    o SEMICON China (March 18-20, Shanghai)

    o SEMICON Singapore (April 23-25, Marina Bay Sands)

    o SEMICON West (July 8-10, San Francisco, California)

- NA Standards Fall 2013 Meetings (October 28-31)

    o Committees meeting at SEMI Headquarters (San Jose)

        ▪ 3DS-IC | EHS | Facilities & Gases | HB-LED | Information & Control | MEMS/NEMS | Metrics | PV Materials

- o SEMI thanks Intel (Santa Clara) for hosting the PIC and Silicon Wafer meetings
- Standards Publications Report
  - o July 2013 Cycle
    - New Standards – 2, Revised Standards – 2, Reapproved Standards – 3, Withdrawn Standards – 0
  - o August 2013 Cycle
    - New Standards – 0, Revised Standards – 15, Reapproved Standards – 0, Withdrawn Standards – 0
  - o September 2013 Cycle
    - New Standards – 3, Revised Standards – 2, Reapproved Standards – 6, Withdrawn Standards – 0, Total in portfolio – 892 (includes 98 Inactive Standards)
- New Cycle 8 Voting Period
  - o Ballot Submission Date: Nov 15, 2013
  - o Voting Period Starts: Nov 29, 2013
  - o Voting Period Ends: Dec 31, 2013
- Upcoming North America Meetings (2013)
  - o NA Liquid Chemicals Fall 2013 Meetings *[task force and committee meetings]* (November 5; SEMI HQ in San Jose, California)
  - o NA Compound Semiconductor Materials *[committee meeting]* (November 15, teleconference and web meeting only)
- North America Standards 2014 Meetings
  - o NA Standards Spring 2014 Meetings (March 31 – April 3 at SEMI HQ in San Jose, California)
  - o NA Standards Meetings at SEMICON West 2014 (July 7-10 in San Francisco, California)
  - o NA Standards Fall 2014 Meetings (November 3-6 at SEMI HQ in San Jose, California)
- Standards Usage Interview
  - o Looking for details on how standards are actually used:
    - Development/Engineering
    - Procurement
    - Manufacturing
  - o Interview should take less than 30 minutes – contact James or any Standards staff
- Official SEMI Standards Groups
  - o LinkedIn
    - http://www.linkedin.com/groups/Official-SEMI-Standards-Group-1774298/about
  - o Twitter
    - @SEMI_standard

Attachment: 03, SEMI Standards Staff Report

3.2 *Japan Information & Control Committee*

Takayuki Nishimura presented the Japan I&C liaison report. The key items were as follows:

- Leadership and Structure Change
  - o New Task Force – Fiducial Mark Interoperability TF

- ▪ Leader – Mitsuhiro Matsuda (Hitachi Kokusai Electric)
  - o AMHS TF disbanded.
- Document Review Summary (Japan Standards Fall 2013 Meetings)

Document #	Description	Committee Action
5486	New Standard: *"Specification for Predictive Carrier Logistics Information from Equipment to be used for Predictive Carrier Logistics Management (PCL)"*	Failed and was returned to the Task Force for rework.

- Upcoming ballots to be reviewed at Japan Standards Winter 2013 Meetings (in conjunction with SEMICON Japan 2013)

Document #	Description	SC / TF / WG
	Voting Period – Cycle 6	
5422A	New Standard: *"Guide for Equipment Information System Security"*	EISS TF
5538	New Standard: "Specification for Production Recipe Cache (PRC)" Note: Title was changed from the SNARF	GEM300 TF
5602	Reapproval for SEMI E54.19-0308: *"Specification for Sensor/Actuator Network for MECHATROLINK"*	Sensor Bus TF
5603	Revision to SEMI E54.12-0701E (Reapproved 1211): *"Specification for Sensor/Actuator Network Communications for CC-Link"*	Sensor Bus TF
	Voting Period – Cycle 8	
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"*	JA I&CC Maintenance TF

- AMHS TF disbanded
  - o SEMI E153-0310 *"Specification for AMHS SEM (AMHS SEM)"* to be reviewed at JA I&CC Maintenance TF.
- GEM300 TF
  - o New SNARF #5600: Line-item revision to SEMI E5, SEMI E40 and E40.1, removal of inconsistencies
    - ▪ Remove of inconsistencies in Process Job Attributes.
  - o New SNARF #5601: *"New Standard: Specification for Wafer Object Model"*
    - ▪ Introduce Wafer Object and its behavior.
  - o Collaboration with NA GEM300 TF
    - ▪ #5454 Alarm Category
- Predictive Carrier Logistics (PCL) TF
  - o #5486: *"New Standard: Specification for Predictive Carrier Logistics (PCL)"*
    - ▪ Balloted for Cycle 5 and reviewed at Japan I&C Committee meeting on September 19.
    - ▪ Failed and is returned to the TF for re-work and re-ballot.
- Japan I&CC Maintenance
  - o #5615: Revision to SEMI E98 and SEMI E98.1
    - ▪ Remove provisional.
    - ▪ Ballot submission is postponed to Cycle 8-2013 (from Cycle 5) with the approval at Japan I&C Committee meeting on September 19, 2013.
- New – Fiducial Mark Interoperability TF
  - o Originating Global Technical Committee:

- Traceability / Silicon Wafer / Physical Interfaces & Carriers /Assembly & Packaging / Information & Control
  - o Originating TC Chapter Region/Locale:
    - Japan
  - o Charter:
    - Standardization of fiducial mark as the alternative to the notch is now under development at the International 450mm Wafer Task Force under the Global Silicon Wafer Committee.
    - Adoption of fiducial mark will affect not only Si wafer specification and related Standards but also Standards owned by other Global Technical Committees that reference the Notch. Furthermore, as readability of fiducial mark may change due to intentional and unintentional interaction of wafer surface and various tools in their process apparatuses and with wafer handling mechanisms, standardization of fiducial mark detection data and their communication is deemed necessary to support traceability and to compensate deteriorated readability of Fiducial Mark.
    - In order to address above cross disciplinary challenge, this Task Force is established under five Global Technical Committees, and develops the Standards to support the fiducial mark.
  - o Scope:
    - Investigate and verify to introduce the fiducial mark.
    - Develop Standards to support the fiducial mark, such as T7 revision (Traceability Committee), Wafer Handling issue (Physical Interfaces & Carriers Committee), Backend Alignment issue (Assembly & Packaging Committee), Fiducial Mark Information Handling issue (Information & Control Committee) and so on.
    - Development of physical specification of fiducial mark is outside the scope of this TF
- Next meeting: December 6 for the Japan Winter 2013 Meetings (in conjunction with SEMICON Japan 2013)
- Japan I&CC Meeting Schedule
  - o Winter in December 6, 2013
  - o Spring in April, 2014 (TBD)
  - o Summer in June, 2014 (TBD)
  - o Fall in September, 2014 (TBD)
- Staff Contact: Chie Yanagisawa (cyanagisawa@semi.org)

Attachment: 04, Japan I&C Liaison Report

3.3 *Korea Information & Control Committee*

Natalie Shim presented the Korea I&C liaison report. The key items were as follows:

- Next meeting:
  - o November 8, 2013 (SEMI Korea office)
  - o February 13, 2014 (COEX, Seoul; in conjunction with SEMICON Korea 2014)
- Major Updates
  - o Reviewed Ballot (Cycle 3, 2013 – Cycle 5, 2013)
    - 5320B (E116 Revision, Equipment Performance Tracking) – Failed
  - o Authorized Ballots
    - 4946B (E87/E87.1 [carrier management] revisions, Adding Carrier Ready to Unload Prediction feature) in Cycle 6
    - 5320C (E116/E116.1 [equipment performance tracking] revisions, Adding New Attributes to EPTTracker and editorial changes) in Cycle 7 with GCS approval

- GEM300 TF
    - o 4646B (see above) to be adjudicated in the November 8, 2013 meeting.
    - o 5320C (see above) to be adjudicated in the February 13, 2014 meeting.
    - o Kevin Lee assigned as a liaison for SML Notation copyright issue.
- DDA TF
    - o No activity
- Staff Contact: Natalie Shim (eshim@semi.org)

Attachment: 05, Korea I&C Liaison Report

3.4 *Europe Equipment Automation Committee (Information & Control, Metrics, Physical Interfaces & Carriers)*

Paul Trio presented the Europe I&C liaison report. The key items were as follows:

- Leadership
    - o Alfred Honold (InReCon)
    - o Lothar Pfitzner (Fraunhofer IISB)
    - o Frank Petzold (Trustsec)
- Two documents to go inactive
    - o SEMI E54.14, Specification for Sensor/Actuator Network Communications for PROFINET
    - o SEMI E54.8, Specification for Sensor/Actuator for Network Communications for PROFIBUS-DP
- Staff Contact: Yann Guillou (Business Development and Standards Manager, yguillou@semi.org)

Attachment: 06, Europe Liaison Report

3.5 *Taiwan Information & Control Committee*

No activities to report.

4 E30/SML Copyright Discussion

Lance Rist presented. The key items were as follows:

Committee Responsibility
- Responsible for:
    - o Examining the copyrighted item(s) and the relevant SEMI Document(s)
    - o Determining whether
    - o Copyrighted item(s) have been reproduced
    - o Reproduction is justified on technical grounds

Questions we need answered
1) What is the copyrighted material?
2) What are the relevant SEMI Documents?
3) How do we judge "reproduced"?
4) What is sufficient "justification on technical grounds"?

Question 1

- What is the copyrighted material?
    - Reported at SEMICON West:
        - http://www.peergroup.com/resources/technicaldocumentation/secsmessagelanguage.aspx
    - Is there any other copyrighted material of which we need to be aware?

Question 2

- Which SEMI Documents are relevant?
    - What sections/figures/tables of each Document might contain copyrighted material?
- Reported at SEMICON West: SEMI E30 and the following:
    - [SEMI E5] SEMI Equip Communications Standard 2 Message Content (SECS-II)
    - [SEMI E30.1] Inspection and Review Specific Equip Model (ISEM)
    - [SEMI E40.1] SECS-II Support for Processing Mgt Standard
    - [SEMI E82] Specification for Interbay/Intrabay AMHS SEM (IBSEM)
    - [SEMI E87.1] Provisional Specification for SECS-II Protocol for Carrier Mgt (CMS)
    - [SEMI E88] Specification for AMHS Storage SEM (Stocker SEM)
    - [SEMI E90.1] Specification for SECS-II Protocol Substrate Tracking
    - [SEMI E91] Specification for Prober Specific Equip Model (PSEM)
    - [SEMI E94.1] Specification for SECS-II Protocol for Control Job Mgt (CJM)
    - [SEMI E109] Specification for Reticle and Pod Mgt (RPMS)
    - [SEMI E109.1] Specification for SECS-II Protocol for Reticle & Pod Mgt (RPMS)
    - [SEMI E116.1] Specification for SECS-II Protocol for Equip Perf Tracking (EPT)
    - [SEMI E122.1] Spec for SECS-II Protocol for Tester Specific Equip Model (TSEM)
    - [SEMI E123.1] Spec for SECS-II Protocol for Handler Specific Equip Model (HSEM)
    - [SEMI E138] XML Semiconductor Common Components
    - [SEMI E153] Specification for AMHS SEM (added in GCS)

Question 3

- How do we judge "reproduced"?
    - Merriam-Webster:
        - to make a copy of (something)
        - to produce something that is the same as or very similar to (something else)
    - See also
        - "Substantial similarity" or "striking similarity"
        - The definitions are not black and white
    - Are there more precise definitions?

Question 4

- What is sufficient "justification on technical grounds"?
    - Use of the copyrighted material uniquely satisfies a portion of the purpose of the SEMI Document
    - No acceptable alternatives are available
    - Removal of the copyrighted material would result in significant inconvenience or expense to current users of the standard

How to proceed from here

- Confirm answers to the four questions
- Determine who will participate in the process
    - ○ Working group to organize the information and recommend conclusions (members?), or
    - ○ The entire committee (via telecon?)
- Examine the relevant documents
    - ○ Follow the process in the SEMI Regulations
    - ○ Recommend the appropriate result for each:
        - ▪ no action / remove copyrighted material / request copyright release
- Confirm the result for each document by committee vote (at F2F meetings)

Additional Discussion

- Paul Trio stated that SEMI is asking its legal counsel to provide additional guidance for handling copyright in SEMI Standards.

- Mike Kropp asked whether it was fair to ask technical engineers to tackle these complex issues. Are people legally trained to make such an assessment? James Amano pointed out that, ultimately, the committee makes the decision. However, if SEMI does not feel comfortable, it can pull the standards from publication. Supika Mashiro also pointed out that the committee does not make the materiality decision, but potential materiality only. More importantly, the committee makes a technical decision, not legal. Finally, Supika pointed out that the Regulations is not clear on how to handle copyrighted material.

- Jackie Ferrell reported that there will be other activities that will use copyrighted material. Paul Trio stated that these cases will be treated in the same way as the E30/SML matter. Jackie Ferrell stated that the committee needs to know the process for handling copyrighted material so that volunteers' time will be used effectively.

Motion:	The North America Information & Control Committee agrees to establish a working group that would:
	• Prepare a report to facilitate the TC Chapter examining the issue according to the SEMI Standards Regulations § 15.4
	○ Suggest areas of potential reproduction
	○ Examine the question of technical justification
By / 2nd:	Jack Ghiselli (Ghiselli Consulting) / Terry Asakawa (Tokyo Electron)
Discussion:	• A concern was raised that only few people would attend a WG meeting.
	• Some volunteers were identified at this meeting:
	○ Supika Mashiro will assist in observing whether the WG is alignment with the Regulations
	○ Lance Rist will lead the WG
	○ Jackie Ferrell will participate
	• PEER Group will participate as an observer.
	• Lance Rist will determine the schedule for the first teleconference. Committee members interested in participating were asked to contact Lance Rist and SEMI staff.
Vote:	16-0 in favor. Motion passed.

Action Item: 2013Oct #01, Lance Rist to organize and schedule SML copyright working group teleconference.

5 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.
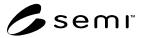
NOTE 1:Committee adjudication on Cycle 6 ballots are detailed in the Audits & Reviews (A&R) Subcommittee Forms for procedural review. These A&R forms are available as attachments to these minutes. The attachment number for each document is provided below the summary tables.

5.1 *Cycle 6 Ballots*

Document #	Document Title	Committee Action
5454C	Line Item Revision to SEMI E30-0611, Generic Model for Communications and Control of Manufacturing Equipment (GEM) and SEMI E5-0813, SEMI Equipment Communications Standard 2 Message Content (SECS-II)	
Line Item 1	Modifications to the definition of alarms and alarm categories	**Failed**, to be reballoted
5507	Line Item Revisions to: - SEMI E120-0310, Specification for the Common Equipment Model (CEM), - SEMI E120.1-0310, XML Schema for the Common Equipment Model (CEM), - SEMI E125-0710, Specification for Equipment Self Description (EqSD), - SEMI E125.1-0710, Specification for SOAP Binding for Equipment Self Description (EQSD), - SEMI E128-0310, Specification for XML Message Structures, - SEMI E132-0310E2, Specification for Equipment Client Authentication and Authorization - SEMI E132.1-0310, Specification for SOAP Binding for Equipment Client Authentication and Authorization (ECA), - SEMI E134-0813, Specification for Data Collection Management - SEMI E134.1-0813, Specification for SOAP Binding of Data Collection Management (DCM), - SEMI E138-0709, XML Semiconductor Common Components - SEMI E145-0213, Classification for Measurement Unit Symbols in XML - SEMI E164-0313, Specification for EDA Common Metadata	
Line Item 1	Complementary Files and Various Materials	**Passed** as balloted
Line Item 2	E132 Issues	**Failed**, to be reballoted
Line Item 3	E128 Issues	**Passed** with editorial changes
Line Item 4	E120 Issues	**Passed** as balloted
Line Item 5	E125 Issues	**Passed** as balloted
Line Item 6	E134 Issue	**Passed** as balloted
Line Item 7	E132 Client SessionPing	**Passed** as balloted
Line Item 8	E138 Issue	**Passed** as balloted
5509B	Line Item Revision to SEMI E94-0713, Specification for Control Job Management	
Line Item 1	Clarify the entry for OutputRule in Table 2	**Passed** as balloted. Superclean

Attachment: 07, Ballot Review for Doc. 5454C

08, Ballot Review for Doc. 5507

09, Ballot Review for Doc. 5509B

6 Task Force Reports

6.1 *Diagnostic Data Acquisition (DDA) Task Force*

Brian Rubow reported for the DDA Task Force. The key items were as follows:

- Attendance: 7 in person, 1 attendee via teleconference, 1 attendee via GoToMeeting

- New SNARF
    - 5677 - Revision to SEMI E164, Specification for EDA Common Metadata
        - Rationale: A number of issues were reported in the E164 Complementary Files and Various Materials including:
            1) Incorrect state names in state machines (e.g., ProcessJob Active state)
            2) Incorrect transition names in state machines (e.g., E90GetStateMachines.xml)
            3) Typographical errors (e.g., Missing "H" in host in LoadPortCarrierAssociation)
            4) Parameter isTransient assignment errors (e.g., E87GetEquipmentNodeDescriptions.xml LocationID)
            5) Missing parameter types (e.g., E157GetTypeDefinitions.xml MPTState)
            6) Possible missing available parameters in event maps (e.g., EventMap for E90 SubstrateObject)
            7) Target state ID in state machines (e.g., E90BatchGetStateMachines.xml NoState-Occupied).
            8) Incorrect descriptions in transition descriptions (e.g., GetStateMachinesResponse.xml ProcessState)

            Many of these errors are situations where the example files are not following the requirements the E164.

            Additionally, a user has reported a conflict between E164 requirement 26 and E125 section 10.7.6.7.1. E125 allows non-transient parameters to be listed in the EventToParameterMap such as for emphasis to show that it is useful data. E164 prohibits this by restricting to transient parameters only. The user would like to continue to allow related non-transient parameters to be able to be listed.
        - Scope: Correct the reported issues in the E164 Complementary Files and Various Materials. Some issues will require the Task Force to reach consensus. Modify E164 requirement 26 to be compatible with E125 if consensus can be achieved.

Motion:	Approve SNARF for Revision to SEMI E164, Specification for EDA Common Metadata
By / 2ⁿᵈ:	Brian Rubow (Cimetrix) / Jackie Ferrell (SEMATECH)
Discussion:	None.
Vote:	12-0 in favor. Motion passed.

- Ballot Plans (for Cycle 2, 2014):
    - 5507A to address Complementary Files and resolve items from the TF issue list
        - Revisions to:
            SEMI E120, Specification for the Common Equipment Model (CEM);
            SEMI E120.1, XML Schema for the Common Equipment Model (CEM);
            SEMI E125, Specification for Equipment Self Description (EqSD);
            SEMI E125.1, Specification for SOAP Binding for Equipment Self Description (EQSD);
            SEMI E128, Specification for XML Message Structures;
            SEMI E132, Specification for Equipment Client Authentication and Authorization;
            SEMI E132.1, Specification for SOAP Binding for Equipment Client Authentication and Authorization (ECA);

SEMI E134, Specification for Data Collection Management;
SEMI E134.1, Specification for SOAP Binding of Data Collection Management (DCM);
SEMI E138, XML Semiconductor Common Components;
SEMI E145, Classification for Measurement Unit Symbols in XML; and
SEMI E164, Specification for EDA Common Metadata

- o 5677 (E164 revision)

Attachment: 10, Diagnostic Data Acquisition Task Force Report

6.2 *Energy Saving Equipment Communication Task Force*

Brian Rubow reported for the Energy Saving Equipment Communication Task Force. The key items were as follows:

- Attendance: 10 in person, 2 attendee via teleconference, 2 attendee via GoToMeeting
- Ballot Review
  - o 5411B and 5453A passed [see section 4 of these minutes]
- New SNARF
  - o Creation of a new standard for exchanging information about energy saving between the production equipment and sub-systems
  - o Pending review by task force and IP review

Attachment: 11, Energy Saving Equipment Communication Task Force Report

6.3 *GEM300 Task Force*

Brian Rubow reported for the GEM300 Task Force. The key items were as follows:

- Attendance: 16 in person, 1 attendee via teleconference, 1 attendee via GoToMeeting
- Revised SNARFs
  - o 5618 – New Standard: Specification for Preservation of Recipe Integrity
    - Revisions/updates made to the SNARF Scope and Copyright sections.
      - Revised Scope: The SEMI specification will address three areas in its first approved version. ~~The scope of the specification may be expanded in the future to address other areas within the scope of the GEM300 Task Force.~~ The three areas are:

        1. Recipe identifier – this will specify an approach for constructing the recipe identifier that will yield a unique value for each recipe created in the factory and help ensure that the same identifier will not be applied to different recipe content.

        2. Recipe header – while preserving existing recipe format and content, a user accessible collection of information describing the recipe and its use will be added as a wrapper to the recipe body. The task force will determine the final list of information.

        3. Recipe variable parameter availability – the specification will standardize a definition of which parameters within the equipment recipe must be made available as recipe variable parameters that can be set at run time (e.g., using SEMI E40 ProcessJobs).
      - Will include copyrighted material: Content from SEMATECH guide.

Motion:	Approve revised SNARF #5618 (New Standard: Specification for Preservation of Recipe Integrity)
By / 2ⁿᵈ:	Lance Rist (SEMATECH) / Mitsuhiro Matsuda (Hitachi Kokusai)
Discussion:	None.
Vote:	13-0 in favor. Motion passed.

- 5619 – Revision to SEMI E30, Generic Model for Communications and Control of Manufacturing Equipment (GEM) and New Complimentary File: SECS-II Equipment Data Template
  - Revisions/updates made to the SNARF include submitter information, Rationale, Scope, General Milestones, and Copyright sections.
    - <u>Revised Rationale</u>: SEMATECH member companies chartered the Manufacturing Technology Program to improve current supplier practices used to provide SECS-II information to device makers and address the following top three issues related to equipment logs:
      - Missing standard ~~data~~ <u>variables</u> and events
      - Users cannot find or identify what data to collect
      - Difficult to standardize equipment logs in the factory
    - SECS-II data files vary across suppliers and the information provided is not well organized in a standard form. Some of the files use text, Excel or other file formats. The goal of this activity is to standardize an electronic format and content information such that the categories and the order of the related information are standardized. This way, the description of alarms, events and ~~data~~ <u>variables</u> provided via the SECS-II interface can be defined and used more efficiently by the factories.
    - <u>Revised Scope</u>: <u>This activity will modify SEMI E30 to add a common template for a SECS-II equipment data dictionary (SEDD). Each SEDD will contain the description of the data available from a production equipment, including collection events, variables, and alarms. The variables include status variables, data variables, equipment constants, and recipe variable parameters.</u>

      <u>The SEDD format will be XML. It will be governed by an XML schema, referred to as the SECS-II Data Template (SDT). The SDT will be proposed as a SEMI Complementary file. Modifications to the SEMI E30 text will be made to explain the SEDD, reference the SDT Complementary file, and fit them into the context of the specification.</u>

      ~~The scope of this activity is to define a common template that can be used by all suppliers and device makers. The template can be used to define and retrieve the SECS-II data interface related to Alarm, Event, and Parameters in a standardized manner.~~

      ~~The defined template will use the same order as defined by the SECS II messages that are used to retrieve alarm, event, equipment constants and variable data from the equipment. The file format will be defined and standardized such that the SECS II data is provided and managed in a consistent manner.~~

      ~~Additional related information that is not defined by the SECS II messages but defined by the supplier in their manuals or in other indirect way may also be included with the template and is to be determined. The additional information will help define and provide more complete SECS II data in one place.~~
    - <u>Intercommittee Ballots will be issued</u>: HB-LED, PV Automation
    - <u>Will include copyrighted material</u>: Content from SEMATECH guide.

Motion: Approve revised 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)

By / 2nd: Lance Rist (SEMATECH) / Wontae Kim (IT Innovation)

Discussion: None.

Vote: 14-0 in favor. Motion passed.

- o 5589 – Revisions to:

  SEMI E30, Generic Model for Communications and Control of Manufacturing Equipment (GEM);

  SEMI E30.1, Inspection and Review Specific Equipment Model (ISEM);

  SEMI E82, Specification for Interbay/Intrabay AMHS SEM (IBSEM);

  SEMI E88, Specification for AMHS Storage SEM (Stocker SEM);

  SEMI E91, Specification for Prober Specific Equipment Model (PSEM);

  SEMI E122, Standard for Tester Equipment Specific Equipment Model (TSEM); and

  SEMI E123.1, Specification for SECS-II Protocol for Handler Specific Equipment Model (HSEM)

  Remove references and content related to SML and SML Notation.

  - ▪ Updated to include additional Standards to be revised.

    - • SEMI E5, SEMI Equipment Communications Standard 2 Message Content (SECS-II);
    - • SEMI E40.1, SECS-II Support for Processing Management Standard;
    - • SEMI E87.1, Provisional Specification for SECS-II Protocol for Carrier Management (CMS);
    - • SEMI E90.1, Specification for SECS-II Protocol Substrate Tracking;
    - • SEMI E94.1, Specification for SECS-II Protocol for Control Job Management (CJM);
    - • SEMI E109, Specification for Reticle and Pod Management (RPMS);
    - • SEMI E109.1, Specification for SECS-II Protocol for Reticle and Pod Management (RPMS);
    - • SEMI E116.1, Specification for SECS-II Protocol for Equipment Performance Tracking (EPT);
    - • SEMI E122.1, Specification for SECS-II Protocol for Tester Specific Equipment Model (TSEM);
    - • SEMI E123, Standard for Handler Equipment Specific Equipment Model (HSEM);
    - • SEMI E138, XML Semiconductor Common Components; and
    - • SEMI E153, Specification for AMHS SEM (AMHS SEM)

  - ▪ Revisions/updates were also made to other SNARF sections including Rationale, Scope, and General Milestones.

    - • Revised Rationale: SEMI Regulations, March 2013 version, section 15.1 states:

      "…Published Documents should be written in a such way that the … reproduction of copyrighted items is not necessary."

      SEMI Required Elements June 2, 2010 states the following:

      "When possible, SEMI Standards and Safety Guidelines should be written in such a way that patented technology or copyrighted information is not necessary to use, comply with, or implement the Standard or Safety Guideline."

The current 0611 E30 publication indicates that SECS Message Language™ is trademarked, and that SML® a registered trademark. The PEER Group has made it known to the NA I&CC that "SML Notation" is copyrighted.

In order to follow SEMI's policy to avoid copyrighted material in the standards, all references to SML and SML Notation will be removed from SEMI E30 and related SEMI Standards. SML and SML Notation are not necessary to use.

- Revised Scope: References and content related to "SML" and "SML Notation" will be removed from: 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

Additional Discussion:

o Lance Rist asked whether there are any issues with submitting a ballot that changes this many standards. Brian Rubow responded that he checked the Regulations with Mitsuhiro Matsuda and it appears to be OK.

Motion:	Approve revised SNARF #5589 (Revisions 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)
By / 2nd:	Brian Rubow (Cimetrix) / Wontae Kim (IT Innovation)
Discussion:	None.
Vote:	11-0 in favor. Motion passed.

o 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 (including the Scope section).

- Revised Scope: Define an XML Schema for representing the content, structure and format of SECS-II messages. The schema could be used to establish a common communication for reporting logging format. The schema will allow the content and format of a SECS-II message to be represented in XML. The elements and attributes will identify the data type, values, and additional optional decorations as attributes. The new XML Schema will be added to SEMI E5 ~~E30~~ as a Complementary File. Text will be added to E5 ~~E30~~ to document aspects of the schema usage, and to identify the complementary file.

Note that the notation used to represent SECS-II messages does not change the format or content of the transmitted SECS-II messages.

Motion:	Approve revised 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)
By / 2nd:	Brian Rubow (Cimetrix) / Mitsuhiro Matsuda (Hitachi Kokusai)
Discussion:	None.
Vote:	12-0 in favor. Motion passed.

- Ballot Plans (Cycle 2, 2014):
    o 5589, 5618, 5619, 5620 (see above)
    o 5454D (E5 and E30 revisions, modifications to the definition of alarms and alarm category definitions)
    o 5508 (E5, E90, and E90.1 revisions; provide generalized support for multiple substrate groups such as those used in HB-LED's material management approach)

Attachment: 12, GEM300 Task Force Report

Action Item: 2013Oct #02, Paul Trio to send updated SNARFs #5618 and #5619 to Lance Rist.

6.4 *Process Control System (PCS) Task Force*

Paul Trio reported for the PCS Task Force. The key items were as follows:

- Attendance: 2
- Ballot Plans:
    - o 5650 (E133 and E133.1 revisions, correct issues uncovered in E133 implementation) for Cycle 8, 2013.
    - o 4507A (E133 and E133.1 revisions, fault detection and other enhancements including XML specification) for Cycle 2, 2014.

Attachment: 13, PCS Task Force Report

6.5 *Sensor Bus Task Force*

Paul Trio reported for the Sensor Bus Task Force. The key items were as follows:

- Attendance: 4
- Documents in Development
    - o 5274B (ADDON SDM): ballot targeted for Cycle 8, 2013
    - o E54.9 (Modbus/TCP re-approval): under discussion, no schedule yet
- Ballot Plans:
    - o 5274B (New E54 Subordinate Standard: Specification for Sensor/Actuator Network Specific Device Model of a Generic Equipment Add-On Sensor [ADDON]) for C8-13.

Attachment: 14, Sensor Bus Task Force Report

6.6 *Japan Equipment Information System Security (EISS) Task Force*

Mitch Sakamoto reported for the EISS Task Force. The key items were as follows:

- Ballot 5422A – New Standard: Guide for Equipment Information System Security
    - o Issued for Cycle 6, 2013
    - o Current Voting Results: return rate = 61% (55/90), rejects = 0, accepts = 17
- Next TF meeting: December 5, 2013 in conjunction with SEMICON Japan /Standards Meetings
    - o Committee adjudication of ballot 5422A: December 6, 2013

Attachment: 15, Japan Equipment Information System Security (EISS) Task Force Report
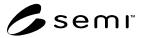

6.7 *AMHS IBSEM Task Force*

Jack Ghiselli reported that the TF co-leaders agreed to disband the task force.

Motion: Approve to disband the AMHS IBSEM TF
By / 2nd: Brian Rubow (Cimetrix) / Mitsuhiro Matsuda (Hitachi Kokusai)
Discussion: On behalf of the committee, Jack Ghiselli thanked the TF for their good work.
Vote: 10-0 in favor. Motion passed.

6.8 *Sort Map Task Force*

Jack Ghiselli reported that the TF co-leaders would like to keep this task force chartered. However, Jack pointed out that the TF has not met in the last two years. The committee chairs would like to disband the Sort Map TF. Jack Ghiselli also pointed out that the TF can regroup when there is activity.

Motion:	Approve to disband the Sort Map TF
By / 2nd:	Brian Rubow (Cimetrix) / Mitch Sakamoto (Tokyo Electron)
Discussion:	Mitsuhiro Matsuda asked whether there were any existing SNARFs under the TF. Jack Ghiselli responded that he was not aware of any open SNARFs at the time.
Vote:	9-0 in favor. Motion passed.

Action Item: 2013Oct #03, NA I&C Chairs to inform the Sort Map TF and AMHS IBSEM TF leaders that the committee approved to disband their task force.

7 Proposed Meeting Schedule for NA Standards Spring 2014 Meetings

March 31 – April 3, 2014
SEMI Headquarters
3081 Zanker Road
San Jose, California 94103

The tentative schedule is provided below:

- Monday, March 31
    - I&C Leadership (12:00 Noon to 1:00 PM)
    - PCS (1:00 PM to 3:00 PM)
    - DDA (1:00 PM to 4:00 PM)
    - SML Copyright Review WG (4:00 PM to 6:00 PM)
- Tuesday, April 1
    - GEM300 (8:00 AM to 5:00 PM)
    - Energy Saving Equipment Communication (9:00 AM to 12:00 Noon)
    - Sensor Bus (1:00 PM to 3:00 PM)
    - I&C GCS (5:00 PM to 6:00 PM
- Wednesday, April 2
    - I&C Committee (8:00 AM to 4:30 PM)

8 Old Business

8.1 Status update on action items generated from the previous meetings:

Item #	Assigned to	Details	Status
2013Jul #01	Paul Trio	Send copies of approved SNARFs to I&C GCS	Done. Closed.
2013Jul #02	Paul Trio, NA I&C Co-chairs	Contact Sort Map TF and AMHS IBSEM TF leaders and determine whether these TFs wish to remain chartered or disband.	Done. Sort Map TF wishes to remain chartered. AMHS IBSEM TF agrees to disband. *(See ¶ 6.6 and ¶ 6.7 above for additional committee discussion)*
2013Jul #03	Paul Trio	Include in the NA I&C Committee Fall 2013 meeting agenda: Japan EISS TF Update	Done. Closed.
2013Jul #04	Paul Trio	Send the NA I&C Fall 2013 meeting schedule to Jackie Ferrell to take to the NA Metrics committee's discussion and planning of its Fall 2013 meeting schedule.	Done. Closed.
2013Jul #05	Paul Trio	Consult with the ISC Regulations Subcommittee on what should be done to SEMI E30 in light of the existing SML copyright issue.	Open
2012Oct #02	Paul Trio	Draft SNARF and ballot proposal for E30 revision (reorganization of introductory sections) and send to GEM300 TF leaders for review.	Open

9 New Business

9.1 *NA I&C Standards due for 5-Year Review*

The committee approved to issue reapproval ballots for the following SEMI Standards:

- SEMI E39, Object Services Standard: Concepts, Behavior, and Services
- SEMI E91, Specification for Prober Specific Equipment Model (PSEM)
- SEMI E148, Specification for Time Synchronization and Definition of the TS-Clock Object

9.2 *New Ballot Submission Summary*

Paul Trio reviewed the TFOFs, SNARFs, and letter ballot submission information presented to the committee for approval. These can be found in the Authorized Ballots and Authorized Activities tables (Table 4 and Table 5, respectively) at the beginning of these minutes.

Motion:	Approve all SNARFs, TFOFs, and letter ballots (as presented in tables 4 and 5 above)
By / 2nd:	Brian Rubow (Cimetrix) / Wontae Kim (IT Innovation)
Discussion:	None.
Vote:	8-0 in favor. Motion passed.

Committee authorization to submit GEM300 TF ballot #5508 (E5/E90/E90.1 revisions) for C2-14 ballot was not obtained together with the other Documents listed above. Therefore, a separate motion was made to approve this Document

Motion:	Approve ballot #5508 for C2-14 letter ballot.
By / 2nd:	Brian Rubow (Cimetrix) / Mitsuhiro Matsuda (Hitachi Kokusai)
Discussion:	None.
Vote:	7-0 in favor. Motion passed.

10 Action Item Review

10.1 *Open Action Items*

Paul Trio (SEMI) reviewed the open action items. These can be found in the Open Action Items table at the beginning of these minutes.

10.2 *New Action Items*

Paul Trio (SEMI) reviewed the new action items. These can be found in the New Action Items table at the beginning of these minutes.

11 Adjournment

Having no further business, a motion was made to adjourn the NA I&C Committee meeting on October 30 in conjunction with the NA Standards Fall 2013 meetings in San Jose, California. Adjournment was at 2:35 PM.

Respectfully submitted by:
Paul Trio
Senior Manager, Standards Operations
SEMI North America
Phone: +1.408.943.7041
Email: ptrio@semi.org

Minutes approved by:

Jack Ghiselli (Ghiselli Consulting), Co-chair	January 30, 2014
Lance Rist (Industry Consultant), Co-chair	February 1, 2014
Brian Rubow (Cimetrix), Co-chair	

Table 8 Index of Available Attachments [#1]

#	Title	#	Title
1	SEMI Standards Required Meeting Elements	9	Ballot Review for Doc. 5509B
2	NA I&CC SEMICON West 2013 (July 10) meeting minutes	10	Diagnostic Data Acquisition Task Force Report
3	SEMI Standards Staff Report	11	Energy Saving Equipment Task Force Report
4	Japan I&C Liaison Report	12	GEM300 Task Force Report
5	Korea I&C Liaison Report	13	PCS Task Force Report
6	Europe Liaison Report	14	Sensor Bus Task Force Report
7	Ballot Review for Doc. 5454C	15	Japan Equipment Information System Security (EISS) Task Force Report
8	Ballot Review for Doc. 5507		

#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 Paul Trio at the contact information above.