



Information & Control NA TC Chapter Meeting Summary and Minutes

SEMICON West

Thursday, July 13, 2023

9:00–3:00 PM (Pacific Time)

TC Chapter Announcements

Next TC Chapter Meeting

Wednesday, November 8, 2023

9:00-12:00 PM, 1:00-4:00 PM Pacific

Table 1 Meeting Attendees

Italics indicate virtual participants

Co-Chairs: James Moyne (Applied Materials / University of Michigan), Brian Rubow (Cimetrix), Jack Ghiselli (Ghiselli Consulting)

SEMI Staff: Michelle Sun

| <i>Company</i> | <i>Last</i> | <i>First</i> | <i>Company</i> | <i>Last</i> | <i>First</i> |
|-------------------------------|------------------|-----------------|---|------------------|----------------|
| Agileo Automation | Golra | Fahad | Intel Corporation | <i>Viswanath</i> | <i>Shuba</i> |
| Applied Materials, Inc. | <i>Moyne</i> | <i>James</i> | Intel Corporation | <i>Maloney</i> | <i>Chris</i> |
| Arlington Laboratory | <i>Judd</i> | <i>Daniel</i> | Intel Ireland, Ltd | <i>Liong</i> | <i>Michael</i> |
| Cimetrix Incorporated | Howard | Richard | Linkgenesis Co., Ltd. | Cha | Kyoungwhan |
| Cimetrix Incorporated | Rubow | Brian | Linkgenesis Co., Ltd. | Jung | Mingyu |
| Cimetrix Incorporated | Tracey | Tami | Omron Automation Americas | Deeb | Joseph |
| Doople | Kim | Hyungsu | Omron Electronics, Inc | Infelise | Nick |
| Edwards Ltd. | <i>Shelley</i> | <i>Gerald</i> | PEER Group Inc. | Fuchigami | Albert |
| EWA-Canada | <i>Thomas</i> | <i>Nicholas</i> | Samsung | Park | Jae Yong |
| Ghiselli Consulting | Ghiselli | Jack | SCREEN Semiconductor Solution Co., Ltd. | Nishimura | Takayuki |
| Hitachi High-Tech Corporation | <i>Toyoshima</i> | <i>Yuko</i> | SEMI | Sun | Michelle |
| Industrial Strength Graphics | <i>Summers</i> | <i>Frank</i> | SEMI | Shim | Natalie |
| Intel Corp. | Bond | Ryan | Tokyo Electron Korea Ltd. | Im | Byoung Min |

Table 2 Leadership Changes

| <i>WG/TF/SC/TC Name</i> | <i>Previous Leader</i> | <i>New Leader</i> |
|-------------------------|------------------------|-------------------|
| None | | |

Table 3 Committee Structure Changes

| <i>Previous WG/TF/SC Name</i> | <i>New WG/TF/SC Name or Status Change</i> |
|-------------------------------|---|
| None | |



Table 4 Ballot Results

| <i>Document #</i> | <i>Document Title</i> | <i>Committee Action</i> |
|-------------------|--|---|
| 7065 | Line Item Revision to SEMI E172-0320, Specification for SECS Equipment Data Dictionary (SEDD) | |
| LI-1 | Add Name element to help identify SEDD objects. | Passed |
| LI-2 | Add Well-Known Name element to SEDD objects. | Passed |
| LI-3 | Update Schema File so not applicable items are handled consistently | Passed with editorial changes |
| 7066 | Line Item Revision to SEMI E87-0921, Specification for Carrier Management (CMS) and SEMI E87.1-0921, Specification for SECS-II Protocol for Carrier Management (CMS) | |
| LI-1 | Rework Carrier Ready to Unload Prediction (CaRTUP) functionality into Carrier Complete Prediction (CCP) functionality and address gaps. | Failed |
| LI-2 | Clarify ContentMap behavior. | Passed |
| LI-3 | Update CMS Compliance Statement to include missing information. | Passed |
| 6743A | Revision to SEMI E95-1101, Specification for Human Interface for Semiconductor Manufacturing Equipment | Failed |
| 6924A | New Standard: Specification for Equipment Management of Consumables and Durables | Passed, Ratification Balot to be Issued |
| 6925A | New Subordinate Standard: Specification for SECS-II Protocol for Equipment Management of Consumables and Durables | Passed, Ratification Balot to be Issued |
| 6991 | Line Item Revision to SEMI E4-0418, Specification for SEMI Equipment Communications Standard 1 Message Transfer (SECS-I) | |
| LI-1 | Bias Free Terminology | Passed |

#1 **Passed** ballots and line items will be submitted to the ISC Audit & Review Subcommittee for procedural review.

#2 **Failed** ballots and line items were returned to the originating task forces for re-work and re-balloting or abandoning.

Table 5 Ratification Ballot Results

| <i>Document #</i> | <i>Document Title</i> | <i>ISC A&R Action</i> |
|-------------------|---|---------------------------|
| R7002 | Revision to SEMI E132-0922 Specification for Equipment Client Authentication and Authorization and SEMI E132.2-0422e Specification for Protocol Buffers for Equipment Client Authentication and Authorization (ECA) | Passed |

Note 1: **Passed** Ratification ballots will be submitted to SEMI publication for final processing.

Note 2: **Failed** Ratification ballots were returned to the originating task forces for re-work and re-balloting or abandoning.

Table 6 Activities Approved by the GCS between meetings of the TC Chapter

| <i>#</i> | <i>Type</i> | <i>SC/TF/WG</i> | <i>Details</i> |
|----------|---------------------------------------|-----------------|--|
| 6743A | Ballot Authorization for Cycle 5-2023 | GUI TF | Revision to SEMI E95-1101, Specification for Human Interface for Semiconductor Manufacturing Equipment |
| 6924A | Ballot Authorization for Cycle 5-2023 | ABFI | New Standard: Specification for Equipment Management of Consumables and Durables |
| 6925A | Ballot Authorization for Cycle 5-2023 | ABFI | New Subordinate Standard: Specification for SECS-II Protocol for Equipment Management of Consumables and Durables |
| 6991 | Ballot Authorization for Cycle 5-2023 | GEM300 TF | Line-Item Revision to SEMI E4-0418, Specification for SEMI Equipment Communications Standard 1 Message Transfer (SECS-I) |



Table 6 Activities Approved by the GCS between meetings of the TC Chapter

| # | Type | SC/TF/WG | Details |
|------|---------------------------------------|-----------|--|
| 6992 | Ballot Authorization for Cycle 5-2023 | GEM300 TF | Line-Item Revision to SEMI E157-0611 (Reapproved 0616), Specification for Module Process Tracking |
| 7063 | SNARF | GEM300 TF | Reapproval of SEMI E40-1218, Specification for Processing Management |
| 7063 | Ballot Authorization for Cycle 5-2023 | GEM300 TF | Reapproval of SEMI E39-1218, Specification for Object Services: Concepts, Behavior, and Services |
| 7064 | SNARF | GEM300 TF | Reapproval of SEMI E39-1218, Specification for Object Services: Concepts, Behavior, and Services |
| 7064 | Ballot Authorization for Cycle 5-2023 | GEM300 TF | Reapproval of SEMI E40-1218, Specification for Processing Management |
| 7065 | Ballot Authorization for Cycle 5-2023 | GEM300 TF | Line Item Revision to SEMI E172-0320, Specification for SECS Equipment Data Dictionary (SEDD) |
| 7066 | SNARF | GEM300 TF | Line Item Revision to SEMI E87-0921, Specification for Carrier Management (CMS) and SEMI E87.1-0921, Specification for SECS-II Protocol for Carrier Management (CMS) |
| 7066 | Ballot Authorization for Cycle 5-2023 | GEM300 TF | Line Item Revision to SEMI E87-0921, Specification for Carrier Management (CMS) and SEMI E87.1-0921, Specification for SECS-II Protocol for Carrier Management (CMS) |
| 7067 | SNARF | PCS TF | Line Item Revision to SEMI E133-1218, Specification for Automated Process Control Systems Interface and SEMI E133.0318, Specification for XML Messaging for Process Control System (PCS) |
| 7068 | Ballot Authorization for Cycle 5-2023 | EDP TF | New Standard: Specification for Equipment Data Publication |
| 7069 | Ballot Authorization for Cycle 5-2023 | EDP TF | Revision to Add a New Subordinate Standard: Specification for Common Data for Etch Components to Specification for Equipment Data Publication |
| 7070 | Ballot Authorization for Cycle 5-2023 | EDP TF | Revision to Add a New Subordinate Standard: Specification for Common Data for Vacuum Components to Specification for Equipment Data Publication |

Table 7 Authorized Activities

Listing of all revised or new SNARF(s) approved by the Originating TC Chapter.

| # | Type | SC/TF/WG | Details |
|------|-------|----------|--|
| 7114 | SNARF | GEM300 | Line Item Revision to SEMI E30-0423, Specification for the Generic Model for Communications and Control of Manufacturing Equipment (GEM) and SEMI E5-0323, Specification for the Generic Model for Communications and Control of Manufacturing Equipment (GEM) |
| 7115 | SNARF | GEM300 | Line Item Revision to SEMI E40-1218, Specification for Processing Management and SEMI E40.1-1218, Specification for SECS-II Protocol for Processing Management |
| 7116 | SNARF | GEM300 | Line Item Revision to SEMI E87-0921, Specification for Carrier Management (CMS) and SEMI E87.1-0921, Specification for SECS-II Protocol for Carrier Management (CMS) |
| 7117 | SNARF | GEM300 | Line Item Revision to SEMI E90-0921, Specification for Substrate Tracking and SEMI E90.1-0312 (Reapproved 0921), Specification for SECS-II Protocol Substrate Tracking |
| 7118 | SNARF | GEM300 | Line Item Revision to SEMI E94-0314 (Reapproved 0819), Specification for Control Job Management and SEMI E94.1-0819, Specification for SECS-II Protocol for Control Job Management (CJM) |
| 7119 | SNARF | GEM300 | Line Item Revision to SEMI E116-0623, Specification for Equipment Performance Tracking and SEMI E116.1-0623, Specification for SECS-II Protocol for Equipment Performance Tracking (EPT) |
| 7120 | SNARF | GEM300 | Line Item Revision to SEMI E157-0611, Specification for Module Process Tracking |

#1 SNARFs and TFOFs are available for review on the SEMI Web site at:

Table 8 Authorized Ballots

| # | When | TF | Details |
|-------|--------------|------------|--|
| 6743B | Cycle 7-2023 | GUI | Revision to SEMI E95-1101, Specification for Human Interface for Semiconductor Manufacturing Equipment |
| 6836 | Cycle 7-2023 | GEM300 | Line Item Revision to SEMI E87-0619, Specification for Carrier Management (CMS) and SEMI E87.1-0619, Specification for SECS-II Protocol for Carrier Management (CMS) and SEMI E90-1218, Specification for Substrate Tracking and SEMI E90.1-0312, Specification for SECS-II Protocol Substrate Tracking |
| 6846 | Cycle 7-2023 | Sensor Bus | Reapproval of SEMI E54.1-0316, Specification for Sensor/Actuator Network Common Device Model |
| 6847 | Cycle 7-2023 | Sensor Bus | Reapproval of SEMI E54.2-0316, Guide for Writing Sensor/Actuator Network (SAN) Letter Ballots |
| 6849 | Cycle 7-2023 | Sensor Bus | Reapproval of SEMI E54.24-1116, Specification for Sensor/Actuator Network Specific Device Model of a Generic Equipment Networked Sensor (GENSen) |
| 6926 | Cycle 7-2023 | CDS | New Standard: Specification for Equipment Operator Access Management and Monitoring |
| 6948 | Cycle 7-2023 | ABFI | Line Item Revisions to SEMI E142-0921 - Specification for Substrate Mapping, SEMI E142.1-0921 - Specification for XML Schema for Substrate Mapping, Line Item Revision to SEMI E142.2-0921 - Specification for SECS II Protocol For Substrate Mapping, Line Item Revision to SEMI E142.3-0921 - Specification for Web Services Protocol for Substrate Mapping, Line Item Revision to SEMI E142.4-0921 - Specification for Secs II Protocol For Substrate Mapping Using Item Transfer |
| 7066A | Cycle 7-2023 | GEM300 | Line Item Revision to SEMI E87-0921, Specification for Carrier Management (CMS) and SEMI E87.1-0921, Specification for SECS-II Protocol for Carrier Management (CMS) |
| 7067 | Cycle 7-2023 | PCS | Line Item Revision to SEMI E133-1218, Specification for Automated Process Control Systems Interface and SEMI E133.1-0318, Specification for XML Messaging for Process Control System (PCS) |
| 7114 | Cycle 7-2023 | GEM300 | Line Item Revision to SEMI E30-0423, Specification for the Generic Model for Communications and Control of Manufacturing Equipment (GEM) and SEMI E5-0323, Specification for the Generic Model for Communications and Control of Manufacturing Equipment (GEM) |
| 7115 | Cycle 7-2023 | GEM300 | Line Item Revision to SEMI E40-1218, Specification for Processing Management and SEMI E40.1-1218, Specification for SECS-II Protocol for Processing Management |
| 7116 | Cycle 7-2023 | GEM300 | Line Item Revision to SEMI E87-0921, Specification for Carrier Management (CMS) and SEMI E87.1-0921, Specification for SECS-II Protocol for Carrier Management (CMS) |
| 7117 | Cycle 7-2023 | GEM300 | Line Item Revision to SEMI E90-0921, Specification for Substrate Tracking and SEMI E90.1-0312 (Reapproved 0921), Specification for SECS-II Protocol Substrate Tracking |
| 7118 | Cycle 7-2023 | GEM300 | Line Item Revision to SEMI E94-0314 (Reapproved 0819), Specification for Control Job Management and SEMI E94.1-0819, Specification for SECS-II Protocol for Control Job Management (CJM) |
| 7119 | Cycle 7-2023 | GEM300 | Line Item Revision to SEMI E116-0623, Specification for Equipment Performance Tracking and SEMI E116.1-0623, Specification for SECS-II Protocol for Equipment Performance Tracking (EPT) |
| 7120 | Cycle 7-2023 | GEM300 | Line Item Revision to SEMI E157-0611, Specification for Module Process Tracking |
| 7121 | Cycle 7-2023 | GEM300 | Reapproval of SEMI E39.1-1218, Specification for SECS-II Protocol for Object Services (OSS) |
| 7123 | Cycle 7-2023 | Sensor Bus | Reapproval of SEMI E54.10-0600 (Reapproved 1017), Specification for Sensor/Actuator Network Specific Device Model for An in Situ Particle Monitor Device |
| 7125 | Cycle 7-2023 | PCS | Reapproval of SEMI E133.1-0318 - Specification for XML Messaging for Process Control System (PCS) |



Table 8 Authorized Ballots

| # | When | TF | Details |
|--------|--------------|------|---|
| 7126 | Cycle 7-2023 | DDA | Reapproval of SEMI E145-0414, Classification for Measurement Unit Symbols in XML |
| 7127 | Cycle 7-2023 | DDA | Reapproval of SEMI E128-0414 (Reapproved 0519), Specification for XML Message Structures |
| 7128 | Cycle 7-2023 | DDA | Reapproval of SEMI E138-0217, Specification for XML Semiconductor Common Components |
| R6924A | Cycle 6-2023 | ABFI | New Standard: Specification for Equipment Management of Consumables and Durables |
| R6925A | Cycle 6-2023 | ABFI | New Subordinate Standard: Specification for SECS-II Protocol for Equipment Management of Consumables and Durables |

Table 9 SNARF(s) Granted a One-Year Extension

| # | TF | Title | Expiration Date |
|------|----|-------|-----------------|
| None | | | |

Table 10 SNARF(s) Abolished

| # | TF | Title |
|------|-----|---|
| 6649 | PCS | Line Item Revision to SEMI E133-1218: Specification for Automated Process Control Systems Interface, and SEMI E133.1-0318: Specification for XML Messaging for Process Control System (PCS) |

Table 11 Standard(s) to receive Inactive Status

| Standard Designation | Title |
|----------------------|-------|
| None | |

Table 12 New Action Items

| Item # | Assigned to | Details |
|--------|---------------------|---|
| 1 | Michelle Sun (SEMI) | Issue two-week SNARF review for ESEC SNARF, DDA E164 Revision - OPEN |
| 2 | Michelle Sun (SEMI) | Send James Moyne copies of SEMI E133 and E133.1 - CLOSED |

Table 13 Previous Meeting Action Items

| Item # | Assigned to | Details |
|--------|--------------------|---|
| 1 | Thai Nguyen (SEMI) | Double instances of voter when manual add/self add, and cannot remove someone you've added manually - OPEN |
| 2 | Thai Nguyen (SEMI) | Request to IT: Move timer the screen so it doesn't jump during voting - OPEN |

1 Welcome, Reminders, and Introductions

Brian Rubow (Cimetrix) called the meeting to order at 9:08. The meeting reminders on antitrust issues, intellectual property issues and holding meetings with international attendance were reviewed. Attendees introduced themselves.

Attachment: Required Meeting Elements Nov 2022

2 Review of Previous Meeting Minutes

The TC Chapter reviewed the minutes of the previous meeting.

- Motion:** Approve the minutes as written
By / 2nd: By: Brian Rubow / Cimatrix Incorporated
Second: Richard Howard / Cimatrix Incorporated
Discussion: None
Vote: 14-Y 0-N. Motion passed.
Attachment: NA-IC-TC-Chapter-Minutes-Apr2023 v2

3 Liaison Reports

3.1 *Information & Control Japan TC Chapter*

Takayuki Nishimura (SCREEN) reported for the I&C Japan TC Chapter. Of note:

Meeting Schedule

- Last meeting
 - Wednesday, April 19, 2023, 9:30AM-12:00 noon [JST]
 - SEMI Japan office, Tokyo, Japan +Official Virtual TC Chapter Meeting (Hybrid)
- Next meeting
 - Wednesday, September 13, 2023, 9:30AM-12:00 noon [JST]
 - SEMI Japan office, Tokyo, Japan +Official Virtual TC Chapter Meeting (Hybrid)

Webinars

- SEMI SECS GEM / GEM300 tutorial seminar being held for two months from May 2023.
 - Web on-demand seminar in Japanese
- SEMI SECS GEM / GEM300 tutorial seminar being held for two months from July 2023.
 - Web on-demand seminar in Japanese

Attachment: JA_I&C_Liaison_20230626_v1.2

3.2 *Information & Control Korea TC Chapter*

Michelle Sun (SEMI) reported for the I&C Korea TC Chapter. Of note:

Meeting Schedule

- Last meeting
 - February 24, 2023 @ SEMI Korea, Seoul
- Next meeting
 - TBD

ABFI TF

- Advanced Packaging Automation workshop on April 27 (invitation only)
- Attendee: 46 (Registration: 71)
- Agenda:
 - Automation trends in the Semiconductor industry / Samsung SDS
 - Automation for software perspective / Miracom
 - Smart Factory Best Practice / LS ELECTRIC
 - Advanced Packaging Automation Best Practice / JCET STATS ChipPAC
 - SEMI Packaging-related standards update / SEMI
 - Panel discussion

Upcoming Events



- SEMI Software Standards Tutorial
 - 10/18-19 @ TBD
 - Courses
 - SECS/GEM / Doople
 - EDA / Doople
- SEMI Korea Webinar: Cybersecurity
 - 9/14, 1-2 hrs max

Attachment: Liaison report_InC_KR_July2023

3.3 SEMI Staff Report

Michelle Sun (SEMI) gave the SEMI Staff Report. Of note:

2023 Calendar of Events

- SEMICON West
 - July 11-13
 - San Francisco, CA
- SEMICON Taiwan
 - Sept 6-8
 - Taipei, Taiwan
- SEMICON Europa
 - Nov 14-17
 - Munich, Germany
- SEMICON Japan
 - Dec 13-15
 - Tokyo, Japan

Upcoming NA Meetings

- NA Standards Fall Meetings
 - Nov 6-9, 2023
 - SEMI HQ, Milpitas, CA
- NA Standards Spring Meetings
 - April 1-4, 2024
 - SEMI HQ, Milpitas, CA
- SEMICON West
 - July 2024
 - Moscone Center, San Francisco

Critical Dates

| 2023 | Ballot Submission Deadline | Voting Opens | Voting Closes |
|---------|----------------------------|--------------|---------------|
| Cycle 6 | July 26 | August 9 | September 8 |
| Cycle 7 | August 30 | September 13 | October 13 |
| Cycle 8 | October 4 | October 18 | November 17 |
| Cycle 9 | November 15 | November 29 | December 29 |

New Publications Staff

- Vivian Hoang – Sr. Specialist, Standards Publications
 - Joined SEMI May 17, 2023.
 - Will focus on processing ballots to reduce backlog and improve publishing time.

SEMI Standards Publications



- Total SEMI Standards in portfolio: 1,079
- Includes 327 Inactive Standards

| Cycle | New | Revised | Reapproved | Withdrawn |
|------------|-----|---------|------------|-----------|
| March 2023 | 2 | 2 | 0 | 0 |
| April 2023 | 1 | 10 | 4 | 0 |
| May 2023 | 0 | 4 | 2 | 0 |
| June 2023 | 1 | 10 | 7 | 0 |

New Standards

| Cycle | Designation | Title | Committee | Region |
|------------|-------------|--|----------------------------------|--------|
| March 2023 | SEMI FH1 | Test Method of Line Impedance for Electronic Textiles | Flexible Hybrid Electronics | TW |
| March 2023 | SEMI FH2 | Test Method of Sheet Resistance for Woven Electronic Textiles | Flexible Hybrid Electronics | TW |
| April 2023 | SEMI M92 | Specification for 4H-SiC Homoepitaxial Wafer | Compound Semiconductor Materials | CH |
| June 2023 | SEMI PV100 | Test Method of Wind Uplift Resistance for Photovoltaic Modules Roof (BIPV) | Photovoltaic | CH |

SNARF 3-Year Status

- 6563, Reapproval for SEMI E54.18-0914: Specification for Sensor/Actuator Network Specific Device Model for Vacuum Pump Device
- 6564, Reapproval for SEMI E54.22-0914: Specification for Sensor/Actuator Network Specific Device Model for Vacuum Pressure Gauges
- 6565, New Standard: Specification for Application Accesslisting
- 6649, Line item revisions to SEMI E133-1218: Specification for Automated Process Control Systems Interface, and SEMI E133.1-0318: Specification for XML Messaging for Process Control System (PCS)

Attachment: Staff Report July 2023 v3

4 Ballot Review

NOTE 1: TC Chapter adjudication on ballots reviewed is detailed in the Audits & Review (A&R) Subcommittee Forms for procedural review. The A&R forms are available as attachments to these minutes. The attachment number for each balloted document is provided under each ballot review section below.

4.1 Document #7065, Line Item Revision to SEMI E172-0320, Specification for SECS Equipment Data Dictionary (SEDD)

4.1.1 Line Item #1: Add Name element to help identify SEDD objects

4.1.2 Line Item #2: Add Well-Known Name element to SEDD objects

4.1.3 Line Item #3: Update Schema File so not applicable items are handled consistently

Motion: This is not a Safety Document, when all safety-related information is removed, the Document is still technically sound and complete. (Regulations ¶ 8.7.1)

By / 2nd: By: Albert Fuchigami / PEER Group Inc.
Second: Brian Rubow / Cimatrix Incorporated



Discussion: None
Vote: 14 Y-0 N; Motion passed

Motion: Line item(s) [1], [2] passed TC Chapter review as balloted and will be forwarded to the ISC A&R SC for procedural review.
Line item(s) [3] passed TC Chapter review with editorial changes and will be forwarded to the ISC A&R SC for procedural review.

By / 2nd: By: Brian Rubow / Cimatrix Incorporated
Second: Albert Fuchigami / PEER Group Inc.

Discussion: None
Vote: 16 Y-0 N; Motion passed

Attachment: AR - 7065

4.2 Document #7066, Line Item Revision to SEMI E87-0921, Specification for Carrier Management (CMS) and SEMI E87.1-0921, Specification for SECS-II Protocol for Carrier Management (CMS)

4.2.1 Line Item #1: Rework Carrier Ready to Unload Prediction (CaRTUP) functionality into Carrier Complete Prediction (CCP) functionality and address gaps.

4.2.2 Line Item #2: Clarify ContentMap behavior.

4.2.3 Line Item #3: Update CMS Compliance Statement to include missing information.

Motion: This is not a Safety Document, when all safety-related information is removed, the Document is still technically sound and complete. (Regulations ¶ 8.7.1)

By / 2nd: By: Albert Fuchigami / PEER Group Inc.
Second: Nick Infelise / Omron Electronics, Inc

Discussion: None
Vote: 16 Y-0 N; Motion passed

Motion: Line item(s) [2], [3] passed TC Chapter review as balloted and will be forwarded to the ISC A&R SC for procedural review.

Line item(s) [1] failed TC Chapter review and will be returned to the TF for rework.

By / 2nd: By: Albert Fuchigami / PEER Group Inc.
Second: Brian Rubow / Cimatrix Incorporated

Discussion: None
Vote: 16 Y-0 N; Motion passed

Attachment: AR - 7066

4.3 Document #6743A, Revision to SEMI E95-1101, Specification for Human Interface for Semiconductor Manufacturing Equipment

Negative: Albert Fuchigami / PEER Group
Negative#: 1
Reject #1 – The View Panel layout requires are inconsistent.
The requirement in 7.2.4.1 states the view panel layout has 2 elements (Information area and command area).



Figure 3 and the rest of section 7.2.4 talks about 3 elements (information area, command area and view to view navigation area. Should be consistent.

Motion: Negative is related and persuasive.
By / 2nd: By: Tami Tracey / Cimatrix Incorporated
Second: Albert Fuchigami / PEER Group Inc.
Discussion: None
Vote: 15 Y-0 N; Motion passed

Motion: This Document failed TC Chapter review and will be returned to the TF for rework
By / 2nd: By: Tami Tracey / Cimatrix Incorporated
Second: Nick Infelise / Omron Electronics, Inc
Discussion: None
Vote: 17 Y-0 N; Motion passed

4.4 Document #6924A, New Standard: Specification for Equipment Management of Consumables and Durables

Motion: This is not a Safety Document, when all safety-related information is removed, the Document is still technically sound and complete. (Regulations ¶ 8.7.1)
By / 2nd: By: Brian Rubow / Cimatrix Incorporated
Second: Albert Fuchigami / PEER Group Inc.
Discussion: None
Vote: 19 Y-0 N; Motion passed

Motion: This Document passed TC Chapter review with technical changes and with or without editorial changes and will be forwarded to the ISC A&R SC for procedural review. A Ratification Ballot will be issued to verify the technical changes.
By / 2nd: By: Albert Fuchigami / PEER Group Inc.
Second: Brian Rubow / Cimatrix Incorporated
Discussion: None
Vote: 17 Y-0 N; Motion passed

Attachment: AR – 6924A

4.5 Document #6925A, New Subordinate Standard: Specification for SECS-II Protocol for Equipment Management of Consumables and Durables

Motion: This is not a Safety Document, when all safety-related information is removed, the Document is still technically sound and complete. (Regulations ¶ 8.7.1)
By / 2nd: By: Albert Fuchigami / PEER Group Inc.
Second: Brian Rubow / Cimatrix Incorporated
Discussion: None
Vote: 18 Y-0 N; Motion passed

Motion: This Document passed TC Chapter review with technical changes and with or without editorial changes and will be forwarded to the ISC A&R SC for procedural review. A Ratification Ballot will be issued to verify the technical changes.
By / 2nd: By: Brian Rubow / Cimatrix Incorporated
Second: Albert Fuchigami / PEER Group Inc.



Discussion: None
Vote: 20 Y-0 N; Motion passed

Attachment: AR – 6925A

4.6 Document #6991, Line Item Revision to SEMI E4-0418, Specification for SEMI Equipment Communications Standard 1 Message Transfer (SECS-I)

4.6.1 Line Item #1: Bias Free Terminology

Motion: This is not a Safety Document, when all safety-related information is removed, the Document is still technically sound and complete. (Regulations ¶ 8.7.1)

By / 2nd: By: Brian Rubow / Cimatrix Incorporated
Second: Albert Fuchigami / PEER Group Inc.

Discussion: None

Vote: 16 Y-0 N; Motion passed

Motion: Line item(s) [1] passed TC Chapter review as balloted and will be forwarded to the ISC A&R SC for procedural review.

By / 2nd: By: Brian Rubow / Cimatrix Incorporated
Second: Albert Fuchigami / PEER Group Inc.

Discussion: None

Vote: 17 Y-0 N; Motion passed

Attachment: AR - 6991

5 Subcommittee and Task Force Reports

5.1 CDS Task Force

Ryan Bond (Intel) reported for the CDS Task Force. Of note:

Ballot 6926 – Equipment Operator Access Management and Monitoring

- Discussed current draft of requirements
- Update will be posted to connect@SEMI site

Further Development Proposal

- Requested volunteers to help draft sections of the ballot
- Overview – Ryan
- Authentication – Ryan
- Authorization - Richard
- Configuration Provisioning - ?
- Access Control - Richard
- Logging - ?

Communicate as an offline working group and bring back a major revision to the TF

Attachment: CDS TF Report 20230711

5.2 EDP Task Force

Shuba Viswanath (Intel) reported for the EDP Task Force. Of note:

Meeting Results

- Team focused on Etch subordinate content development while working on the primary in parallel
- Etch Subordinate:
- Got alignment on the category table that was reviewed (Slide #7). Focus will on extracting the next level of details
- Reviewed the EDP vs. Ethercat standards – the latter is richer/granular information on sensor parameters vs. EDP is at a high level. As an example, EDP might have a MFC sensor but Ethercat talks at a very deep level on MFC1, MFC2 etc., (Slide #8)
- Primary standard:
 - Good discussion on the Rev.0 primary outline
 - Need clear distinction between shareable and non shareable definitions to avoid grey areas and has to be mutually exclusive
 - Work through the primary content based on the feedback provided by the team

Attachment: EDP TF Report Final- July 23

5.3 GUI Task Force

Tami Tracey (Intel) reported for the GUI Task Force. Of note:

Meeting Results

Discussion of Negatives and Comments on 6743A

- 4 of 4 Negatives discussed
- 10 of 11 Comments discussed
- 11th comment was a copy of the draft 6743A with embedded comments. With agreement with the voter in the TF meeting, the specific comments in this document were not viewed or discussed.
 - The document has been posted to the GUI Task Force document library in Connect@SEMI
 - Co-leaders will review the document's comments. If it necessary to review with the Task Force, an interim Task Force meeting will be called. Otherwise, edits will be incorporated into the next document draft.

Attachment: GUI TF Report - 2023-07-11

5.4 ABFI Task Force

Brian Rubow (Cimetrix) reported for the ABFI Task Force. Of note:

- Adjudicated 6924A: New Consumables and Durables specification
- Adjudicated 6925A: New subordinate Consumable and Durables specification
- Discussed E142 ballot 6948

Attachment: SEMI NA-ICC-ABFI-TF Report Summer 2023

5.5 DDA Task Force

Albert Fuchigami (PEER Group) reported for the DDA Task Force. Of note:

- Ballot Adjudication:
 - Passed - Ballot #R7002 – Revision to SEMI E132-0922 Specification for Equipment Client Authentication and Authorization and SEM E132.2-0422e Specification for Protocol Buffers for Equipment Client Authentication and Authorization (ECA)
- Meeting Results (Technical Summary)

- Moving forward with approach to re-architecture SEMI E164 into primary/subordinate standard to address issues with current SEMI E164.
- Reviewed draft for new Revision SNARF for SEMI E164 (required new due to scope change for standard re-architecture). Will send out for TC Member review and ask for GCS Approval.
- Create new SNARFs to split current SEMI E164 requirements into new subordinate standards per content standard (i.e. one for metadata requirements for SEMI E30, E40, E94, etc.)
- Plan to update Supplementary Files for sample tool model (TrackSys) with updated metadata structure.
- Targeting EDA Software Vendor Test Plan #2 for Spring 2024.
- Share zip files with .proto files to use and distribute test plans beforehand so everyone knows expectations on what will be tested.
- Waiting for previously authorized DDA ballots to be published before next set of ballots can be developed.
- Creating a list of errata in the meantime.

Attachment: DDA TF Report - SEMICON 2023_Rev 1.0

5.6 PCS Task Force

James Moyne (AMAT/U of Michigan) reported for the PCS Task Force. Of note:

- New Ballots and ballot plans
 - E133 and E133.1 are due for 5-year review
 - Plan: Ballot generation for Cycle 7
 - Restricted bias terms identified in E133 (“master”)
 - Consensus replacing “master” with “supervisory” (SCADA → Supervisory Control and Data Acquisition)
 - No restricted bias terms identified in E133.1; will review more current version of document
 - James to receive E133 and E133.1 latest from Michelle and verify that there are no other restricted bias terms
- E133 LI Ballot: James and Chris to generate ballot and distribute to TF. Cycle 7 deadline is August 30th our target cycle
 - Need approval from I&CC to distribute
- E133.1 LI Ballot: Assuming there are no restricted bias terms Michelle to generate reapproval SNARF and ballot for E133.1
 - Need approval from I&CC to distribute
 - Longer term: Working on optimized maintenance addition to E133
 - Definitions completed; successfully balloted by E-RAMP TF
 - Will work to align the Intel Roadmap for Devices and Systems (IRDS) with these definitions
 - Consensus: Go into holding pattern until we have resources which is expected early next year
- Potential resources from proposals into government for CHIPs act
- Voted to abolish associated SNARF 6649
- Will re-introduce a SNARF when the activity resumes

Attachment: PCS-TF-report20230711

5.7 GEM300 Task Force

Brian Rubow (Cimetrix) reported for the GEM300 Task Force. Of note:

- Ballot Adjudication:
 - Passed in the Task Force
 - 7065 Line Items 1, 2, 3 with Editorial Change
 - 7066 Line Items 2, 3
 - 6991
- Ratification Ballot in the Task Force
 - None
- Failed in the Task Force
 - 7066 Line Item 1
- New Ballots and ballot plans

- 7066A
- 6 ballots from 6 new SNARFS
 - E30, E5
 - E40.1
 - E87, E87.1
 - E90.1
 - E116.1
 - E157
- Meeting Results (Technical Summary)
 - Adjudicated 7065: changes to E172 SEDD file
 - Adjudicated 7066: changes to E87. Changes to carrier ready to unload prediction failed.
 - Adjudicated 6991: E4 changes for bias free terminology. Superclean.
 - Reviewed six SNARFS. Primarily well-knowns will be proposed to standardize alias names. The SNARFS for E30/E5 and for E87 also include a list of issues reported by task force members to be resolved.
 - Reviewed planned changes for ballot 6836 (SEMI E87/E90). Allow for handling bonder/debonder equipment.

Attachment: SEMI NA-ICC-GEM300-TF Report Summer 2023

5.8 Sensor Bus Task Force

Dan Judd (Arlington Lab) reported for the Sensor Bus Task Force. Of note:

Work Plan – E54 Series

5-year Review – Overdue – will submit SNARF to Reapprove ASAP

- E54.1 – CDM (0316)
- E54.2 – CDM Guide (0316)
- E54.10 – SDM ISPD (1017)
- E54.20 – C EtherCAT (0316) *
- E54.24 – SDM GenSen (1116)

5-year Review – October 2023

- E54.17 – C A-Link (1018) *
- E54.19 – C Mechatrolink (1018) *

Restricted Biased Terms (RBT)

Active

- E54.4 – DeviceNet 0422 (4)
- E54.12 – CC-Link 1019 (10)
- E54.17 – A-Link 1018 (2)
- E54.19 – Mechatrolink 1018 (32)
- E54.20 – EtherCAT 0316 (36)
- E54.21 – MotionNet 1019 (30)
- E54.23 – CC-Link IE 0520 (27)

Inactive

- E54.8 – Profibus (57)
- E54.9 – Modbus/TCP (10)
- E54.13 – Ethernet/IP (2)
- E54.15 – SafetyBus p (10)



- E54.16 – Lonworks (4)

Attachment: SEMI SB TF Report

5.9 ESEC Task Force

Gerald Shelley (Edwards) reported for the Sensor Bus Task Force. Of note:

- 11 attendees
- No Leadership changes
- Previously agreed the existing line item SNARF 6923 is insufficient for changes proposed to E167
- Prepared new SNARF E167/E167.1 only as a major revision to replace SNARF 6923 which included E175
 - Update scope definition to add process module
 - Update state model and transition table
- SNARF for E175 line item changes will follow to maintain alignment of terms

Attachment: SEMI_ESEC_230711

6 Next Meeting and Adjournment

The next meeting is scheduled for Wednesday, November 8, 2023, at SEMI HQ, Milpitas. See <http://www.semi.org/standards-events> for the current list of events.

Adjournment: 2:48.

Respectfully submitted by:

Michelle Sun
 Coordinator
 SEMI North America
 Phone: 408.943.7982
 Email: msun@semi.org

Minutes tentatively approved by:

| | |
|------------------------------|-----------------|
| <Name> (<Company>), Co-chair | <Date approved> |
| <Name> (<Company>), Co-chair | <Date approved> |

Table 14 Index of Available Attachments^{#1}

| <i>Title</i> | <i>Title</i> |
|-------------------------------------|---------------------------|
| Required Meeting Elements Nov 2022 | Staff Report July 2023 v3 |
| NA-IC-TC-Chapter-Minutes-Apr2023 v2 | AR - 7065 |
| JA_I&C_Liaison_20230626_v1.2 | AR - 7066 |
| Liaison report_InC_KR_July2023 | AR – 6924A |
| AR – 6925A | AR - 6991 |



Table 14 Index of Available Attachments#1

| | |
|--|--|
| CDS TF Report 20230711 | SEMI NA-ICC-ABFI-TF Report Summer 2023 |
| EDP TF Report Final- July 23 | DDA TF Report - SEMICON 2023_Rev 1.0 |
| GUI TF Report - 2023-07-11 | PCS-TF-report20230711 |
| SEMI NA-ICC-GEM300-TF Report Summer 2023 | SEMI SB TF Report |
| SEMI_ESEC_230711 | |

#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.