Traceability North America TC Chapter

Meeting Summary and Minutes

SEMICON West 2018 Meeting
July 9, 2018 11:00AM – 12:00 (noon)
San Francisco, CA

TC Chapter Announcements

Next TC Chapter Meeting
November 8, 2018 at 14:30 – 16:00
Milpitas, CA

Table 1 Meeting Attendees
*Italicics* indicate virtual participants

Co-Chairs: Yaw Obeng (NIST); Win Baylies (BayTech Resor)

**SEMI Staff:** Inna Skvortsova

<table>
<thead>
<tr>
<th>Company</th>
<th>Last</th>
<th>First</th>
<th>Company</th>
<th>Last</th>
<th>First</th>
</tr>
</thead>
<tbody>
<tr>
<td>NIST</td>
<td>Obeng</td>
<td>Yaw</td>
<td>PEER</td>
<td>Suerich</td>
<td>Doug</td>
</tr>
<tr>
<td>PEER</td>
<td>Fuchigami</td>
<td>Albert</td>
<td>PDF Solutions</td>
<td>Prewitt</td>
<td>Greg</td>
</tr>
<tr>
<td>PDF Solutions</td>
<td>Huntley</td>
<td>David</td>
<td>Cimretix</td>
<td>Rubow</td>
<td>Brian</td>
</tr>
<tr>
<td>BW Associates</td>
<td>Wu</td>
<td>Bevan</td>
<td>SEMI</td>
<td>Skvortsova</td>
<td>Inna</td>
</tr>
<tr>
<td>Samsung</td>
<td>Bruce</td>
<td>Eric</td>
<td>SEMI</td>
<td>Trio</td>
<td>Paul</td>
</tr>
<tr>
<td>Ghiselli Consulting</td>
<td>Ghiselli</td>
<td>Jack</td>
<td>SEMI</td>
<td>Wu</td>
<td>Jun</td>
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<tr>
<td>Lam Research</td>
<td>Deaux</td>
<td>Vincent</td>
<td>SEMI</td>
<td>Yanagisawa</td>
<td>Chie</td>
</tr>
<tr>
<td>Swagelok</td>
<td>Shutler</td>
<td>Robert</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEER</td>
<td>Suerich</td>
<td>Doug</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PDF Solutions</td>
<td>Prewitt</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2 Leadership Changes

<table>
<thead>
<tr>
<th>WG/TF/SC/TC Name</th>
<th>Previous Leader</th>
<th>New Leader</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment and Materials Traceability</td>
<td>n/a</td>
<td>Eric Bruce (Samsung); Lance Dyrdahl (LAM Research); Jeff Hanan (Global Foundries).</td>
</tr>
<tr>
<td>Task Force [NEW]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single Device Traceability Task Force</td>
<td>n/a</td>
<td>Dave Huntley (PDF Solutions); Chris Portelli (STMicroelectronics); Zoe Conroy (Cisco).</td>
</tr>
<tr>
<td>[NEW]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 3 Committee Structure Changes

<table>
<thead>
<tr>
<th>Previous WG/TF/SC Name</th>
<th>New WG/TF/SC Name or Status Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>n/a</td>
<td>Equipment and Materials Traceability Task Force [NEW]</td>
</tr>
<tr>
<td>n/a</td>
<td>Single Device Traceability Task Force [NEW]</td>
</tr>
<tr>
<td>T5 Revision Task Force [Disbanded]</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Table 4 Ballot Results

<table>
<thead>
<tr>
<th>Document #</th>
<th>Document Title</th>
<th>Committee Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

#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 Activities Approved by the GCS between meetings of the TC Chapter

<table>
<thead>
<tr>
<th>#</th>
<th>Type</th>
<th>SC/TF/WG</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 6 Authorized Activities

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

<table>
<thead>
<tr>
<th>#</th>
<th>Type</th>
<th>SC/TF/WG</th>
<th>Details</th>
</tr>
</thead>
</table>
| 6428 | SNARF | 5-Year Revision TF | Reapproval to SEMI T3-1213, Specification for Wafer Box Labels  
New SNARF Approved at TC meeting |
| 6429 | SNARF | 5-Year Revision TF | Reapproval to SEMI T4-0301 (Reapproved 1213), Specification for 150 mm and 200 mm Pod Identification Dimensions  
New SNARF Approved at TC meeting |
New SNARF to be distributed for 2-week member review followed by GCS approval |
New SNARF to be distributed for 2-week member review followed by GCS approval |
New SNARF to be distributed for 2-week member review followed by GCS approval and ballot authorization for Cycle 7-18 |

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

Table 7 Authorized Ballots

<table>
<thead>
<tr>
<th>#</th>
<th>When</th>
<th>TF</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>6428</td>
<td>Cycle 7-18</td>
<td>5-Year Revision TF</td>
<td>Reapproval to SEMI T3-1213, Specification for Wafer Box Labels</td>
</tr>
<tr>
<td>6429</td>
<td>Cycle 7-18</td>
<td>5-Year Revision TF</td>
<td>Reapproval to SEMI T4-0301 (Reapproved 1213), Specification for 150 mm and 200 mm Pod Identification Dimensions</td>
</tr>
</tbody>
</table>
Table 8 SNARF(s) Granted a One-Year Extension

<table>
<thead>
<tr>
<th>#</th>
<th>TF</th>
<th>Title</th>
<th>Expiration Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 9 SNARF(s) Abolished

<table>
<thead>
<tr>
<th>#</th>
<th>TF</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>6117</td>
<td>T5 Revision TF</td>
<td>Line Item Revision to SEMI T5-1214, Specification for Alphanumeric Marking of Round Compound Semiconductor Wafers</td>
</tr>
</tbody>
</table>

Table 10 Standard(s) to receive Inactive Status

<table>
<thead>
<tr>
<th>Standard Designation</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

Table 11 New Action Items

<table>
<thead>
<tr>
<th>Item #</th>
<th>Assigned to</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018 SW#01</td>
<td>Inna S.</td>
<td>Issue reapproval ballots for SEMI T3 and SEMI T4</td>
</tr>
</tbody>
</table>

Table 12 Previous Meeting Action Items

<table>
<thead>
<tr>
<th>Item #</th>
<th>Assigned to</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>NONE</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 Welcome, Reminders, and Introductions

Yaw Obeng (NIST) called the meeting to order at 11:00AM. 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 Elements.ppt

2 Review of Previous Meeting Minutes

2.1 The TC Chapter reviewed and approved the minutes of the previous SEMICON West 2017 Standards meeting.

Motion: To approve minutes as written
By / 2nd: Yaw Obeng (NIST) / Rob Shutler (Swagelok)
Discussion: None
Vote: 7/0. Motion passed.

Attachment 02: NA Traceability TC Meeting Minutes (July 2017).pdf

3 SEMI Standards Staff Report

3.1 Inna Skvortsova (SEMI) gave the SEMI Staff Report. Of note:

SEMI Global 2018 Calendar of Events
- SEMICON West (July 10-12, 2018, San Francisco, California)
- SEMICON Taiwan (September 5-7, 2018, Taipei, Taiwan)
- SEMICON Europa (November 13-16, 2018, Munich, Germany)
- SEMICON Japan (December 12-14, 2017, Tokyo, Japan)

**Upcoming North America Meetings**
- NA Standards Fall 2018 Meetings (November 5-8, 2018, SEMI HQ, Milpitas, California)
- NA Standards Spring 2019 Meetings (April 1-4, 2019, SEMI HQ, Milpitas, California)
- SEMICON West 2019 Meetings (July 8-11, 2019, San Francisco, California)

**Letter Ballot Critical Dates for NA Standards meetings**
- Cycle 6-18: due July 20 / Voting Period: Aug 1 – Aug 31
- Cycle 7-18: due Aug 22 / Voting Period: Sep 5 – Oct 5


- SEMI Standards Publications

<table>
<thead>
<tr>
<th>Cycle</th>
<th>New</th>
<th>Revised</th>
<th>Reapproved</th>
<th>Withdrawn</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 2018</td>
<td>0</td>
<td>9</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>May 2018</td>
<td>0</td>
<td>3</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>June 2018</td>
<td>2</td>
<td>14</td>
<td>11</td>
<td>0</td>
</tr>
</tbody>
</table>

Total SEMI Standards in portfolio: 987. Includes 236 Inactive Standards

<table>
<thead>
<tr>
<th>Cycle</th>
<th>Designation</th>
<th>Title</th>
<th>Committee</th>
<th>Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 2018</td>
<td>SEMI C96</td>
<td>Test Method for Determining Density of Chemical Mechanical Polish (CMP) Slurries</td>
<td>Liquid Chemicals</td>
<td>NA</td>
</tr>
<tr>
<td>June 2018</td>
<td>SEMI D77</td>
<td>Test Method for Measurements of Dimension of Films for FPD – Contour Matching Method</td>
<td>Flat Panel Display</td>
<td>JA</td>
</tr>
</tbody>
</table>

- New Forms, Regulations & Procedure Manual
  - New version of *Regulations* (June 8, 2018)
  - New version of *Procedure Manual* (June 8, 2018)
  - New TFOF & SNARF
  - New Ballot Review Templates
Regulations & Procedure Manual Changes

- Improvements on Rules for Handling of Patented Technology (Regulations § § 16.1-16.3)
  - Patented Technology that might be material to the Standard is disclosed at the end stage of document development
    - Disclosed after the ballot is issued
    - Assessment for potential materiality and technical justifiability for inclusion shall be postponed to the next scheduled meeting.
  - A TF sometimes decides to use patented technology after it has started the document development project.
    - To require subsequent update of SNARF regarding use of Patented Technology and subsequent LOI process to ensure that TC Chapter agrees to the course of action recommended by the TF.

- Improvements on Rules for Handling of Copyright and Trademark (Regulations § 16.4)
  - Improvement on handling copyright process
  - New process for handling trademarks

- Additional Official Virtual TC Chapter Meeting Related Rules (Regulations ¶ 7.4.2 and § 9.5)
  - Loss of necessary infrastructure at the meeting location described in the Background Statement of the Letter Ballot
    - The necessary infrastructure (e.g., electrical power, internet connection, required software applications)
  - Procedure for Transition of Virtual Meeting (PM 4.3.6)
    - GTC Decision for Whether or Not to Adopt the Official Virtual TC Chapter Meeting

- Clarification on the Use of Editorial Changes a Standard or Safety Guideline (Regs § 8.9.5)
  - Two types, made independently from a Letter Ballot.
  - Both requires TC approval and subsequent A&R approval.
  - Type 1:
    - minor changes (i.e., corrections of obvious misspelling, formatting changes to comply with the Style Manual; corrections of capitalization, the use of italics, incorrect spacing);
  - Type 2:
    - those that introduce no change in technical content (e.g., changes to nontechnical information; insubstantial changes to existing Supplementary Materials; changes that reduce ambiguity; changes to eliminate an obvious technical content inconsistency; or adding/deleting/changing Notes or footnotes).

- Clarification on SNARF Revision vs. New SNARF (PM 2.2.6)
• The SNARF should be revised if the Draft Document deviates technically from the scope described in the SNARF or changes in the ‘Intellectual Property Considerations’ section

• New SNARF is required
  o expected result of activity changes from Line Item revision(s) to a major revision, or
  o scope change beyond modification of existing scope items (i.e., deleting existing or adding new scope items),
  o change of ballot type (e.g., reapproval to revision or vice versa), or
  o introduction of new Line Item(s)

• **SNARF(s) and TFOF Approved by GCS in between TC Chapter Meetings**
  o None

• **SNARF 3 year status TC Chapter may grant a one-year extension:**
  o None

• **SNARFs to abolish at I&C TC meeting:**
  o SNARF # 6117, Line Item Revision to SEMI T5-1214, Specification for Alphanumeric Marking of Round Compound Semiconductor Wafers

  **Motion:** To abolish SNARF #6117 for Line Item Revision to SEMI T5-1214, Specification for Alphanumeric Marking of Round Compound Semiconductor Wafers

  **By / 2nd:** Yaw Obeng (NIST) / Albert Fuchigami (PEER)

  **Discussion:** Task Force is not active. No actions were taken under this SNARF for significant period of time.

  **Vote:** 5-0. Motion passed.

  **Motion:** To disband T5 Revision Task Force

  **By / 2nd:** Yaw Obeng (NIST) / Albert Fuchigami (PEER)

  **Discussion:** Task Force is not active.

  **Vote:** 5-0. Motion passed.

• **Nonconforming Titles**
  o None

  **NOTE:** Refer to Procedure Manual (PM) Appendix Table A4-1 and A4-2

• **Documents due for 5 Year Review**
<table>
<thead>
<tr>
<th>Name</th>
<th>Due for Review</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEMI T15-0812</td>
<td>8/16/2017</td>
<td>General Specification of Jig ID: Concept</td>
</tr>
<tr>
<td>SEMI T17-0706 (Reapproved 0812)</td>
<td>8/16/2017</td>
<td>Specification of Substrate Traceability</td>
</tr>
<tr>
<td>SEMI T18-1106 (Reapproved 0812)</td>
<td>8/16/2017</td>
<td>Specification of Parts and Components Traceability</td>
</tr>
<tr>
<td>SEMI T10-0701 (Reapproved 0912)</td>
<td>9/28/2017</td>
<td>Test Method for the Assessment of 2D Data Matrix Direct Mark Quality</td>
</tr>
<tr>
<td>SEMI T3-1213</td>
<td>12/13/2018</td>
<td>Specification for Wafer Box Labels</td>
</tr>
<tr>
<td>SEMI T4-0301 (Reapproved 1213)</td>
<td>12/13/2018</td>
<td>Specification for 150 mm and 200 mm Pod Identification Dimensions</td>
</tr>
</tbody>
</table>

Attachment 03: SEMI Standards Staff Report Traceability TC July 2018.ppt

4 Liaison Reports

4.1 Traceability Japan TC Chapter

Chie Yanagisawa (SEMI) reported for the Traceability Japan TC Chapter. Of note:

- Meeting Information
  - Last meeting:
    - December 15, 2017 at the SEMICON Japan 2017 Standards Meetings
    - Tokyo Big Sight, Tokyo, Japan
    - Next meeting: TBD

- Traceability Japan TC Chapter Leadership (no changes)
  - Yoichi Iga (Toshiba)
  - Hirokazu Tsunobuchi (Keyence)

- Ballot Results

<table>
<thead>
<tr>
<th>Doc #</th>
<th>Document Title</th>
<th>TC Chapter Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>6203</td>
<td>Reapproval of SEMI T22-0212: “Specification for Traceability by Self Authentication Service Body and Authentication Service Body”</td>
<td>Passed, as balloted</td>
</tr>
<tr>
<td>6244*</td>
<td>Reapproval of SEMI T10-0701 (Reapproved 0912): “Test Method For The Assessment Of 2d Data Matrix Direct Mark Quality”</td>
<td>Passed, as balloted</td>
</tr>
<tr>
<td>6246*</td>
<td>Reapproval of SEMI T17-0706 (Reapproved 0812): “Specification Of Substrate Traceability”</td>
<td>Passed, as balloted</td>
</tr>
<tr>
<td>6247*</td>
<td>Reapproval of SEMI T18-1106 (Reapproved 0812): “Specification of Parts And Components Traceability”</td>
<td>Passed, as balloted</td>
</tr>
<tr>
<td>6293</td>
<td>Line Item Revision to SEMI T15-0812: “General Specification of Jig ID: Concept” with title change to “Specification for Jig ID: Concept”</td>
<td>Passed, as balloted</td>
</tr>
<tr>
<td></td>
<td>Line Item 1 Change nonconforming title</td>
<td>Passed, as balloted</td>
</tr>
<tr>
<td></td>
<td>Line Item 2 Add section title to meet the requirement which is specified section 3.2 of Procedure Manual</td>
<td>Passed, with editorial changes</td>
</tr>
</tbody>
</table>

NOTE: *marked document are originated from North America.
Activities Approved via GCS between Meetings

<table>
<thead>
<tr>
<th>Doc #</th>
<th>Type</th>
<th>SC/TF/CFG</th>
<th>Title/Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>6293</td>
<td>SNARF and Ballot Submis sion</td>
<td>5 Year Review TF</td>
<td>Line Item Revision to SEMI T15-0812 “General Specification of Jig ID: Concept” with non-conforming title change to “Speciation for Jig ID: Concept” — Approved and authorized for ballot in voting Cycle 8-2017 by GCS on 10/13/2017</td>
</tr>
<tr>
<td>6245</td>
<td>Withdrawal of SNARF</td>
<td>5 Year Review TF under NA TC Chapter</td>
<td>Reapproval of SEMI T15-0812, General Specification Of Jig Id: Concept — Prepared by the 5 Year Review Task Force, under the Traceability North America TC Chapter. During the preparation of the ballot draft of Reapproval of SEMI T15-0812, it was found out that the document was originally developed by the Traceability Japan TC Chapter and also needs some corrections. So, a new SNARF for Line Item Revision to SEMI T15-0812 is proposed by the Japan TC Chapter as above. — Approved by GCS on 10/13/2017</td>
</tr>
</tbody>
</table>

Authorized Activities
- None

Authorized Ballots
- None

Abolished SNARF(s)
- None

Documents due for 5-Year Review

<table>
<thead>
<tr>
<th>Designation</th>
<th>Standard Title</th>
<th>Action By</th>
<th>Assigned to</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEMI T21-0314</td>
<td>Specification for Organization Identification by Digital Certificate Issued from Certificate Service Body (CSB) for Anti-Counterfeiting Traceability in Components Supply Chain</td>
<td>Spring 2019</td>
<td>5 Year Review TF</td>
</tr>
</tbody>
</table>

Task Force Highlights
- None

For additional information, please contact SEMI Japan staff:
- Chie Yanagisawa cyanagisawa@semi.org

Attachment 04: Japan Traceability TC Report (July 2018).ppt
5 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.

- None.

6 Subcommittee and Task Force Reports

- None.

7 Old Business

7.1 Standards due for Five-Year Review.

Inna Skvortsova addressed the TC Chapter on this topic. Of note:

<table>
<thead>
<tr>
<th>Name</th>
<th>Due for Review</th>
<th>Title</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEMI T17-0706</td>
<td>8/16/2017</td>
<td>Specification of Substrate Traceability</td>
<td>DONE. Ballot 6246 - JA Traceability TC</td>
</tr>
<tr>
<td>SEMI T17-0706</td>
<td>8/16/2017</td>
<td>Specification of Parts and Components Traceability</td>
<td>DONE. Ballot 6247 - JA Traceability TC</td>
</tr>
<tr>
<td>SEMI T10-0701</td>
<td>9/28/2017</td>
<td>Test Method for the Assessment of 2D Data Matrix Direct Mark Quality</td>
<td>DONE. Ballot 6244 - JA Traceability TC</td>
</tr>
<tr>
<td>SEMI T3-1213</td>
<td>12/13/2018</td>
<td>Specification for Wafer Box Labels</td>
<td>Reapproval ballot to be issued</td>
</tr>
<tr>
<td>SEMI T4-0301</td>
<td>12/13/2018</td>
<td>Specification for 150 mm and 200 mm Pod Identification Dimensions</td>
<td>Reapproval ballot to be issued</td>
</tr>
</tbody>
</table>

7.2 SNARFs Approaching 3-Year Review

The TC Chapter reviewed SNARFs approaching 3-year project period.

- No SNARFs received extended period.

8 New Business

8.1 New TFOFs Approval

- Single Device Traceability Task Force
  - Task Force Leadership team:
    - Dave Huntley (PDF Solutions)
    - Chris Portelli (STMicroelectronics)
    - Zoe Conroy (Cisco)
  - TF Charter:
    - To develop standards enabling traceable device-level identification (ID) throughout the IC manufacturing, test, and assembly processes to the point of use in the final system.
  - TF Scope:
    - The task force will develop standard(s) focusing on key concepts, behaviors, and requirements as well as standards focusing on specific implementations for enabling device ID & traceability.
Motion: Move to authorize new Task for Single Device Traceability under the leadership of Dave Huntley (PDF Solutions) Chris Portelli (STMicroelectronics) and Zoe Conroy (Cisco)

By / 2nd: Yaw Obeng (NIST) / Eric Bruce (Samsung)

Discussion: None.

Vote: 7/0. Motion passed.

- Equipment and Materials Traceability (EMT) Task Force
  - Task Force Leadership team:
    - Eric Bruce (Samsung)
    - Lance Dyrdahl (LAM Research)
    - Jeff Hanan (Global Foundries)
  - TF Charter:
    - Defects introduced by process-critical equipment and materials affect final product quality resulting in lower yields and higher manufacturing costs. This Task Force will deal with traceability and verification of:
      - components such as seals, mass flow controllers, valves, etc.;
      - instruments for in-line and off-line data collection and monitoring;
      - sub-systems that support process tools e.g. vacuum, abatement, chillers used in semiconductor or related industries.
  - TF Scope:
    - The Task Force will develop and maintain Standards relating to and directly concerning Traceability and Verification of Equipment and Materials. This includes, but is not limited to:
      - Identification (for example via barcodes, QR Codes);
      - Specifying and transferring information (for example, part information, Certificates of Authenticity, Certificates of Compliance, Certificates of Use, etc.);
      - Part traceability protocols.
      - Although work will be primarily considering the semiconductor equipment and materials, it can be applied to other related industries.

Motion: Move to authorize new Task Force for Equipment and Materials Traceability (EMT) under the leadership of Eric Bruce (Samsung), Lance Dyrdahl (LAM Research), Jeff Hanan (Global Foundries)

By / 2nd: Yaw Obeng (NIST) / Dough Suerich (PEER)

Discussion: None.

Vote: 8/0. Motion passed.

8.2 New SNARFs Approval

TC Chapter reviewed draft SNARFs prepared by newly formed Task Forces and authorized to distribute proposed SNARFs for 2-week member review followed by GCS approval:


In addition to proposals review, TC Chapter authorized SNARFs for
• Reapproval to SEMI T3-1213, Specification for Wafer Box Labels
• Reapproval to SEMI T4-0301 (Reapproved 1213), Specification for 150 mm and 200 mm Pod Identification Dimensions

Motion: Move to approve SNARF for SEMI T3 and SEMI T4
By / 2nd: Yaw Obeng (NIST) / Dough Suerich (PEER)
Discussion: None.
Vote: 5/0. Motion passed.

8.3 New Ballots Authorization:
• Ballot #TBD for Reapproval to SEMI T3-1213, Specification for Wafer Box Labels
• Ballot #TBD for Reapproval to SEMI T4-0301 (Reapproved 1213), Specification for 150 mm and 200 mm Pod Identification Dimensions

Motion: To authorize letter ballots submission for Cycle 7-2018 for the SEMI T3 and SEMI T4 reapprovals
By / 2nd: Yaw Obeng (NIST) / Dough Suerich (PEER)
Discussion: None.
Vote: 5-0. Motion passed.

9 Action Items Review
9.1 Previous Meeting(s) Action Items
Inna Skvortsova (SEMI) reviewed open action items. These can be found in the Previous Meeting(s) Action Items table at the beginning of these minutes.

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

10 Next Meeting and Adjournment
The next meeting is tentatively scheduled for November 8, 2018 at SEMI HQ, Milpitas, CA. See http://www.semi.org/en/events for the current list of meeting schedules.

Having no further business, a motion was made to adjourn. Adjournment was at 12:06 PM.

Respectfully submitted by:
Inna Skvortsova
Sr. Standards Coordinator
SEMI North America
Phone: 408-9436996
Email: iskvortsova@semi.org

Minutes tentatively approved by:
Yaw Obeng (NIST)
Winthrop Baylies (BayTech Resor)

<table>
<thead>
<tr>
<th>Attachment 01: SEMI Standards Required Elements.ppt</th>
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<tr>
<td>Attachment 02: NA Traceability TC Meeting Minutes (July 2017)</td>
</tr>
<tr>
<td>Attachment 03: SEMI Standards Staff Report (July 2018)</td>
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<td>Attachment 04: Japan Liaison Report (July 2018).pdf</td>
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Table 13 Index of Available Attachments#1

#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 Inna Skvortsova at the contact information above.