Taiwan I&C Standard Committee
Meeting Summary and Minutes

Taiwan I&C TC Meeting
June 18, 2015 (Thu), 13:30-15:30
SEMI Taiwan Office

Next Committee Meeting
Sep 3, 2015 (Thu), 14:00-16:00
Nankang Exhibition Center, Taipei

Committee Announcements (optional)

Table 1 Meeting Attendees:
Co-chairs: Robert Chien (TSMC)
SEMI Staff: Andy Tuan (SEMI Taiwan)

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<td>TSMC</td>
<td>Chien</td>
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<td>TSMC</td>
<td>Liao</td>
<td>Robin</td>
<td>Techcet</td>
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<td>Gudeng</td>
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<td>Paul</td>
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Table 2 Leadership Changes:
None

Table 3 Ballot Results (or move to Section 4, Ballot Review)
Passed ballots and line items will be submitted to the ISC Audit & Review Subcommittee for procedural review.
#5485 ballot passed ISC A&R process.
#5688 ballot failed ISC A&R process.
None

Table 4 Authorized Ballots (or move to Section 7, New Business)
None

Table 5 Authorized Activities (or move to Section 7, New Business)
None

Note: SNARFs and TFOFs are available for review on the SEMI Web site at:
http://downloads.semi.org/web/wstdsbal.nsf/TFOFSNARF
Table 6  New Action Items (or move to Section 8, Action Item Review)

- Collect and analyze committee member questionnaire and report out in next meeting
- Continue to invite and recruit new members
- Follow-up task force meeting will be notified by TF leaders separately
- Hold the next committee meeting in early Sep in conjunction with SEMICON Taiwan and eMDC conference
  - SEMI to promote I&C committee as the platform to enable smart manufacturing (Industry 4.0) during SEMICON
  - Explore the need to address process materials data integration and AMC environmental data issues in this committee
  - SEMI to help leverage the resources of I&C committees in other regions as well as resources in other technical committees like 3DS-IC

Table 7  Previous Meeting Actions Items (or move to Section 8, Action item Review)

- Simplified TF structure
- Retain existing members
- Recruit new members
- Focus on technical information exchange and best practice sharing among all members
- Enhance communications with counterparts in other regions
- Welcome visits and technical sessions of foreign I&C experts

1  Welcome, Reminders, and Introductions

Mr. Robert Chien called the meeting to order at 13:30. After welcoming all attendees, the SEMI meeting reminders on antitrust issues, intellectual property issues and practices for international attendance were reviewed. Attendees introduced themselves.

2.  Review of Previous Meeting Minutes

The committee reviewed the background and action items of the previous meeting held on Nov 28, 2014.

3. Staff Report and Liaison Report

- Staff report:
  - Update on new task force establishment progress
  - SEMICON Taiwan 2105: Synergies with eMDC symposium and Smart Manufacturing Pavilion

- Liaison Report –
  - NA I&C Committee
    Attachment: SEMI NA I&C Liaison Report
  - Japan I&C Committee
    Attachment: SEMI Japan I&C Liaison Report
  - Europe I&C Committee
    Attachment: SEMI Europe I&C Liaison Report
  - Korea I&C Committee
4. Ballot Review
None

5. Task Force Update

Equipment & GEM300 TF (reported by Robin Liao)
- A new task force “Equipment Information Integration” to be formed under Taiwan I&C Standard Committee
- Scope: The focus of the Equipment Information Integration Task Force is to refine the equipment automation interface standard suite to fulfill the requirement of new including
  - Enable high-secured manufacturing automation: Equipment security enhancement and information protection
  - Quality enhancement with the information integration of raw material CoA (Certificate of Analysis) and MES system
  - Enable industry 4.0 in semiconductor manufacturing: Not only in process automation, but also in operation automation, such as maintenance automation, equipment recovery automation…etc.
  - Big-data Application in semiconductor manufacturing:
  - Enlarge data collection capability of EQP (Interface-A, Sensor data, equipment log… etc.)
  - Equipment precise control and Equipment productivity monitoring / improvement.
- Activities
  - Collect TW requirement and initialize / vote into the New standard Ballots
  - Practice and experience sharing of implementing Standard.
  - Co-work with the other region TF for new standard promotion
- Regular Meeting
  - I&CC
    - March and September (SEMICOM TW)
    - Hosted by Chairman
  - TF
    - Dynamic Meeting for discussing new requirement, SNARF and Ballots
    - Hosted by TF leader

Backend Factory Integration TF (reported by Ivan Chen)
- Backend Business Overview
  - Wearables and home devices are likely to lead growth in the Internet of Things (IoT) business during the rest of this decade.
  - The back-end technologies is on the trend from traditional BGA assembly towards 3D IC package (POP, TSV PIP, etc.).
  - How to equip more capabilities of automating tool processing to improve the throughput and availability is one of key focuses.
- Approach
  - Leveraging SEMI standards reviews and develops the equipment automation standard suite and related standards for back-end tool including Wafer Sort, Bump, Assembly and Final Test to build up the capability of full automation process.
- Activities
  - The primary focus of Task Force is to refine the equipment automation interface standard suite.
  - Promote new SEMI standards.
- Regular Meeting
6. Old Business

Status update on previous TC meeting A/Rs

- Simplified TF structure (done)
- Retain existing members (done)
- Recruit new members (ongoing)
- Focus on technical information exchange and best practice sharing among all members (ongoing)
- Enhance communications with counterparts in other regions (ongoing)
- Welcome visits and technical sessions of foreign I&C experts (done) – Japan I&C member visit in Feb and NA I&C member visit in May

7. New Business

- Add materials data integration topic into the next committee meeting discussion

8. Action Item Review

- Invite Collect and analyze committee member questionnaire and report out in next meeting
- Continue to invite and recruit new members
- Follow-up task force meeting will be notified by TF leaders separately
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9. Next Meeting and Adjournment

Sep 3, 2015 (Thu), 14:00-16:00 @ Nankang Exhibition Center

Respectfully submitted by:

Andy Tuan
SEMI Taiwan
Phone:+ 886 3 560 1777
Email: atuan@semi.org
Table 8  Index of Available Attachments #1

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<td>SEMI meeting report package</td>
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<td>SEMI NA I&amp;C Liaison Report</td>
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<td>SEMI Japan I&amp;C Liaison Report</td>
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#1 Due to file size and delivery issues, attachments must be downloaded separately. A .zip file containing all attachments for these minutes is available at www.semi.org. For additional information or to obtain individual attachments, please contact [SEMI Staff Name] at the contact information above.