Table 1 Meeting Attendees

<table>
<thead>
<tr>
<th>Company</th>
<th>Last First</th>
<th>Company</th>
<th>Last First</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acteon NEXT</td>
<td>Komatsu Shoji</td>
<td>SUMCO</td>
<td>Nakai Tetsuma</td>
</tr>
<tr>
<td>Daifuku</td>
<td>Yamagata Kenji</td>
<td>TDK</td>
<td>Okabe Tsutomu</td>
</tr>
<tr>
<td>Daifuku</td>
<td>Suzuki Tomoko</td>
<td>Thermo Fischer Scientific</td>
<td>Kwakman Laurens</td>
</tr>
<tr>
<td>Hirata Corporation</td>
<td>Toyoda Noriyoshi</td>
<td>Thermo Fischer Scientific</td>
<td>Morrison Troy</td>
</tr>
<tr>
<td>Hitachi Kokusai Electric</td>
<td>Matsuda Mitsuhiro</td>
<td>Tokyo Electron</td>
<td>Mashiro Supika</td>
</tr>
<tr>
<td>Kumai Consulting</td>
<td>Kumai Sadao</td>
<td>Tokyo Electron</td>
<td>Kobayashi Sensho</td>
</tr>
<tr>
<td>Mirial</td>
<td>Nagashima Tsuyoshi</td>
<td>Yamamoto Planning</td>
<td>Yamamoto Makoto</td>
</tr>
<tr>
<td>Murata Machinery</td>
<td>Kawaguchi Masatomi</td>
<td>Self</td>
<td>Sakamoto Mitsune</td>
</tr>
<tr>
<td>Murata Machinery</td>
<td>Ito Yasuhisa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shin-Etsu Polymer</td>
<td>Shida Hiroyuki</td>
<td>SEMI Headquarters</td>
<td>Amano James</td>
</tr>
<tr>
<td>Sinfonia Technologies</td>
<td>Otani Mikio</td>
<td>SEMI Japan</td>
<td>Yanagisawa Chie</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>PI&amp;C Japan TC Chapter</td>
<td>Tsutomu Okabe (TDK)</td>
<td>Noriyoshi Toyoda (Hirata Corporation)</td>
</tr>
</tbody>
</table>

Table 3 Committee Structure Changes

None

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></td>
<td></td>
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</tbody>
</table>
Table 5 Activities Approved by the GCS prior to the Originating TC Chapter meeting

<table>
<thead>
<tr>
<th>#</th>
<th>Type SC/TF/WG</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
<td></td>
</tr>
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</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>SC/TF/WG</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>6130</td>
<td>Global PIC Standards Maintenance TF</td>
<td>Reapproval of SEMI E84-1109: Specification for Enhanced Carrier Handoff Parallel I/O Interface</td>
</tr>
</tbody>
</table>

Note 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>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>6130</td>
<td>Cycle 1/2-2017 Global PIC Standards Maintenance TF</td>
<td>Reapproval of SEMI E84-1109: Specification for Enhanced Carrier Handoff Parallel I/O Interface</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>
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</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
<td></td>
<td></td>
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</table>

Table 9 SNARF(s) Abolished

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

Table 10 Standard(s) to receive Inactive Status

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

Table 11 New 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>

Table 12 Previous Meeting Action Items

<table>
<thead>
<tr>
<th>Item #</th>
<th>Assigned to</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>20160728-01</td>
<td>Chie Yanagisawa (SEMI Japan)</td>
<td>To request Laura Nguyen (SEMI NA) to resend the GCS voting request for proposal to add Related Information to SEMI E111 and References to SEMI E19, E112, and E117 with the extension of the voting deadline. =&gt;CLOSE</td>
</tr>
</tbody>
</table>
1 Welcome, Reminders, and Introductions

Kenji Yamagata (DAIFUKU) called the meeting to order at 14:00. The meeting reminders on antitrust issues, intellectual property issues and holding meetings with international attendance were reviewed. Attendees introduced themselves.

Attachment: 01, Required_Elements_Reg_20150327_E+J

2 Review of Previous Meeting Minutes

The TC Chapter reviewed the minutes of the previous meeting.

Motion: Approve the previous meeting minutes with editorial change
By / 2nd: Makoto Yamamoto (Yamamoto Planning) / Tsutomu Okabe (TDK)
Discussion: None
Vote: 15 in favor and 0 opposed. Motion passed.

3 Technical Committee Award

The PI&C Japan TC Chapter gave the Technical Committee Award for 2016 to Tsutomu Okabe (TDK) for his dedication to the PI&C Technical Committee activities as a co-chair for many years.

4 Liaison Reports

4.1 PI&C Europe TC Chapter

Chie Yanagisawa (SEMI Japan) reported for the PI&C Europe TC Chapter. Of note:

- The last meeting was held in conjunction with SEMICON Europa 2016 and the next meeting is tentatively scheduled during SEMICON Europa 2017.
- The only activity under the PI&C Europe TC Chapter is International Reticle SMIF Pod & Loadport Interoperability TF and the details will be reported at the following PI&C NA TC Chapter Liaison Report section.

Attachment: 02_EU PIC Nov 2016 v1

4.2 PI&C North America TC Chapter

Chie Yanagisawa (SEMI Japan) reported for the PI&C North America TC Chapter. Of note:

- International Reticle SMIF Pod and Load Port Task Force
  - Committee approved to add Related Information to E111, E19, E112 and E117 as balloted with editorial changes
    - Pending publications
  - TF does not intend to take up any other business after Related Information has been added to SEMI E111, E19, E112 and E117
  - The Task Force will sunset in Spring 2017
- International 450mm Physical Interfaces and Carriers TF
  - Japan proposal and discussion
  - JA PIC TC approval will be obtained at SEMICON Japan in December.
  - Wait for feedback from other TF members until then.
After publishing this AUX, we plan to add it to the reference section of 450 mm standards.

- **Global PIC Maintenance TF**
  - Review of Cycle 7 ballots
  - Approve PIP form for SEMI E117
    - In SEMI E117, D value shown in Fig. 3, \( D >= 250 \), does not agree with Fig. 2 or Table 1, \( D <= 250 \). Propose PIP form to correct the former, as Table 1 is the requirement
  - Review list of Standards up for 5-year review
    - Will prepare SNARFs for Spring 2017
    - Three standards for Line-Item ballot to correct titles
    - Three standards for other action tbd in April
    - Will prepare SNARF for Reapproval, but may decide other course of action (or inaction)

- **EUV Reticle Handling Task Force**
  - Disbanded during Spring 2016 Meetings

- **International Process Module Physical Interface Task Force (IPPI TF)**
  - Disbanded during Spring 2016 Meetings

- **N.A. 450 mm ATDP TF (inactive)**
  - No current activity in the NA Region
  - Most of the work has been done in the Japan Assembly & Packaging committee
  - The Committee may decide to sunset in Spring 2017 meeting

**Attachment:** 03_NA PIC Liaison Report Nov2016_r

### 4.3 SEMI Staff Report

Chie Yanagisawa (SEMI Japan) gave the SEMI Staff Report. Of note:

- SEMI Global 2016/17 Calendar of Events
- Global Standards Meeting Schedule
- SEMI Japan Standards Award
  - JRSC Honor Award
    - Morihisa Hoga/Dai Nippon Printing
    - Makoto Ishikawa/Nisshinbo Mechatronics
    - Naokatsu Nishiguchi/SCREEN Business Support Solutions
    - Hideaki Ogihara
  - SEMI International Collaboration Award
    - Lauren Crane/Tokyo Electron
    - Naoko Murata/Tokyo Electron
    - Ryuji Takeda/Global Wafer Japan
  - SEMI Japan Standard Award
5 Ballot Review

None

6 Subcommittee and Task Force Reports

6.1 Global PIC Standards Maintenance TF

Shoji Komatsu (Acteon NEXT) reported for the Global PIC Standards Maintenance Task Force as following.

- The TF decided to propose a new SNARF for Reapproval of SEMI E84-1109 and the ballot submission at the New Business section of this meeting.

6.2 International 450 mm PIC TF

Shoji Komatsu (Acteon NEXT) reported for the International 450 mm PIC Task Force as following.

- Explanation the AUX JA proposal, and obtained an understanding of the TF members.
  - The publication of this AUX document to be proposed at the New Business section of this meeting.
  - After publishing this AUX, we plan to add it to the reference section of 450 mm standards.
- About move the KC chapter; Discuss again at the next revision timing.

Attachment: 04_450mm IPIC TF meeting Minutes rev0-20161214

6.3 International Reticle SMIF Pod & Load Port Interoperability TF

Chie Yanagisawa (SEMI Japan) reported for the International Reticle SMIF Pod & Load Port Interoperability Task Force. This report is sent from the task force leader, Jan Rothe (GLOBALFOUNDRIES). Of note:

- Current activities
  - TF Telecons preparing Ballot Document 5941 – adjudicated at Semicon West
    - Reject vote was procedural (no change of title for non-confirming standards, line items not mutually independent)
    - As a result, the ballot failed
This led to the creation of new SNARFs to correct titles of SEMI E19, E19.1-E19.4 as well as SEMI E111 and SEMI E112.

- These new SNARFs are being handled by the PIC Maintenance TF

- At Semicon West, the PIC Committee approved inclusion of Related Information in SEMI E111, E19, E112, and E117 as balloted (with editorial change on one footnote)

- Expect inclusion in SEMI 1216 volumes

- Therefore no re-balloting of document 5941 will be attempted

### New Business

- TF does not intend to take up any other business after related information has been added to SEMI E111, E19, E112 and E117 - task for charter fulfilled:

**Attachment:** 05_2016-12-14_RSP-LP-Interoperability-TF-Report v2

#### 6.4 Fiducial Mark Interoperability TF

Supika Mashiro (Tokyo Electron) reported for the Fiducial Mark Interoperability Task Force as following.

- SNARF 5890 (Revision to SEMI T7)
  
  - Delete all position specifications from SEMI T7 because position specifications are also described on SEMI M1 and other related Silicon Standard.

- Published as T7-0516.

- Assembly and Packaging: Discussing backend alignment issues with introducing fiducial mark wafer.

- TF leaders to start discussion about disbanding this TF if the TF doesn’t have further activity.

**Attachment:** 06_20161118FMI-TF-Report_r1

#### 6.5 (Japan Chapter of Silicon Wafer TC) JA Shipping Box TF

Shoji Komatsu (Acteon NEXT) reported for the JA Shipping Box Task Force that there has been no activity.

#### 6.6 (Japan Chapter of Silicon Wafer TC / NA Chapter of PI&C TC) Int'l 450mm Shipping Box JA Shipping Box TF

Shoji Komatsu (Acteon NEXT) reported for the JA Shipping Box Task Force that there has been no activity.

### 7 Old Business

#### 7.1 Co-chairs step down and appointment

Kenji Yamagata (DAIFUKU) addressed the committee on this topic.

It is announced that Tsutomu Okabe (TDK) officially steps down at this PI&C Japan TC Chapter meeting. Also reported that Noriyoshi Toyoda (Hirata Corporation) was approved as a co-chair by JRSC at JRSC meeting on August 26, 2016.
8 New Business

8.1 Proposal for TEM (Transmission Electron Microscopes) Grid Standardization

Troy Morrison (Thermo Fischer Scientific) addressed the committee on this topic. He made his presentation as attached. After some questions and answers are made between the presenter and the attendees, Supika Mashiro (Tokyo Electron) made the following suggestion.

Motion: This committee to support for conducting a survey regarding standardization of TEM and potential further standardization of TEM grid carrier
By / 2nd: Supika Mashiro (Tokyo Electron) / Mitsuhiro Matsuda (Hitachi Kokusai Electric)
Discussion: SEMI HQ will conduct this survey and Supika Mashiro will support to make the survey with Troy Morrison.
Vote: 15 in favor and 0 opposed. Motion passed.
Attachment: 07_SEMI standards for TEM gridsElevatorPitch

8.2 Proposal for Reapproval of SEMI E84-1109, “SPECIFICATION FOR ENHANCED CARRIER HANDOFF PARALLEL I/O INTERFACE”

New SNARF and the ballot submission for this document are proposed as following.

Motion: Approve SNARF for Reapprvoal of SEMI E84-1109
By / 2nd: Shoji Komatsu (Acteon NEXT) / Makoto Yamamoto (Yamamoto Planning)
Discussion: None
Vote: 17 in favor and 0 opposed. Motion passed.

Motion: Approve Ballot submission for Cycle 1/2-17 of Reapprvoal of SEMI E84-1109
By / 2nd: Shoji Komatsu (Acteon NEXT) / Mitsuhiro Matsuda (Hitachi Kokusai Electric)
Discussion: None
Vote: 15 in favor and 0 opposed. Motion passed.

8.3 Proposal for the publication of #5974 Auxiliary Information “450mm PIC INTEROPERABILITY”

Shoji Komatsu (Acteon NEXT) addressed on this topic and the committee reviewed the attached document. Then, He made the following proposal.

Motion: Authorize the publication of #5974 Auxiliary Information “450mm PIC INTEROPERABILITY”
By / 2nd: Shoji Komatsu (Acteon NEXT) / Mitsuhiro Matsuda (Hitachi Kokusai Electric)
Discussion: None
Vote: 15 in favor and 0 opposed. Motion passed.

This proposal will be forwarded to GCS, to get subsequently approval, and be forwarded to A&R.
Attachment: 08_450mm PIC AUX_rev7

9 Next Meeting and Adjournment

The next meeting is scheduled for Wednesday, April 19, 2017 at SEMI Japan office, Tokyo. 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 16:00.
Respectfully submitted by:
Chie Yanagisawa
Manager
SEMI Japan
Phone: +81.3.3222.5863
Email: cyanagisawa@semi.org

Minutes tentatively approved by:

<table>
<thead>
<tr>
<th>Name</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tsuyoshi Nagashima (Miraial), Co-chair</td>
<td>April 3, 2017</td>
</tr>
<tr>
<td>Kenji Yamagata (Daifuku), Co-chair</td>
<td>March 31, 2017</td>
</tr>
<tr>
<td>Toyoda Noriyoshi (Hirata Corporation), Co-chair</td>
<td>March 31, 2017</td>
</tr>
</tbody>
</table>

Table 13 Index of Available Attachments

<table>
<thead>
<tr>
<th>Title</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>01, Required_Elements_Reg_20150327_E+J</td>
<td>05_2016-12-14_RSP-LP-Interoperability-TF-Report v2</td>
</tr>
<tr>
<td>02_EU PIC Nov 2016 v1</td>
<td>06_20161118FMI-TF-Report_r1</td>
</tr>
<tr>
<td>03_SEMI Staff Report 20161211_v1.1</td>
<td>07_SEMI standards for TEM gridsElevatorPitch</td>
</tr>
<tr>
<td>04_450mm IPIC TF meeting Minutes rev0-20161214</td>
<td>08_450mm PIC AUX_rev7</td>
</tr>
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</table>

#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.