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SEMI® International Standards

North America Traceability Technical Committee Chapter Meeting Summary and Minutes

North America Standards SEMICON West 2014 Meetings
Thursday, July 10, 2014, 10:00 – 12:00 PDT
San Francisco Marriott Marquis Hotel in San Francisco, California

Next TC Chapter Meeting
The next N.A. Traceability standards meetings are tentatively scheduled for July 16, 2015 at the San Francisco Marriott Marquis Hotel in San Francisco, California in conjunction with SEMICON West 2015. Exact meeting date and details will be announced when finalized and available at the SEMI Calendar of Events:
http://www.semi.org/Standards/CalendarEvents

Table 1 Meeting Attendees

Co-Chairs: Yaw Obeng (NIST), Win Baylies (BayTech-Resor)
SEMI Staff: Michael Tran

Company	*Last*	*First*	*Company*	*Last*	*First*
BayTech-Resor	Baylies	Win	NIST	Obeng	Yaw
ENT Foundation	*Mossbarger*	*Mike*	The Scatter Works	Stover	John
G450C/Intel	Goldstein	Michael	SEMI N.A.	Tran	Michael

**Italics indicate virtual participants*

Table 2 Leadership Changes

None.

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*	*TC Chapter Action*
5612	Reapproval of SEMI T7-0303 (Reapproved 0709), Specification for Back Surface Marking of Double-Side Polished Wafers with a Two-Dimensional Matrix Code Symbol	**Failed** TC Chapter review and returned to the TF for rework
5613	Reapproval of SEMI T11-0703 (Reapproved 0709), Specification for Marking of Hard Surface Reticle Substrates	**Passed** TC Chapter review. Superclean
5689	Line Item Revision of SEMI T5-1106 (Reapproved 1111), Specification for Alphanumeric Marking of Round Compound Semiconductor Wafers	
Line item 1	Update table 1 by adding Back Surface for 150 mm wafer	**Passed** TC Chapter review. Superclean

Table 4 Authorized Activities

Listing of all new TFOFs, SNARFs, and other activities approved by the TC Chapter.

#	*Type*	*SC/TF/WG*	*Details*
5752	SNARF	5 Year Review TF	Revision of SEMI T7-0303 (Reapproved 0709), Specification for Back Surface Marking of Double-Side Polished Wafers with a Two-Dimensional Matrix Code Symbol

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

Listing of documents approved by the TC Chapter for letter ballot.

#	*When*	*SC/TF/WG*	*Details*
5752	Cycle 7, 2014	5 Year Review TF	Revision of SEMI T7-0303 (Reapproved 0709), Specification for Back Surface Marking of Double-Side Polished Wafers with a Two-Dimensional Matrix Code Symbol *(To be adjudicated at the next Japan Traceability TC Chapter meeting at SEMICON Japan 2014 pending Traceability GCS approval)*

Table 6 New Action Items

Item #	*Assigned to*	*Details*
2014Jul#01	Win Baylies	To continue technical discussions regarding Traceability for 450 mm wafers.
2014Jul#02	Michael Tran	To coordinate with the Japan Traceability TC Chapter and Traceability GCS to adjudicate Document 5752 after Cycle 7, 2014.

Table 7 Old Action Items

Item #	*Assigned to*	*Details*	*Status*
2013Jul#01	David Brown and Win Baylies	To contact Rob van Wezel (Salland) for revision of SEMI T3 Specification for Wafer Box Labels (Extend application to other symbologies and Near-Field Communication)	CLOSED
2013Jul#02	Kevin Nguyen	To review the Traceability Committee member list and remove inactive members	CLOSED

1 Welcome, Reminders, and Introductions

1.1 Yaw Obeng (NIST) called the meeting to order at 10:17 AM (PDT). 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 Meeting Elements

2 Review of Previous Meeting Minutes

2.1 The TC Chapter reviewed the minutes of the previous meeting during SEMICON West 2013.

Motion: To approve the previous meeting minutes from SEMICON West 2013.
By / 2nd: Win Baylies (BayTech-Resor) / Mike Goldstein (G450C/Intel)
Discussion: None.
Vote: 3-0 in favor. Motion passed.

Attachment: 02, NA Traceability Meeting Minutes (SEMICON West 2013)

3 Liaison Reports

3.1 *Japan Traceability TC Chapter*

3.1.1 Michael Tran (SEMI N.A.) gave the Japan Traceability TC Chapter Report. The key items were as follows:

- TC Chapter Leadership
  - Committee co-chairs
    - Yoichi Iga (Self)
    - Hirokazu Tsunobuchi (Keyence)
- Meeting Information
  - Last Meeting
    - December 6, 2013 in conjunction with SEMICON Japan 2013 at Makuhari Messe, Chiba Japan
  - Next Meeting
    - To be determined; the meeting originally scheduled for April 25, 2014 was cancelled.
- Task Force Reports
  - 5 years review Task Force
    - No Activity
  - Japan PV Traceability TF
    - Doc. 5594, *New Standard: Guide for Smart Label for PV Traceability* was discontinued.
  - Fiducial Mark Interoperability TF
    - Discussed Document Draft #5604, *Line Item Revision to SEMI M1-0114, Specification for Polished Single Crystal Silicon Wafer and SEMI M20-0110, Practice for Establishing a Wafer Coordinate System (Re: Addition of Notchless 450 mm Wafers)*
- SEMI Japan Standards staff contact: Chie Yanagisawa, cyanagisawa@semi.org

Discussion: None.

Attachment: 03, Japan Traceability TC Chapter Report (West 2014)

3.2 *North America Standards Staff Report*

3.2.1 Michael Tran (SEMI NA) gave the NA Standards Staff Report. The key items were as follows:

- Upcoming SEMI Global Events in 2014
  - SEMICON Taiwan
    - September 3-5, 2014 in Taipei
  - Strategic Materials Conference
    - September 30 – October 1, 2014 in Santa Clara, California
  - SEMICON Europa Plastic Electronics
    - October 7-9, 2014 in Grenoble, France
  - SEMICON Japan
    - December 3-5, 2014 in Tokyo
- Standards Workshop at SEMICON West 2014
  - Wafer Geometry Control for Advanced Semiconductor Manufacturing

            - Important developments and future needs in wafer geometry for advanced semiconductor manufacturing.
            - Presenters from IBM, Intel as well as key equipment companies.
            - Proposals discussed during this workshop will be considered for standardization by the Advanced Wafer Geometry TF under the Silicon Wafer Committee.
- Standards Update at SEMICON West 2014
    - Semiconductor Technology Symposium (STS) Session
        - Metrics Standards Activities Update
            - Topic: Challenges, Innovations and Drivers in Metrology
        - 3DS-IC Standards Activities Update
            - Topic: Embracing what's NEXT – Devices & Systems for Big Data, Cloud and IoT
    - TechXPOT Session
        - Facilities & Gases Standards Activities Update
            - Topic: Subcomponent Supply Chain Challenges for 10 nm and Beyond
        - Compound Semiconductor Materials Standards Activities Update
            - Topic: Disruptive Compound Semiconductor Technologies
    - SEMI Standards Publications Stats
        - April 2014 – June 2014
            - New Standards: 6
            - Revised Standards: 20
            - Reapproved Standards: 4
            - Withdrawn Standards: 0
        - Total SEMI Standards in portfolio: 909
            - Includes 106 Inactive Standards
- Upcoming NA Standards Meetings
    - NA Standards Fall 2014 Meetings
        - November 3-6, 2014 in SEMI HQ in San Jose, California
    - NA Standards Spring 2015 Meetings
        - (Tentative) March 30 – April 2, 2015 SEMI HQ in San Jose, California
    - NA Standards Meetings at SEMICON West 2015
        - (Tentative) July 13-16, 2015 in San Francisco, California
- SEMI NA Standards staff contact: Michael Tran, mtran@semi.org

Discussion: None.

Attachment: 04, NA Standards Staff Report (West 2014)

4 Ballot Review

NOTE: TC Chapter adjudication on ballots reviewed is detailed in the Audits & Reviews (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.

Document #	*Document Title*	*TC Chapter Action*
5612	Reapproval of SEMI T7-0303 (Reapproved 0709), Specification for Back Surface Marking of Double-Side Polished Wafers with a Two-Dimensional Matrix Code Symbol	**Failed** TC Chapter review and returned to the TF for rework
5613	Reapproval of SEMI T11-0703 (Reapproved 0709), Specification for Marking of Hard Surface Reticle Substrates	**Passed** TC Chapter review. Superclean
5689	Line Item Revision of SEMI T5-1106 (Reapproved 1111), Specification for Alphanumeric Marking of Round Compound Semiconductor Wafers	
Line item 1	Update table 1 by adding Back Surface for 150 mm wafer	**Passed** committee review. Superclean

Motion: Document 5612, **failed** TC Chapter review and returned to the TF for rework.
By / 2nd: Win Baylies (BayTech-Resor) / Mike Goldstein (G450C/Intel)
Discussion: None.
Vote: 3-0. Motion passed.

Attachment: 05, Ballot Review Summary for Document 5612

Motion: Document 5613 **passed** TC Chapter review as balloted and will be forwarded to the A&R SC for procedural review.
By / 2nd: Mike Goldstein (G450C/Intel) / Win Baylies (BayTech-Resor)
Discussion: None.
Vote: 3-0. Motion passed.

Attachment: 06, Procedural Review for Document 5613

Motion: Document 5689, Line Item 1 **passed** TC Chapter review as balloted and will be forwarded to the A&R SC for procedural review.
By / 2nd: Mike Goldstein (G450C/Intel) / Win Baylies (BayTech-Resor)
Discussion: None.
Vote: 3-0. Motion passed.

Attachment: 07, Procedural Review for Document 5689

5 Subcommittee & Task Force Reports

5.1 *ISO Technical Committee 247, Working Group 3 (Anti-counterfeiting WG)*

5.1.1 Yaw Obeng (NIST) reported for the *ISO Technical Committee 247, Working Group 3.* David Brown (Intel), chairperson wants to reconfigure the technical committee. ISO Technical Committee 247 will be disbanded and existing working groups will be consolidated into one. More details will be provided by Daniel Brown and ISO soon.

5.2 *Traceability Five Year Review TF*

5.2.1 Document 5752, *Revision of SEMI T7-0303 (Reapproved 0709), Specification for Back Surface Marking of Double-Side Polished Wafers with a Two-Dimensional Matrix Code Symbol* will be adjudicated at the Japan Traceability TC Chapter Meeting at SEMICON Japan 2014 pending the approval of the Traceability GCS because the N.A. Traceability TC Chapter do not meet again until SEMICON West 2015.

5.2.2 The TF looked at Traceability documents that are due for five year reviews. See §6.2 of these minutes.

6 Old Business

6.1 *Traceability for 450 mm Wafers*

Action Item: 2014Jul#01, Win Baylies (BayTech-Resor) to continue technical discussions regarding Traceability for 450 mm wafers.

6.2 *5-Year Review Documents Update*

6.2.1 The TC Chapter reviewed documents due for five year review and assigned reviewers:

#	*Details*	*Status*
SEMI T20-0710	Specification for Authentication of Semiconductors and Related Products	Yaw Obeng and David Brown will review.
SEMI T12-0710	Specification for Tracing Jigs and Implements	Japan document. Yoichi Iga to review.
SEMI T13-1104 (Reapproved 0710)	Specification for Device Tracking: Concepts, Behavior, and Services	Japan document. Yoichi Iga to review.
SEMI T16-0310	Specification for Use of Data Matrix Symbology for Automated Identification of Extreme Ultraviolet Lithography Masks	Win Baylies will review.

7 New Business

7.1 *HB-LED Traceability*

7.1.1 Win Baylies (BayTech-Resor) said the HB-LED committee is now looking into tablet/sapphire substrates for mobile devices and HB-LED Traceability is going to be needed. Will the HB-LED Traceability fall under the HB-LED committee or Traceability committee? Win said this is a good question going forward. The committee already has SEMI T7, *Specification for Back Surface Marking of Double-Side Polished Wafers with a Two-Dimensional Matrix Code Symbol* as a good start for the HB-LED committee. Traceability for HB-LED is definitely needed and Win will keep everyone updated with the tablet substrate activities from the HB-LED committee.

7.2 *New SNARF*

Listing of all new TFOFs, SNARFs, and other activities approved by the TC Chapter.

#	*Type*	*SC/TF/WG*	*Details*
5752	SNARF	5 Year Review TF	Revision of SEMI T7-0303 (Reapproved 0709), Specification for Back Surface Marking of Double-Side Polished Wafers with a Two-Dimensional Matrix Code Symbol

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

Motion: To approve SNARF #5752
By / 2nd: Win Baylies (BayTech-Resor) / Mike Goldstein (G450C/Intel)
Discussion: None.
Vote: 4-0. Motion passed.

7.3 *New Ballot Authorization*

#	When	SC/TF/WG	Details
5752	Cycle 7, 2014	5 Year Review TF	Revision of SEMI T7-0303 (Reapproved 0709), Specification for Back Surface Marking of Double-Side Polished Wafers with a Two-Dimensional Matrix Code Symbol *(To be adjudicated at the next Japan Traceability TC Chapter meeting at SEMICON Japan 2014 pending Traceability GCS approval)*

Motion: To approve Document 5752 for letter ballot in Cycle 7, 2014
By / 2nd: Mike Goldstein (G450C/Intel) / Win Baylies (BayTech-Resor)
Discussion: None.
Vote: 4-0. Motion passed.

Action Item: 2014Jul#02, Michael Tran (SEMI N.A.) to coordinate with the Japan Traceability TC Chapter and Traceability GCS to adjudicate Document 5752 after Cycle 7, 2014.

8 Action Item Review

8.1 *Old Action Items*

8.1.1 Michael Tran (SEMI N.A.) reviewed the old action items. These can be found in the Old Action Items table at the beginning of these minutes.

8.2 *New Action Items*

8.2.1 Michael Tran (SEMI N.A.) reviewed the new action items. These can be found in the New Action Items table at the beginning of these minutes.

9 Next Meeting and Adjournment

9.1 The next N.A. Traceability standards meetings are tentatively scheduled for July 16, 2015 at the San Francisco Marriott Marquis Hotel in San Francisco, California in conjunction with SEMICON West 2015. Exact meeting date and details will be announced when finalized and available at the SEMI Calendar of Events: http://www.semi.org/Standards/CalendarEvents

9.2 Having no further business, a motion was made to adjourn the N.A. Traceability TC Chapter meeting on July 10, 2014 in conjunction with the N.A. Standards SEMICON West 2014 Meetings at the San Francisco Marriott Marquis Hotel in San Francisco, California.

Motion: To adjourn the TC Chapter meeting.
By / 2nd: Yaw Obeng (NIST) / Win Baylies (BayTech-Resor)
Discussion: None.
Vote: Unanimous in favor. Motion passed.

Respectfully submitted by:

Michael Tran
Senior Standards Engineer
SEMI North America
Phone: 1-408-943-7019
Email: mtran@semi.org

Minutes approved by:

Yaw Obeng (NIST), Co-chair	August 28, 2014
Win Baylies (BayTech-Resor), Co-chair	August 29, 2014

Table 8 Index of Available Attachments [#1]

#	*Title*	*#*	*Title*
01	SEMI Standards Required Meeting Elements	05	Ballot Review Summary for Document 5612
02	NA Traceability Meeting Minutes (SEMICON West 2013)	06	Procedural Review for Document 5613
03	Japan Traceability TC Chapter Report (West 2014)	07	Procedural Review for Document 5689
04	NA Standards Staff Report (West 2014)		

#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 Michael Tran at the contact information above.