



# Automated Test Equipment (ATE) NA TC Chapter Meeting Summary and Minutes

Thursday, January 23, 2020  
SEMI HQ, Milpitas, California  
Lassen Conference Room  
1:30PM – 3:00PM (Pacific Time)

## TC Chapter Announcements

*Next TC Chapter Meeting*

November 16, 2020, 8:00AM – 10:00AM (Pacific Time)

Via Web Conference

## Table 1 Meeting Attendees

*Italics indicate virtual participants*

**Co-Chairs:** Mark Roos (Roos Instruments), Stacey Ajouri (Texas Instruments), Laurent Bonneval (Teradyne)

**SEMI Staff:** Inna Skvortsova

<i>Company</i>	<i>Last</i>	<i>First</i>	<i>Company</i>	<i>Last</i>	<i>First</i>
Advantest	<i>Blair</i>	<i>Don</i>	Qualtera	<i>De Vries</i>	<i>Dirk</i>
Cohu	Fritzsche	Bill	Roos Instruments	Roos	Mark
Micron	<i>Cicero</i>	<i>Jason</i>	Texas Instruments	<i>Ajouri</i>	<i>Stacy</i>
Peer Group	<i>Fuchigami</i>	<i>Albert</i>			

## 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>
6580	New Standard: Specification for the Automated Test Equipment Tester Event Messaging for Semiconductors (TEMS)	<b>Failed</b>

#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**

#	Type	SC/TF/WG	Details
6517	SNARF	TEMS	New Standard: Specification for HTTP-JSON Protocol for Test Event Messaging for Semiconductors (TEMS) <b>Approved by GCS 4/29/2019</b>
6518	SNARF	RITdb	New Standard: Specification for Rich Interactive Test Database (RITdb) <b>Approved by GCS 4/29/2019</b>
6580	SNARF	TEMS	New Standard: Specification for the Automated Test Equipment Tester Event Messaging for Semiconductors (TEMS) <b>Approved by GCS 8/27/2019</b>
6581	SNARF	TEMS	New Subordinate Standard: Specification for HTTP JSON Protocol Implementation for the Automated Test Equipment Tester Event Messaging for Semiconductors (TEMS) <b>Approved by GCS 8/27/2019</b>

**Table 6 Authorized Activities**

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

#	Type	SC/TF/WG	Details
None.			

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

<http://downloads.semi.org/web/wstdsbal.nsf/TFOFSNARE>

**Table 7 Authorized Ballots**

#	When	TF	Details
6580A	Cycle 5- or 6-2020	TEMS	New Standard: <i>Specification for the Automated Test Equipment Tester Event Messaging for Semiconductors (TEMS)</i>
6581	Cycle 5- or 6-2020	TEMS	New Subordinate Standard: <i>Specification for HTTP JSON Protocol Implementation for the Automated Test Equipment Tester Event Messaging for Semiconductors (TEMS)</i>
6518	Cycle 5- or 6-2020	RITdb	New Standard: <i>Specification for Rich Interactive Test Database (RITdb)</i>

**Table 8 SNARF(s) Granted a One-Year Extension**

#	TF	Title	Expiration Date
None.			

**Table 9 SNARF(s) Abolished**

#	TF	Title
6517	TEMS	New Standard: <i>Specification for HTTP-JSON Protocol for Test Event Messaging for Semiconductors (TEMS)</i>

**Table 10 Standard(s) to receive Inactive Status**

Standard Designation	Title
None.	



**Table 11 New Action Items**

<i>Item #</i>	<i>Assigned to</i>	<i>Details</i>

**Table 12 Previous Meeting Action Items**

<i>Item #</i>	<i>Assigned to</i>	<i>Details</i>
1	Laurent B	Share with Albert Fuchigami via email latest version of ballot #6580A <negatives/comments resolution> and add Albert to the TF members lists for future communication - <b>CLOSED</b>
2	Laurent B	To move Standards content for TEMS TF from Teradyne Box to <a href="http://Connect.semi.org">Connect.semi.org</a> community - <b>OPEN</b> (some members can not access Teradyne Box from work computers)
3	Inna S	Verify if TEMS TF has dedicated page on Connect.semi.org - <b>DONE, TEST TF – NA page is set up in 2019 and TF leader has administrative rights to add content.</b>
4	Mark R, Laurent, B	To follow up on industry case studies project and report the status update at next ATE TC meeting. - <b>OPEN</b>
5	Inna S	To set up TEMS TF recurring meetings (monthly calls) - <b>OPEN</b>
6	Inna S, Paul T	Align on SEMICON West Test Vision schedule to avoid overlap with ATE TC/TF meetings at SEMICON 2020 - <b>CLOSED</b>

**1 Welcome, Reminders, and Introductions**

Mark Roos called the meeting to order at 1:37 PM. The meeting reminders on antitrust issues, intellectual property issues and holding meetings with international attendance were reviewed. Attendees introduced themselves.

**Attachment:** SEMI Standards Required Elements

**2 Review of Previous Meeting Minutes**

The TC Chapter reviewed the minutes of the previous meeting.

**Motion:** To accept the previous meeting minutes as written.

**By / 2<sup>nd</sup>:** Mark Roos (Roos Instruments) / Bill Fritzsche (Cohu)

**Discussion:** None.

**Vote:** 2/0. Motion passed.

**Attachment:** NA ATE TC Meeting Minutes Spring 2019\_distr

*2.1 SEMI Staff Report*

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

SEMI Global Calendar of Events

- SEMICON Korea (February 5-7; Seoul, Korea)

Upcoming North America Standards Meetings

- NA Standards Spring 2020 Meetings (March 30-April 2, SEMI HQ in Milpitas, California)



- SEMICON West 2020 Meetings (July 20-23, Moscone Center, San Francisco, California)
- NA Standards Fall 2020 Meetings (November 2-5, SEMI HQ in Milpitas, California)

Letter Ballot Critical Dates for 2019

- Cycle 1-2020: Ballot Submission Due: Jan 6/Voting Period: Jan 15 – Feb 14
- Cycle 2-2020: Ballot Submission Due: Jan 30/Voting Period: Feb 11 – Mar 12
- Cycle 3-2020: Ballot Submission Due: Mar 11/Voting Period: Mar 25 – Apr 24

Critical Dates: <http://www.semi.org/en/Standards/Ballots>

Standards Publications Report

<i>Cycle</i>	<i>New</i>	<i>Revised</i>	<i>Reapproved</i>	<i>Withdrawn</i>
March 2019	2	3	0	0
April 2019	2	12	5	0
May 2019	1	1	1	0
June 2019	2	9	2	0

Total in portfolio – 1,010 (includes 269 Inactive Standards)

New Standards

<i>Cycle</i>	<i>Designation</i>	<i>Title</i>	<i>Committee</i>	<i>Region</i>
July 2019	SEMI S30	Safety Guideline for Use of Energetic Materials in Semiconductor R&D and Manufacturing Processes	EHS	NA
July 2019	SEMI 3D20	Specification for Panel Characteristics for Panel Level Packaging (PLP) Applications	3D-IC	NA
August 2019	SEMI A3	Specification for Printed Circuit Board Equipment Communication Interfaces (PCBEI)	Automation Technology	TW
August 2019	SEMI HB11	Specification for Sapphire Single Crystal Ingot Intended for Use for Manufacturing HB-LED Wafers	HB-LED	CH
September 2019	SEMI E177	Specification for Transmission Electron Microscope (TEM) Lamella Carriers Used in Electron Microscopy Workflow	PIC	NA
October 2019	SEMI 3D21	Guide for Describing Glass-Based Material for Use in 3DS-IC Process	3D-IC	NA
October 2019	SEMI PV91	Specification for Trichlorosilane Used in Polysilicon Production	Photovoltaic	CH

Inactive Standards

<i>Committee</i>	<i>Number of Inactive Standards</i>
Assembly & Packaging	48
Automated Test Equipment	2
Compound Semiconductor Materials	4
Environmental Health & Safety	8
Facilities	15
FPD – Equipment	5
FPD – Factory Automation	14
FPD – Materials & Components	13
Gases	18
Information & Control	37
Liquid Chemicals	24



MEMS	3
Metrics	9
Micropatterning	30
Photovoltaic	1
Physical Interfaces & Carriers	19
Silicon Wafer	11
Traceability	8

[connect@SEMI](mailto:connect@SEMI) - Contact your staff if a TF Site is desired

- Web link - <https://connect.semi.org>
  - Login using Standards account (username and password)
- Program Member
  - Join any task forces; Post discussion thread
- TF Leader/Community Admin; contact your staff if a TF Site is desired
  - Add member; Upload meeting minutes
  - Communicate TF members
- Details
  - [www.semi.org/standards](http://www.semi.org/standards) >> Committee Info >> Collaboration Community

Regulations & Procedure Manual

- *Regulations* (Feb 28, 2019)
  - Latest version clarifies procedures applicable for Copyrighted Items and trademarks
- *Procedure Manual* (Feb 28, 2019)
- Style Manual Version 6 (March 25, 2019)
  - Additions and revisions to harmonize with updated *Regulations* and *Procedure Manual*
  - Updates
    - *Company or Organization Trademarks (Table 1, #1-24)*
    - *Active vs. Passive Voice (Table 4, #4-4)*
    - *Word Usage (Table 4, #4-5)*
    - *New Safety Guideline Conformance Notice (Table 8, #8-1)*

Nonconforming Titles (See PM Appendix 4) {None}

Five-Year Review {None}

SNARF 3 Year Status, TC Chapter may grant a one-year extension {None}

**Action Item:** None

**Attachment:** ATE Staff Report January 2020\_IS

**3 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.



3.1 Document #6580, New Standard: Specification for the Automated Test Equipment Tester Event Messaging for Semiconductors (TEMS). Per *Regulations* § 9.3.2.1, the document automatically failed since it did not reach 60% return rate. It will be returned to the TEMS Task Force for rework.

#### 4 Subcommittee and Task Force Reports

##### 4.1 RITdb Task Force

Stacy Ajouri (Texas Instruments) reported for the RITdb Task Force. The Task Force plans to ballot Doc #6518 for New Standard: Specification for Rich Interactive Test Database (RITdb) in Cycle 5-2020.

**Motion:** To ballot Document 6518 in Cycle 5-2020 or Cycle 6-2020

**By / 2<sup>nd</sup>:** Mark Roos (Roos Instruments) / Bill Fritzsche (Cohu)

**Discussion:** None.

**Vote:** 2/0. Motion passed.

**Attachment:** RITdb TF Report for ATE Committee Meetings 01232020\_final

##### 4.2 TEMS Task Force

Mark Roos (Roos Instruments) reported for the TEMS Task Force. This report contained information on Doc 6517, 6580A, and 6581.

**Motion:** To abolish SNARF 6517 for New Standard: Specification for HTTP-JSON Protocol for Test Event Messaging for Semiconductors (TEMS)

**By / 2<sup>nd</sup>:** Bill Fritzsche (Cohu) / Mark Roos (Roos Instruments)

**Discussion:** None.

**Vote:** 2/0. Motion passed.

**Motion:** To ballot Document 6580A in Cycle 5-2020 or Cycle 6-2020

**By / 2<sup>nd</sup>:** Mark Roos (Roos Instruments) / Bill Fritzsche (Cohu)

**Discussion:** None.

**Vote:** 2/0. Motion passed.

**Motion:** To ballot Document 6581 in Cycle 5-2020 or Cycle 6-2020

**By / 2<sup>nd</sup>:** Mark Roos (Roos Instruments) / Bill Fritzsche (Cohu)

**Discussion:** None.

**Vote:** 2/0. Motion passed.

**Attachment:** TEMS TF Report for ATE Committee Meetings 01232020\_LB

#### 5 Old Business

None.

#### 6 New Business

None.



## 7 Next Meeting and Adjournment

The next meeting is scheduled for 11/16/2020 via Web Conference. See <http://www.semi.org/standards-events> for the current list of events.

Adjournment: 2:43 PM

Respectfully submitted by:

Michelle Sun

Standards Coordinator

SEMI North America

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Email: [msun@semi.org](mailto:msun@semi.org)

Minutes tentatively approved by:

N/A	N/A

**Table 13 Index of Available Attachments<sup>#1</sup>**

<i>Title</i>	<i>Title</i>
SEMI Standards Required Elements_August2018	TEMS TF Report for ATE Committee Meetings 01232020_LB
NA ATE TC Meeting Minutes Spring 2019_distr	
ATE Staff Report January 2020_IS	
RITdb TF Report for ATE Committee Meetings 01232020_final	

#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](http://www.semi.org). For additional information or to obtain individual attachments, please contact [SEMI Staff Name] at the contact information above.