

SEMI Standards Staff Report

October 2, 2017

SEMI Japan

Contents

- SEMI Global 2017 Calendar of Events
- SEMICON Japan Overview
- Global Standards Meeting Schedule
- SEMICON Japan Standards Meetings
- 2017 Critical Dates for SEMI Standards Ballots
- A&R Ballot Review
- SEMI Standards Publications
- GTC Charter & Scope Review
- ISC (International Standards Committee) Topics
 - 3D Packaging and Integration Global Technical Committee
- JRSC Topics
- SEMI通信(2017年)
- Global Staff Assignment
- Staff Contact –Japan

SEMI Global 2017 Calendar of Events [1/2]

Event Name	Event Details
PV Taiwan 2017	October 18-20, 2017 Taipei, Taiwan
SEMICON Europa 2017	November 14-17, 2017 Munich, Germany
SEMICON Japan 2017	December 13-15, 2017 Tokyo, Japan
SEMICON Korea 2018	January 31 – February 2, 2018 Seoul, South Korea
FPD China 2018	March 14 -16, 2018 Shanghai, China
SEMICON China 2018	March 14 -16, 2018 Shanghai, China

SEMI Global 2017 Calendar of Events [2/2]

Event Name	Event Details
SEMICON Southeast Asia 2018	May 8 - 10, 2018 Kuala Lumpur, Malaysia
SEMICON West 2018	July 10-12, 2018 San Francisco, California

SEMICON[®] JAPAN WORLD OF IOT

開催概要

日時： 2017年12月13日（水）～15日（金）

会場： 東京ビッグサイト 東展示棟、会議棟

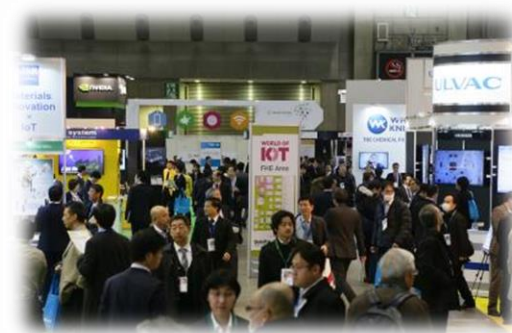
規模： 750社 1,750小間

延べ来場者： 70,000名

*延べ来場者数は、日毎の入場登録者と出展者を含む延べ人数です。

テーマ

CONNECT



Global Standards Meeting Schedule

<http://www.semi.org/en/standards-events>

- OCT 3, 2017
Metrics Japan TC Chapter Meeting
Tokyo, Japan
- OCT 4, 2017
EHS Japan TC Chapter Meeting
Tokyo, Japan
- OCT 13, 2017
PV&PV Materials China TC Chapters
joint Meeting
Taizhou, Jiangsu, China
- OCT 13, 2017
I&C Taiwan TC Chapter Meeting
Zhubei, Taiwan
- OCT 18, 2017
PV Taiwan TC Chapter Meeting
Taipei, Taiwan
- OCT 20, 2017
I&C Korea TC Chapter Meeting
Seoul, South Korea
- OCT 25, 2017
EHS Taiwan TC Chapter Meeting
Zhubei, Taiwan
- NOV 6-9
North America Fall Standards Meetings
Milpitas, California, USA
- NOV 14-15
SEMICON Europa Standards Meetings
Munich, Germany
- Dec. 11-15
SEMICON Japan Standards Meetings
Tokyo, Japan

SEMICON Japan Standards Meetings

- 会議スケジュールドラフト









SJ2017_Std&EH
_Meeting_Schedt

2017 Critical Dates for SEMI Standards Ballots

Cycle	Ballot Submission Date	Voting Period Starts	Voting Period ends
Cycle 1	January 3	January 17	February 16
Cycle 2	February 3	February 17	March 20
Cycle 3	March 7	March 21	April 20
Cycle 4	April 14	April 25	May 25
Cycle 5	May 12	May 26	June 26
Cycle 6	July 21	August 1	August 31
Cycle 7	August 18	September 1	October 2
Cycle 8	October 13	October 27	November 27
Cycle 9	November 16	November 29	December 29

A&R Ballot Review

A&R Cycle	Result	Notes
October 2016	 A&R_201610	All passed.
December 2016	 A&R_201612	Do. 5723A and 5775A failed.
January 2017	 A&R_201701	All passed.
May 2017	 A&R_201705	6066A-LI2 and 6068A-LI2 failed. Reason: reapprovals require a separate ballot and cannot be done as a line item ballot.
Jun 2017	 A&R_201706	All passed
August 2017	 A&R_201707	Doc. 6172 (LI1:Correct title and concomitant texts for S14) failed.

Recent Balloted Item Failures

- Document 6066A, Line Item 2 (SEMI E130.1 was balloted for reapproval with no changes)
- Document 6068A, Line Item 2 (SEMI E116.1 was balloted for reapproval with no changes)
 - Both documents were failed for the same reason:
 - The Regulations and the Procedure Manual clearly state that a Reapproval Letter Ballot is used for reapproval of a document and that a Line-Item Letter Ballot is a type of revision ballot. Therefore, reapproval cannot be balloted as a line item.
- Document 6172, Line Item 1 (SEMI S14 was balloted for title correction)
 - Failed because the ballot was not accompanied by a Safety Check List, which is required for all Safety Guidelines.

SEMI Standards Publications

Publication Cycle	New	Revised	Reapproved	Withdrawn
August 2016	0	7	3	0
September 2016	0	1	0	0
October 2016	1	12	1	0
November 2016	5	9	0	0
December 2016	0	2	0	0
January 2017	1	4	4	0
February 2017	1	9	2	0
March 2017	0	16	11	0
April 2017	0	5	1	0
May 2017	0	4	6	0
June 2017	2*	4	0	0
July 2017	0	1	1	0

*Including New Auxiliary Document: 1

- Total SEMI Standards in portfolio: **974**
– Includes **191** Inactive Standards

GTC Charter & Scope Review

- Problem Statement
 - Majority of GTCs have defined charter but many don't have distinct Scope
 - It is stipulated in the Regulations that each GTC ought to have a distinct charter and scope. (See Regulations ¶5.7.3.2, § 6.2)
 - As charter is often very generic (e.g., The XXXGTC discusses and creates consensus-based specifications and guides that promote mutual understanding and improved communication between users and suppliers of XXXX), it may not be useful to decide if the TF is within the scope of GTC or judge if a technical area proposal for installation of new GTC is really new.
 - Status as of today...
 - SEMI Website publishes charter of GTC
 - <http://downloads.semi.org/web/wstdsbal.nsf/StdCharters>
 - Only a couple of GTCs clearly define scope while most of them define its Standards' scopes or at least include scope description in its charter.

GTCs Charter - Scope Table as of Today

GTC	CHARTER	SCOPE
3D Packaging & Integration	X	X
Automated Test Equipment	X	x (included in the Charter)
Automation Technology	X	X
Compound Semiconductor Materials	x(only the Scope is defined in the Charter)	x (included in the Charter)
EH&S	X	x (defined, as part of the Charter)
Facilities	X	x (defined, as part of the Charter)
FPD Materials & Components	X	X
FPD Metrology	X	X
Gas	X	x (defined, as part of the Charter)
HB-LED	X	X
Information & Control	X	x (defined, as part of the Charter)
Liquid Chemicals	X	x (defined, as part of the Charter)

GTCs Charter - Scope Table as of Today

GTC	CHARTER	SCOPE
MEMS / NEMS	X	Undefined
Metrics	X	x (defined, as part of the Charter)
Micropatterning	X	Undefined
Photovoltaic	X	X
Photovoltaic (PV) - Materials	X	X
Physical Interfaces & Carriers	X	x (defined, as part of the Charter)
Silicon Wafer	X	x (defined, as part of the Charter)
Traceability	X	X

ISC (International Standards Committee) Report

3D Packaging and Integration Global Technical Committee [1/2]

- The proposal to transform the 3DS-IC and Assembly & Packaging Committees into a single, unified global technical committee (GTC) was approved at the International Standards Committee meeting held on July 13, 2017 during SEMICON West.
- Proposal Details:
 - To transform the 3DS-IC GTC and the Assembly & Packaging GTC into a unified GTC
 - To name the transformed GTCs as "3D Packaging and Integration" GTC
 - Each TC chapter of the unified GTC will inherit the co-chairs of the existing TC chapters

ISC (International Standards Committee) Report

3D Packaging and Integration Global Technical Committee [2/2]

- **Charter:**

- To explore, evaluate, discuss, and create consensus-based specifications, guidelines, test methods, and practices that, through voluntary compliance, will:
- include the materials, piece parts, and interconnection schemes, and unique packaging assemblies that provide for the communication link between the semiconductor chip and the next level of integration, either single- or multi-chip configurations. It relates to the technologies for heterogeneous and other multi-chip packaging such as Fan-out/Fan-in Wafer Level Packaging, Panel Level Packaging, Three-Dimensional Stacking IC, device embedded packaging, flexible electronics technology
- promote mutual understanding and improved communication between users and suppliers, equipment, automation systems, devices, and services
- enhance the manufacturing efficiency, capability and shorten time-to-market and reduce manufacturing cost

- **Scope:**

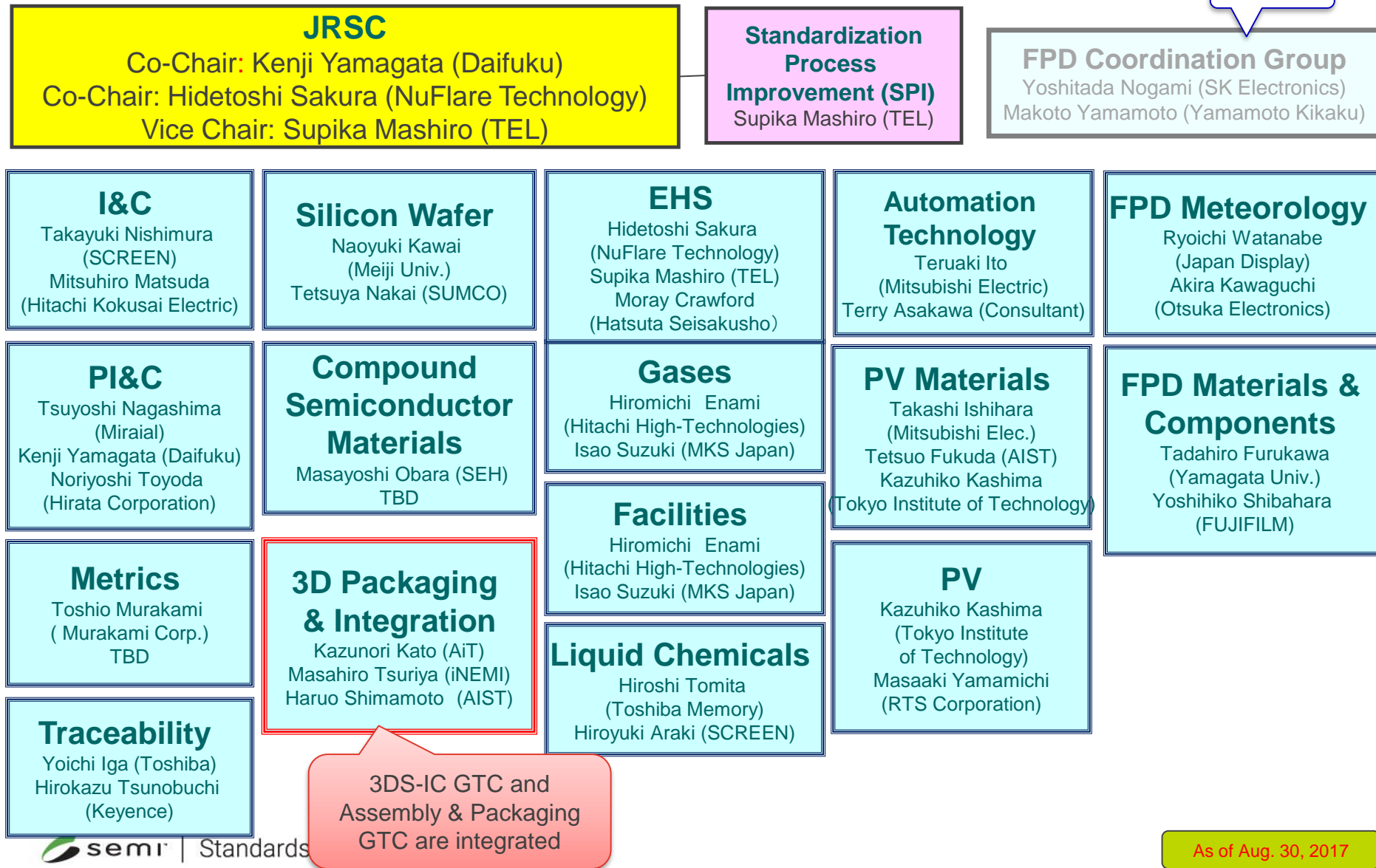
- The 3D Packaging and Integration Committee develops standards for semiconductor devices, including processed wafers, chips, or multi-chip configurations to the next level of integration, either in single- or multi-chip configurations
- materials needed for 3D applications, including prime silicon and glass wafers, temporary and permanent bonding material, specifications needed for processed wafers and/or chips to enter an integration step, etc.
- the materials related to the elements of, interconnection schemes, and unique packaging assemblies that provide for the communication link between device and packaging
- the technologies for heterogeneous and other multi-chip packaging such as Fan-out/Fan-in Wafer Level Packaging, Panel Level Packaging, Three-Dimensional Stacking IC, device embedded packaging, and flexible electronics technology
- metrologies to support these 3D integration and packaging technologies

JRSC

- 本年度のプランニング会議
 - 2017年8月31日(木) 15:15-17:45
 - SEMIジャパン会議室
 - 20名以上の参加者
- 事例から学ぶ規約とPM
 - 以下のわかりにくいポイントを整理したトレーニングセッション
 - SPIタスクフォースにて検討された内容。
 - Ratification Ballot
 - Procedures for Correcting Nonconforming Titles of Published Standards Document
 - 間違いやすい Editorial Changes
 - などなど・・・

JRSC Organization Chart

解散



SEMI通信(2017年)

テーマ募集中!!

- 2017_01_2016年度SEMIジャパン・スタンダード賞はSUMCOの中井哲弥氏が受賞
- 2017_02_電子部品模造被害の現状とトレーサビリティの国際標準化
- 2017_03_コンポーネントに起因する欠陥を測定するためのベースラインの確立
- 2017_05_SEMI S2 19章「地震保護」改訂
- 2017_06_装置データ収集(EDA)ワーキンググループ
- 2017_07_半導体製造に使用される超純水(UPW)品質管理
- 2017_08_電子顕微鏡グリッドに関する標準化活動開始
- 2017_09_3D Packaging and Integration委員会設立の紹介

NARSC Awards

North America Standards 2017 Award Recipients

Leadership Award

The Leadership Award is presented to an individual for providing outstanding leadership in guiding the SEMI Standards Program. This individual has helped others become more effective through training and mentoring, and recruited new participants into the Program.



Brian Rubow
Cimetricx

Merit Award

The Merit Award is presented to an individual for making a major contribution to the semiconductor industry through the SEMI Standards Program, tackling complex problems at the task force level and driving projects to successful completion.



John Visty
Salus Engineering International



Yanli Chen
UCT

SEMI International Standards Excellence Award

Inspired by Karel Urbanek

Bert Planting
ASML

2017 Award Recipient



The Excellence Award is SEMI's most significant honor for contributions to the SEMI Standards Program, and was inspired by the leadership of Karel Urbanek.

Mr. Urbanek was a member of the SEMI Board of Directors and Chairman of the International Standards Committee from 1986 to 1991. He led the Program through the difficult early years of internationalization with diplomacy, fairness, and honesty.

Global Staff Assignment

- North America
 - Inna Skvortsova
 - Automated Test Equipment
 - Information & Control
 - Liquid Chemicals
 - Metrics
 - Traceability
 - Laura Nguyen
 - 3D Packaging & Integration
 - HB-LED
 - Facilities
 - Gases
 - MEMS / NEMS
 - Physical Interfaces & Carriers
 - PV Materials
 - Kevin Nguyen
 - EHS
 - Micropatterning
 - Silicon Wafer

Global Staff Assignment

- China
 - Sophia Huang
 - PV
 - PV Materials
 - HB-LED
- EU
 - James Amano and Kevin Nguyen
 - Automation Technology
 - Compound Semiconductor Materials
 - Gases
 - Liquid Chemicals
 - Information & Control
 - Metrics
 - Physical Interfaces & Carriers
 - PV Materials
 - Silicon Wafer
- Korea
 - Natalie Shim
 - HB-LED
 - FPD Metrology
 - Facilities
 - Information & Control
- Taiwan
 - Dean Chang, CY. Huang
 - 3D Packaging & Integration
 - Automation Technology
 - EHS
 - FPD Metrology
 - Information & Control
 - PV

Staff Contact –Japan, After May 1, 2017

Committee	Staff
PV, PV Materials, Gases, Facilities, Liquid Chemical, I&C, Automation Technology	<i>Mizue Iwamura, Coordinator, Standards & EHS miwamura@semi.org</i>
FPD M&C, FPD Meteorology, PI&C, Metrics, Traceability, EHS, 3D Packaging & Integration	<i>Chie Yanagisawa Manager, Standards & EHS cyanagisawa@semi.org</i>
JRSC (including SPI TF), Compound, Silicon Wafer	<i>Junko Collins Director, Standards & EHS jcollins@semi.org</i>
Others	Staff
Standards Products General Information, SEMIViews	<i>C. Yanagisawa</i>
Other Standards Operation	<i>J. Collins</i>

The background of the slide is a solid red color. It features several white hexagonal shapes of varying sizes and opacities scattered across it. Some hexagons are solid white, while others are semi-transparent, creating a layered effect. The hexagons are positioned in the upper and middle sections of the slide, with some appearing near the top edge and others further down.

Thank you