Procedural Review Voting Sheet
2014 Cycle 7

REGION: Japan
COMMITTEE: Traceability Committee
1 **EVENT:** SEMICON Japan 2014
2 **DATE OF MEETING:** 2014/12/05
3 **PLACE OF MEETING:** Tokyo Big Sight, Tokyo
COMMITTEE CO-CHAIRS: Yoichi Iga/JSA, Hirokazu Tsunobuchi/Keyence
SEMI STAFF: Chie Yanagisawa

A&R Voter: Name/Company
Date: 200X/MM/DD

I. Document Number & Title

Document 5752	Document Title: Revision to SEMI T7-0303 (Reapproved 0709) "Specification for Back Surface Marking of Double-Side Polished Wafers with a Two-Dimensional Matrix Code Symbol"

II. Tally (Staff to fill in)

Voting Tally: As-cast tally after close of voting period

A minimum of 60% of the voting interests that have voting members within the technical committee must return votes. (Regulations ¶ 9.6.1)

	Return		Distribution		Return Rate	
Yellow	29	÷	48	=	60.4%	>=60%
Lilac & Others	22					

Total Vote	51					
Reject	1					
Accept	21					

A&R	Not approved
	Reason:

III. Rejects

Reject 1 (John Vally / SunEdison Semiconductor Limited)

Negative 1 of Reject 1

Negative

Referenced Section	**¶5.3.1.1 and Table 1**
Reason	**Both 5.3.1.1 and Table 1 should be changed to use SEMI M20 coordinates. All wafer metrology and subsequent process interferences which might occur due to this T7 mark will use M20 coordinates. For example, wafer dimensional metrology tools report the wafer thickness disruption in M20 coordinates.** Existing: 5.3.1.1 The 8 row × 32 column rectangular 2-D matrix code symbol shall be placed so that the reference point is located the distance as given in Table 1 from the center of the wafer, along a radius 5.0 ± 0.1° counterclockwise from the orientation fiducial axis. Proposed 5.3.1.1 The 2-D matrix code symbol, 8 rows × 32 columns (see Fig. 2), shall be placed (see Fig. 3) so that the reference point is located at the radial distance from wafer center specified as given in Table 1. When viewed from above with the back side facing upward the mark lies at 5.0 ± 0.1° counterclockwise from the orientation fiducial axis. The SEMI M20 coordinates specified in Table 1 do not change when the wafer is flipped and easily relate to specification of metrology exclusion areas. Proposed Table 1:

Table 1 Code Symbol Reference Point Location (SEMI M20 coordinate space)

Nominal Wafer Diameter (mm)	Radius (mm)	Theta (deg.)	~ x(mm)	~ y(mm)
300	148.95 ± 0.15	265 ± 0.1	-12.98	-148.38
450	223.95 ± 0.15	265 ± 0.1	-19.52	-223.10

Withdrawal		No withdrawal made	**GO TO "Related" section**
	X	Withdrawal document received by staff on November 25, 2014	**GO TO "Final" → (A)**

Related

Motion and Reason		"Related" is mutually agreed upon.	
		***This motion can be appended to the motion for Persuasive (See Persuasive Section)**	
		Negative is related **(needs over 1/3 votes to pass)**	
		Negative is not related **(needs 2/3 or more votes to pass)**	
		Reason: XXXX	
Motion by/2nd by		Name (Company)/Name (Company)	
Discussion			
Result of Vote (check ONE)		XX-XX	
		[Negative is related] > 1/3	**GO TO "Persuasive"**
		[Negative is not related] < 2/3	
		2/3=< [Negative is not related]	**GO TO "Final" → (B)**

Persuasive	**Motion and Reason**		Negative is related and persuasive **(needs over 1/3 votes to pass)**	
			Negative is related and not persuasive **(needs 2/3 or more votes to pass)**	
			Reason	XXXX
	Motion by/2nd by	Name (Company)/Name (Company)		
	Discussion			
	Result of Vote (check ONE)	XX-XX		
			[Negative is related and persuasive] > 1/3	**GO TO "Final" → (E)**
			[Negative is related and not persuasive] < 2/3	
			2/3=<[Negative is related and not persuasive] <90%	**GO TO "Final" → (C)**
			90% =< [Negative is related and not persuasive]	**GO TO "Not Significant Finding Option"**
Not Significant Finding Option	**This option can only be used "if the committee finds a negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action". (Regulations ¶ 9.5.3.3.2)**			
			It is mutually agreed upon to term the negative "not significant"	**GO TO → (D)**
			It is mutually agreed upon to term the negative "significant"	**GO TO → (C)**
	Motion		The negative is "not significant".	
	Motion by/2nd by	Name (Company)/Name (Company)		
	Vote		XX-XX Motion passed with simple majority	**GO TO → (D)**
			XX-XX Motion failed with simple majority	**GO TO → (C)**
	Final	Negative is:		
		X	**(A)** withdrawn (counted under **h** in disposition)	
			(B) not related (counted under **i** in disposition)	
			(C) related and not persuasive (significant)	
			(D) not significant (counted under **j** in disposition)	
			(E) related and persuasive	**DOCUMENT FAILS**
		X	Comment generated. See IV Comments, #5	
A&R			**Not approved**	
			Reason:	

Disposition of Reject 1

1	Original number of Negatives	**(g)**
1	# of Negatives withdrawn	**(h)**
0	# of Negatives found not related	**(i)**
0	# of Negatives found not significant	**(j)**

Final	X	**g**-(**h**+**i**+**j**)=0	☐ Reject **is Not Valid and is not** included in the denominator of § VI. Approval Conditions Check
		g-(**h**+**i**+**j**)>0	☐ Reject **is** included in the denominator of § VI. Approval Conditions Check
		Reject without a Negative	☐**Not Valid**

Note: If all of the negative material included with a reject vote is withdrawn, determined to be not related, or determined to be not significant, the reject vote is not valid. (Regulations ¶ 9.4.3.3)

A&R		**Not approved**
	Reason:	

IV. Comments

Comment 1

Comment	**Referenced Section**	**Section 2.1 and Figure 1**
	From	**Dr. Rafael Vargas-Bernal (Instituto Tecnologico Superior de Irapuato)**
	Comment	In subsection 2.1 "diamters" must be changed by "diameters". In Figure 1 "CL" must be separated to be clear its reading.
	Discussion	Editorial Change in “V. Summary of Editorial Changes”

Action proposed		**The committee agreed to do one of the following actions.**	
		***No motion is required in this step.**	
			No further action was taken by the committee.
			Refer to the task force for more consideration.
			New Business
			Other
	Editorial Change		
		Case 1: No vote in this section :	
		To be included and voted on in § 5. Summary of Editorial Changes.	

			Case 2: Voted in this section :
			Original section number and at least one full sentence are required in "FROM" and "TO" fields.
		1	**FROM: Section xxx**
			To: Section xxx
			Justification (If necessary)
		2	**FROM: Section xxx**
			To: Section xxx
			Justification (If necessary)
Motion by/2nd			Name (Company)/Name (Company)
Vote			XX-XX Motion passed (or failed)
A&R			**Not approved**
			Reason:

Comment 2

Comment	**Referenced Section**	**2.1**
	From	**Mahiro Supika (Tokyo Electron)**
	Comment	Divide the paragraph into 2 paragraphs, one for "silicon wafers with diameters of 300mm and 450mm that comply with SEMI M1" and another for "wafers of other materials with diameters of 300mm and larger."
	Discussion	The concept may be extendable for wafers of other materials with diameter larger than 300mm but no specific coordinate for location of Data Matrix Code is given in the Document

Action proposed	X		**The committee agreed to do one of the following actions.**
			***No motion is required in this step.**
			No further action was taken by the committee.
			Refer to the task force for more consideration.
		X	New Business
			Other
	Editorial Change		

			Case 1: No vote in this section :
			To be included and voted on in § 5. Summary of Editorial Changes.
			Case 2: Voted in this section :
			Original section number and at least one full sentence are required in "FROM" and "TO" fields.
		1	**FROM: Section xxx**
			To: Section xxx
			Justification (If necessary)
		2	**FROM: Section xxx**
			To: Section xxx
			Justification (If necessary)

Motion by/2nd	Name (Company)/Name (Company)
Vote	XX-XX Motion passed (or failed)

A&R		**Not approved**
		Reason:

Comment 3

Comment	**Referenced Section**	**5.3.1.1**
	From	**Mahiro Supika (Tokyo Electron)**
	Comment	Reword "so that the reference point is located the distance as given in Table 1 from the center of the wafer, along a radius 5.0 ± 0.1° counterclockwise from the orientation fiducial axis" to "so that the reference point is located at the radial distance as given in Table 1 from the center of the wafer and at 5.0 ± 0.1° counterclockwise from the primary orientation fiducial axis
	Discussion	Editorial Change in "V. Summary of Editorial Changes"

Action proposed			**The committee agreed to do one of the following actions.**
			***No motion is required in this step.**
			No further action was taken by the committee.
			Refer to the task force for more consideration.
			New Business
			Other

Editorial Change		
		Case 1: No vote in this section :
		To be included and voted on in § 5. Summary of Editorial Changes.
		Case 2: Voted in this section :
		Original section number and at least one full sentence are required in "FROM" and "TO" fields.
	1	**FROM: Section xxx**
		To: Section xxx
		Justification (If necessary)
	2	**FROM: Section xxx**
		To: Section xxx
		Justification (If necessary)

Motion by/2nd	Name (Company)/Name (Company)
Vote	XX-XX Motion passed (or failed)
A&R	**Not approved**
	Reason:

Comment 4

Comment	Referenced Section	3.1
	From	Tetsuya Nakai (SUMCO)
	Comment	We need to add SEMI M20 in 3.1 SEMI Standards, as a referenced standard.
	Discussion	Currently, M20 is not used in T7
Action proposed	X	The committee agreed to do one of the following actions.
		*No motion is required in this step.
	X	No further action was taken by the committee.
		Refer to the task force for more consideration.
		New Business
		Other
	Editorial Change	
		Case 1: No vote in this section :
		To be included and voted on in § 5. Summary of Editorial Changes.
		Case 2: Voted in this section :
		Original section number and at least one full sentence are required in "FROM" and "TO" fields.
	1	FROM: Section xxx
		To: Section xxx
		Justification (If necessary)
	2	FROM: Section xxx
		To: Section xxx
		Justification (If necessary)
Motion by/2nd		Name (Company)/Name (Company)
Vote		XX-XX Motion passed (or failed)
A&R		Not approved
		Reason:

Comment 5

Comment	Referenced Section	¶5.3.1.1 and Table 1
	From	John Vally / SunEdison Semiconductor Limited
	Comment	Please withdraw my negative on Ballot #5752. I agree that my proposed changes can be discussed as New Business.
	Discussion	
Action proposed	X	The committee agreed to do one of the following actions.
		*No motion is required in this step.
		No further action was taken by the committee.
		Refer to the task force for more consideration.
	X	New Business
		Other
	Editorial Change	
		Case 1: No vote in this section :
		To be included and voted on in § 5. Summary of Editorial Changes.
		Case 2: Voted in this section :
		Original section number and at least one full sentence are required in "FROM" and "TO" fields.
	1	FROM: Section xxx
		To: Section xxx
		Justification (If necessary)
	2	FROM: Section xxx
		To: Section xxx
		Justification (If necessary)
Motion by/2nd		Name (Company)/Name (Company)
Vote		XX-XX Motion passed (or failed)
A&R		Not approved
		Reason:

V. Summary of Editorial Changes

Note: Original section number and at least one full sentence are required in "FROM" and "TO" fields.

1	**FROM: Section 2.1** 2.1 This specification defines the geometric and spatial relationships and content (including the error checking and correcting code) of a rectangular two-dimensional (2-D), machine-readable, binary data matrix code symbol for back surface marking of double-side polished silicon wafers with diamters of 300 mm and 450 mm that comply with SEMI M1 and wafers of other materials with diameters of 300 mm and larger.
	TO: Section 2.1 2.1 This specification defines the geometric and spatial relationships and content (including the error checking and correcting code) of a rectangular two-dimensional (2-D), machine-readable, binary data matrix code symbol for back surface marking of double-side polished silicon wafers with diameters of 300 mm and 450 mm that comply with SEMI M1 and wafers of other materials with diameters of 300 mm and larger.
	Justification: (If necessary)
2	**FROM: Section 5.1 Figure 1 and Figure 2**
	TO: Section 5.1 Figure 1 and Figure 2 The symbol ℄ in Figure 1 is changed to ℄ in using Figure 2. Add a NOTE 'the symbol ℄ means "Center Line".' in both Figure 1 and Figure 2.
	Justification: (If necessary)
3	**FROM: Section 5.3.1.1** The 8 row × 32 column rectangular 2-D matrix code symbol shall be placed so that the reference point is located the distance as given in Table 1 from the center of the wafer, along a radius 5.0 ± 0.1° counterclockwise from the orientation fiducial axis.
	TO: Section 5.3.1.1 The 8 row × 32 column rectangular 2-D matrix code symbol shall be placed so that the reference point is located at the radial distance as given in Table 1 from the center of the wafer and at 5.0 ± 0.1° counterclockwise from the orientation fiducial axis.
	Justification: (If necessary)

Motion		To approve the above editorial changes
Motion by/2nd by		Mitsuhiro Matsuda (Hitachi Kokusai Electric) / Tetsuya Nakai (SUMCO)
Discussion		**None**
Vote		7-0 Motion passed
A&R		**Not approved**
	Reason:	

VI. Approval Conditions Check

APPROVAL CONDITION 1: All negatives have been discussed and were withdrawn, found not related, or not persuasive. (Regulations ¶ 9.6.2)

APPROVAL CONDITION 2: At least 90% of the sum of the valid accept and reject votes must be accept. (Regulations ¶ 9.6.3)

Note: if both approval conditions are not satisfied, the document fails.

		Accepts		(Accepts + Valid Rejects)				
Approval Rate	=	21	/	21	=	100.0%		>=90%

A&R		Not approved
	Reason:	

VII. Safety Check

See § 14 of the Regulations for further information

Motion:	X	This is not a Safety Document: when all safety-related information is removed, the document is still technically sound and complete.
		This is a Safety Document: when all safety-related information is removed, the document is not technically sound and complete.
		Safety Checklist (Regulations ¶ 14.3) is complete and has been included with the document throughout the balloting process.
Motion by/2nd by		Mitsuhiro Matsuda (Hitachi Kokusai Electric) / Tetsuya Nakai (SUMCO)
Discussion		None
Vote		5-0 Motion passed
A&R		**Not approved**
		Reason:

VIII. Intellectual Property Check

Note: This ballot may be all or part of a Standard or Safety Guideline. This IP check applies to the entire Standard or Safety Guideline. See § 15 of the Regulations for further information

X	The meeting chair asked those present in person or by electronic link, if they were aware of any potentially material patented technology or copyrighted items* in the Standard or Guideline.		
	X	No potentially material patented technology or copyrighted items are known	**GO TO SECTION IX**
		Potentially material patented technology or copyrighted items are known but a Letter of Assurance (LOA) or copyright release for such material has been obtained or presented to the committee.	**GO TO SECTION IX**
		Potentially material patented technology or copyrighted items are known but an LOA or copyright release for some of the material(s) has NOT been obtained or presented to the committee	
	MOTION		Ask ISC for special permission to publish
			Quit activity
			Wait for LOA for patented technology or release of copyrighted items.
	Motion by/2nd by		Name (Company)/Name (Company)
	Discussion		XXXX
	Vote		XX-XX
	Final Action		Motion Passed
			Motion Failed
A&R			**Not approved**
			Reason:

* Note: Such potentially material patented technology or copyrighted items might have become known since the Standard or Safety Guideline was last reviewed, or might become relevant due to this ballot.

IX. Action for this document

Motion		This document passed committee review as balloted and will be forwarded to the A&R for procedural review.
	X	This document passed committee review with editorial changes and will be forwarded to the A&R for procedural review.
		This document failed committee review and will be returned to the task force for rework.
		This document failed committee review and work will be discontinued.

Motion by/2nd by		Mitsuhiro Matsuda (Hitachi Kokusai Electric) / Tetsuya Nakai (SUMCO)
Discussion		None
Vote		7-0
Final Action	X	Motion passed
		Motion failed
A&R		**Approved**
		Not approved
		Reason: