Record of Line-item Letter Ballot Review by TC Chapter for Procedural Review

Region/Locale: North America

Global Technical Committee: Silicon Wafer

TC Chapter Cochairs: Dinesh Gupta/STA, Noel Poduje/SMS

Standards Staff: Kevin Nguyen

	Scheduled in Background Statement	Actual
Date	07/11/2017	07/11/2017
Location	San Francisco Marriott Marquis	San Francisco Marriott Marquis
Reason for Change of Date and/or Location (if changed)		

Note: See Regulations ¶ 9.5 Exception for allowable reason to change.

Document Information

I. Document Number, Title, Lists of Line Items

Doc	ument Number	Document Title
6169		Line Item Revision to MF1390-1014: Test Method For Measuring Bow And Warp On Silicon Wafer By Automated Noncontact Scanning
- =	Line Item 1	Line Item Title Delete Note 3 in section 2.5 and MF657 in section 4.1
st of	Line Item 2	Line Item Title Deletion of Note 2 and modification of other sections as shown.

Line Item 1 Adjudication

II. Tally

Standards staff to fill in.

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

Note: A minimum of 60% of the Voting Interests that have TC Members within the global technical committee that issued the Letter Ballot must return Votes. (*Regulations* ¶ 9.7.1.1)

Voting Tally:

52	÷	86	=	60.5%	≥60%
					_0070
31					
1		Total Vo	ters	with Rejects	1
36					
	1 36	1 36			1 Total Voters with Rejects 36

Note: See Regulations § 3.2.1 for definition of Voting Interest.

III. Rejects

Voting Interest Reject 1 (Voting Interest Name: Materials & Metrology)
Voter Reject 1 (Voter: Murray Bullis/ Materials & Metrology)

Negative 1

Negative	Referenced Section/ Paragraph	1. Whe	TF/TC Chapter to fill in, including text in the ballot if necessary. . There seems to be no justification for introducing two different bow metrics. When should one be use and when the other? In fact, I would be amazed if the lifference between these was significantly different from the reproducibility of either Original complete Negative text (e.g., issue, justification, suggestion) should be opied.						
tive	Negative Text								
TFi	nput (optional)								
	Withdrawal	х	No Negative withdrawa	I made by Voter.	GO TO "Related" subsection				
	(check one)		Withdrawal document re	GO TO "Final" subsection → (A)					
	Motion and	×	'Related' is mutually ag	GO TO "Persuasive" subsection					
	Reason (check one)		Negative is not related.	(Needs ≥2/3 votes to pass.)					
			Reason	xxxx					
Rel	Motion by/ 2 nd by	Nam	Name (Company)/Name (Company)						
Related	Discussion								
		XX '	XX Y -XX N ; Motion passed/failed.						
	Result of Vote (check one)		[Negative is not related.	.] < 2/3	GO TO "Persuasive" subsection				
	(enesit ene)		2/3 ≤ [Negative is not re	elated.]	GO TO "Final" subsection → (B)				
Persuasi ve	Motion and Reason		Negative is related and	persuasive. (Needs >1/3 votes t	to pass.)				
uasi e	(check one)		x Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)						

		Reason		act that both suppl me Manufacturing		d users use both metrics in High				
	Motion by/ 2 nd by	Noel Poduje (SMS)/K	loel Poduje (SMS)/Kurt Haller (KLA-Tencor)							
	Discussion									
		10 Y -0 N ; Motion pas	sed.							
	Result of Vote	[Negative is relat persuasive.] > 1/		Is a technical change recommended?	·	GO TO "Address by Technical Change Option" subsection				
	(check one)	[Negative is relat persuasive.] < 2/		(check one)		N GO TO "Final" subsection → (E)				
		2/3 ≤ [Negative is and not persuasi		GO TO "Final" s	ubsec	tion → (C)				
		x 90% ≤ [Negative and not persuasi		GO TO "Not Sign	nifican	t Finding Option" subsection				
_		be used only "if the land of the persons votine because the persons with the land of the l				rsuasive by a vote equal to or .6.4.4.2)				
lot Siç	Use of "Not significant finding option" (check one)	It is mutually agressignificant".	eed upon to	GO TO "Final" subsection → (D)						
Not Significant Finding Option		It is mutually agre "significant".	•	GO TO "Final" subsection → (C)						
Į Į		Whether or not the Negative is "not significant" is decided by a vote.								
ndir	Motion	The Negative is "not s	significant".							
յց Op	Motion by/ 2 nd by	Name (Company)/Na	me (Compai	ny)						
tion	Voto	XX Y-XX N; Moti	on passed w	GO TO "Final" subsection → (D)						
	Vote	XX Y-XX N; Moti	I; Motion failed with simple majority GO TO "Final" subsec → (C)							
		(A)	Withdrawn	(counted under l	h in di	sposition)				
		(B)	Not related	d (counted under	i in dis	sposition)				
	(check if	(C)	Related ar	nd not persuasive ((signific	cant)				
Final	applicable)	x (D)	Not signific	cant (counted und	ler j in	disposition)				
<u> </u>		(E)		nd persuasive and by technical chan		DOCUMENT FAILS				
		(F)	Addressed	l by technical chan	ige (co	unted under k disposition)				
	(check if applicable)	Comment genera	ated. See Se	ection V-(ii) Comn	nent #	X.				

This table is needed for each Negative.

Negative 2

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, in 2. If they can be shown herein (please use correct corrections to the existing *Original complete Negation copied.	wn to be significantly of t format) and later mov g bow definition.	different t red to SE	then they need to be defined MI M59 (with suitable				
	Negative Text								
TFi	nput (optional)								
	Withdrawal	x No Negative withdrawa	al made by Voter.		GO TO "Related" subsection				
	(check one)	Withdrawal document r	received by Standards s	taff on	GO TO "Final" subsection → (A)				
	Motion and	* 'Related' is mutually ag	greed upon. (Needs no I	motion.)	GO TO "Persuasive" subsection				
	Reason	Negative is not related.	(Needs ≥2/3 votes to	pass.)					
	(check one)	Reason	xxxx						
Rela	Motion by/ 2 nd by	Name (Company)/Name (Company)							
Related	Discussion								
	Result of Vote (check one)	XX Y-XX N; Motion passed/failed.							
		[Negative is not related		GO TO "Persuasive" subsection					
		2/3 ≤ [Negative is not re	GO TO "Final" subsection → (B)						
		Negative is related and persuasive. (Needs >1/3 votes to pass.)							
	Motion and Reason (check one)	x Negative is related and	x Negative is related and not persuasive. (Needs ≥2/3 ve						
	(oneok one)	Reason			e between the two metrics that ity therefore they are distinct				
Persuasive	Motion by/ 2 nd by	Noel Poduje (SMS)/Kurt Ha	Noel Poduje (SMS)/Kurt Haller (KLA-Tencor)						
suas	Discussion								
sive	Result of Vote	[Negative is related and persuasive.] > 1/3	ls a technical change recommended?	Y	GO TO "Address by Technical Change Option" subsection				
	(check one)	[Negative is related and persuasive.] < 2/3		N	GO TO "Final" subsection → (E)				
		2/3 ≤ [Negative is relate and not persuasive.] <		subsectio	n → (C)				

		X	90% ≤ [Negativ and not persua		GO TO "Not Significant	Finding Option" subsection
Z					finds a Negative not per ction". (<i>Regulations</i> ¶ 9.	suasive by a vote equal to or 6.4.4.2)
Not Sig	Use of "Not	Х	It is mutually ag significant".	greed upon to	term the Negative "not	GO TO "Final" subsection → (D)
Significant	significant finding option" (check one)		It is mutually ag "significant".	greed upon to	term the Negative	GO TO "Final" subsection → (C)
Εį	, ,		Whether or not	the Negative	is "not significant" is decid	led by a vote.
Finding	Motion	The	Negative is "not	t significant".		
η Op	Motion by/ 2 nd by	Nar	ne (Company)/N	lame (Compa	ny)	
Option	Vote		XX Y-XX N; Mo	otion passed v	vith simple majority	GO TO "Final" subsection → (D)
			XX Y-XX N; Mo	otion failed wit	h simple majority	GO TO "Final" subsection → (C)
			(A)	Withdrawn	(counted under h in dis	position)
			(B)	Not related	d (counted under i in dis	position)
	(check if		(C)	Related ar	nd not persuasive (significa	ant)
Final	applicable)	х	(D)	Not signific	cant (counted under j in	disposition)
<u>a</u>			(E)		nd persuasive and not by technical change	DOCUMENT FAILS
			(F)	Addressed	l by technical change (cou	unted under k disposition)
	(check if applicable)		Comment gene	erated. See Se	ection V-(ii) Comment #)	K .

Negative 3

Negative	Referenced Section/ Paragraph	3. M1; des	*TF/TC Chapter to fill in, including text in the ballot if necessary. 3. The two types of bow, if retained, also need to be added to Table 1 of SEMI M1; this would allow the purchaser of silicon wafers to specify which bow was desired. Also they should be discussed in Appendix 3 and Related Information 4 of SWMI M1. At present, only one type of bow is included in these locations.							
ve	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be								
TF	input (optional)									
	Withdrawal (check one)		No Negative withdrawal made by Voter.	GO TO "Related" subsection						
			Withdrawal document received by Standards staff on MM/DD/YYYY.	GO TO "Final" subsection → (A)						
Relat ed	Motion and Reason		'Related' is mutually agreed upon. (Needs no motion.)	GO TO "Persuasive" subsection						
at	(check one)		x Negative is not related. (Needs ≥2/3 votes to pass.)							

		Reason Ł			because it is not part of the ballot				
	Motion by/ 2 nd by	Noe	Noel Poduje (SMS)/Len Perroots (SuperSight)						
	Discussion	A SI	SNARF will be proposed for M1 revision by the appropriate task force.						
		9 Y -	0 N; Motion pas	ssed.					
	Result of Vote (check one)		[Negative is no	t related	.] < 2/3	GO TO "Persuasive" subsection			
		x	2/3 ≤ [Negative is not related.]			GO TO "Final" subsection → (B)			
			(A)	With	drawn (counted under h in dis	position)			
		Х	(B)	Not i	Not related (counted under i in disposition)				
	(check if		(C)	Rela	ted and not persuasive (significa	ant)			
Final	applicable)		(D)	Not s	significant (counted under j in c	disposition)			
<u>a</u>			(E)		ted and persuasive and not essed by technical change	DOCUMENT FAILS			
			(F)	Addr	essed by technical change (cou	nted under k disposition)			
	(check if applicable)		Comment gene	erated. S	See Section V-(ii) Comment # X	(

Disposition of Voting Interest Reject 1

Check only when the Document has not been failed.

3	Original	(g)					
#	Number	of N	egatives withdrawn		(h)		
1	Number	of N	egatives found not related		(i)		
2	Number	of N	egatives found not significant		(j)		
#			egatives addressed by technic t significant)	al change (Negative	(k)		
	$\mathbf{g} - (\mathbf{h} + \mathbf{i} + \mathbf{j} + \mathbf{k}) = 0$		g - (h + i + j + k) = 0	Reject is Not Valid and is not included in the denominator of § VI. Approval Conditions Check			
	Final		g - (h + i +j + k) >0	Reject is included in the denominator of § VI. Approval Conditions Check			
	Reject without a Negative Not Valid						

Note: If all of the Negatives included with a Reject Vote are withdrawn, determined to be not related, or determined to be not significant, the Reject Vote is not valid. ($Regulations \ \P \ 9.4.3.3$)
Note: A Negative addressed by a technical change is automatically considered to be not significant. ($Regulations \ \P \ 9.6.4.4.2$)

IV. Other Technical Issues

Note: TC Chapter may choose to address a technical issue that is not part of a Negative received on a Letter Ballot (i.e., a Comment or a reason not addressed by a Vote response) by handling it as a Negative and finding it related and technically persuasive. The TC Chapter may then fail the Document or address such technical issue by using the procedure defined in *Regulations* § 9.6.4.3 to make a technical change to the Document. (*Regulations* ¶ 9.6.2.4.5)

None

V. Comments

None

V-(ii) Comments Created by Handling Negative

None

VI. Editorial Changes Other than Those Voted on in § V

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

None

VII. Approval Conditions Check

VII. - (i). Approval Rate

APPROVAL CONDITION 1: All Negatives have been discussed and were withdrawn, found not related, found not persuasive, or addressed by a technical change. (*Regulations* ¶ 9.7.1.2)

APPROVAL CONDITION 2: At least 90% of the sum of valid Voting Interest Accept and Voting Interest Reject Votes must be Accept. (*Regulations* ¶ 9.7.1.3)

Note: If both approval conditions are not satisfied, the Document fails.

		Accepts		(Accepts + Valid Rejects)			
Approval Rate	=	36	/	36	=	100.0%	≥90%

VII. – (ii) Approval Level (check one)

Note: See Regulations § 9.7.2 for further information.

X	Globally Approved (No Ratification Ballot needed): Line Item 1 meets the Letter Ballot approval conditions for the global technical committee.
	Need a Ratification Ballot: Line Item 1 meets the Letter Ballot approval conditions for the TC Chapter and a Ratification Ballot will be issued to validate technical changes.

Line Item 2 Adjudication

II. Tally

Standards staff to fill in.

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

Note: A minimum of 60% of the Voting Interests that have TC Members within the global technical committee that issued the Letter Ballot must return Votes. (*Regulations* ¶ 9.7.1.1)

Voting Tally:

Voting Interest:	Returned Votes		Distribution		Return Rate	
Letter Ballot	52	÷	86	=	60.5%	≥60%
Intercommittee Ballot	31					
Voting Interest Reject(s)	0		Total	Vote	rs with Rejects	0
Voting Interest Accept(s)	36	1				

Note: See Regulations § 3.2.1 for definition of Voting Interest.

III. Rejects

None

IV. Other Technical Issues

V. Comments

None

V-(ii) Comments Created by Handling Negative None

VI. Editorial Changes Other than Those Voted on in § V

Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields. None

VII. Approval Conditions Check

VII. - (i). Approval Rate

APPROVAL CONDITION 1: All Negatives have been discussed and were withdrawn, found not related, found not persuasive, or addressed by a technical change. (*Regulations* ¶ 9.7.1.2)

APPROVAL CONDITION 2: At least 90% of the sum of valid Voting Interest Accept and Voting Interest Reject Votes must be Accept. (*Regulations* ¶ 9.7.1.3)

A&R Ballot Report Template (Line Item) Revision 1.4

Note: If both approval conditions are not satisfied, the Document fails.

		Accepts		(Accepts + Valid Rejects)			
Approval Rate	=	36	1	36	=	100.0%	≥90%

VII. – (ii) Approval Level (check one)

Note: See Regulations § 9.7.2 for further information.

X

Globally Approved (No Ratification Ballot needed):

Line Item 2 meets the Letter Ballot approval conditions for the global technical committee.



Need a Ratification Ballot:

Line Item 2 meets the Letter Ballot approval conditions for the TC Chapter and a Ratification Ballot will be issued to validate technical changes.

Checks for Entire Document Including All Approved Line Items

VIII. Safety Check

Note: This Safety check <u>applies to the entire Standard or Safety Guideline</u> including all the approved Line Items. See § 15 of the *Regulations* for further information.

	x	Th is s	This is not a Safety Document , when all safety-related information is removed, the Document is still technically sound and complete. (<i>Regulations</i> ¶ 8.7.1)						
Motion	This is a Safety Document, when all safety-related information is removed, the Document is not technically sound and complete. (Regulations ¶ 8.7.2)								
			Safety Checklist (<i>Regulations</i> ¶ 15.3) is complete and has been included with the Document throughout the balloting process. (<i>Regulations</i> ¶ 15.1.2)						
Motion by/2 nd by Tetsuya Nakai (SUMCO)/Fritz Passek (Siltronic)		y/2 nd by	Tetsuya Nakai (SUMCO)/Fritz Passek (Siltronic)						
	Discussion			XXXX					
Vote 9 Y-0 N				9 Y-0 N					

IX. Intellectual Property (IP) Check

Note: This IP check <u>applies to the entire Standard or Safety Guideline</u> including all the approved Line Items. See § 16 of the *Regulations* for further information.

X	The TC Chapter meeting chair asked those participating, if they were aware of any potentially material patented technology or copyrighted items* in the Standard or Guideline. (<i>Regulations</i> ¶ 8.8.1)								
	Х		otentially n righted iter	GO TO SECTION X.					
		copy copy	tentially material patented technology or reproduction of byrighted items is known, but a Letter of Assurance (LOA) or byright release letter for such items has been obtained or esented to the TC Chapter.						
		use	ntially material patented technology or reproduction of copyrighted items is known and of such materials is technically justified by the TC Chapter, but an LOA or copyright use letter for some of the item(s) has NOT been obtained or presented to the TC Chapter.						
	~		Ask ISC for special permission to publish.						
	Motion		Quit activ	vity.					
			Wait for L	OA for patented technology or release of copyrighted items.					
	Mot	ion by	y/2 nd by	Name (Company)/Name (Company)					
		Discus	ssion	XXXX					
	Vote			XX Y-XX N					
		Final Action			Motion passed				
	Final Action				Motion failed				

^{*} 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 Letter Ballot.

X. Action for This Document

ap	X		e item(s) [1] and [2] passed TC Chapter review as balloted and will be forwarded to the ISC A&R for procedural review.						
M (Ch			tem(s) [X], [X] and [X] passed TC Chapter review with editorial changes and will be forwarded ISC A&R SC for procedural review.						
Motion (Check all applicable items)		editor	ne item(s) [X], [X] and [X] passed TC Chapter review with technical changes and with or without itorial changes and will be forwarded to the ISC A&R SC for procedural review. A Ratificational to the ISC A&R SC for procedural review. A Ratification will be issued to verify the technical changes.						
ıs)		Line	ne item(s) [X], [X] and [X] failed TC Chapter review and will be returned to the TF for rework.						
		Line i	e item(s) [X], [X] and [X] failed TC Chapter review and work will be discontinued.						
Motion by/ 2nd by		d by	Noel Poduje (SMS)/Len Perroots (SuperSight)						
Discussion			XXXX						
Vote			10 Y-0 N						
Final Action		_	x Motion passed						
		n	Motion failed						

Standards staff to record the result of the A&R procedural review here:

		Line item(s) [X], [X] and [X] are Approved for publication								
A&R		Line item(s) [X], [X] and [X] are Approved pending acceptance of the Ratification Ballot								
AGIT		Line item(s) [X], [X] and [X] are Not approved								
	Reason:									