

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

Region/Locale: **North America**

Global Technical Committee: **EH&S**

TC Chapter Cochairs: **Chris Evanston (Salus Engineering), Sean Larsen (LAM Research), Bert Planting (ASML)**

Standards Staff: **Kevin Nguyen**

	Scheduled in Background Statement	Actual
Date	4/2/2020	12/17/2020
Location	Milpitas, CA	OVTCCM
Reason for Change of Date and/or Location (if changed)	COVID-19 Pandemic	

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

Document Information

I. Document Number, Title, Lists of Line Items

Document Number 6594		Document Title LINE ITEM REVISIONS OF SEMI S14-1016 SAFETY GUIDELINES FOR FIRE RISK ASSESSMENT AND MITIGATION FOR SEMICONDUCTOR MANUFACTURING EQUIPMENT
List of Line	Line Item 1	Line Item Title Changes to Title and Concomitant text
	Line Item 2	Changes to Risk Assessment Criteria

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* ¶ 9.6.2.1.1)

Voting Tally:

Voting Interest:	Returned Votes		Distribution		Return Rate	
Letter Ballot	69	÷	115	=	60.0%	≥60%
Intercommittee Ballot	36					
Voting Interest Reject(s)	1		Total Voters with Rejects			1
Voting Interest Accept(s)	48					

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

III. Rejects

Voting Interest Reject 1 (Voting Interest Name: Safety Guru)

Voter Reject 1 (Voter: Eric Sklar and Safety Guru)

Negative 1

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary.				
		Title				
	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied. Negative: Do not make the proposed change to the title. Reason/Justification: This document contains more than one “guideline”, so the change would be from a title that does correctly reflects the contents to a title that does not.				
TF input (optional)		The vote was 6-1 in favor for finding not persuasive in the task force meeting.				
Withdrawal (check one)	<input checked="" type="checkbox"/>	No Negative withdrawal made by Voter.		GO TO “Related” subsection		
	<input type="checkbox"/>	Withdrawal document received by Standards staff on MM/DD/YYYY.		GO TO “Final” subsection → (A)		
Related	Motion and Reason (check one)	<input checked="" type="checkbox"/>	‘Related’ is mutually agreed upon. (Needs no motion.)		GO TO “Persuasive” subsection	
		<input type="checkbox"/>	Negative is not related. (Needs ≥2/3 votes to pass.)			
			Reason	XXXX		
	Motion by/ 2 nd by	Name (Company)/Name (Company)				
	Discussion					
	Result of Vote (check one)	XX Y-XX N; Motion passed/failed.				
		<input type="checkbox"/>	[Negative is not related.] < 2/3		GO TO “Persuasive” subsection	
<input type="checkbox"/>		2/3 ≤ [Negative is not related.]		GO TO “Final” subsection → (B)		
Persuasive	Motion and Reason (check one)	<input type="checkbox"/>	Negative is related and persuasive. (Needs >1/3 votes to pass.)			
		<input checked="" type="checkbox"/>	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)			

		Reason	Because the task force and committee have already spent an asinine amount of time on this topic			
Motion by/ 2 nd by	Clifton Brick (KLA) / Sean Larsen (Lam Research Corporation)					
Discussion	None					
Result of Vote (check one)	5 Y-1N; Motion passed					
		[Negative is related and persuasive.] > 1/3	Is a technical change recommended? (check one)		Y	GO TO "Address by Technical Change Option" subsection
		[Negative is related and not persuasive.] < 2/3			N	GO TO "Final" subsection → (E)
	x	2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO "Final" subsection → (C)			
		90% ≤ [Negative is related and not persuasive.]	GO TO "Not Significant Finding Option" subsection			
Technical Change Recommendations Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.						
Address by Technical Change Option	Technical Changes	1	FROM: Section/Paragraph XXX			
			TO: Section/Paragraph xxx			
			Justification (if necessary)			
		2	FROM: Section/Paragraph XXX			
			TO: Section/Paragraph xxx			
			Justification (if necessary)			
Motion		Negative is addressed by the technical change(s).				
Motion by/2 nd by		Name (Company)/Name (Company)				
Discussion						
Result of Vote (check one)	XX Y-XX N; Motion passed/failed.					
		2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO "Incorporation of the Technical Change" subsection			
		[Negative is not addressed by the technical change(s).] < 2/3	GO TO "Final" subsection → (E)			
Incorporation of the	Motion		To incorporate the technical change(s).			
	Motion by/2 nd by		Name (Company)/Name (Company)			
	Discussion					
			XX Y-XX N; Motion passed/failed.			

		Result of Vote (check one)	<input type="checkbox"/> 90% ≤ [Agree to incorporate.]	GO TO “Final” subsection → (F)	
			<input type="checkbox"/> [Disagree to incorporate.] > 10%	GO TO “Final” subsection → (E)	
Not Significant Finding Option	This option can be used only “if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action”. (Regulations ¶ 9.6.1.4.5.2)				
	Use of “Not significant finding option” (check one)	<input type="checkbox"/>	It is mutually agreed upon to term the Negative “not significant”.	GO TO “Final” subsection → (D)	
		<input type="checkbox"/>	It is mutually agreed upon to term the Negative “significant”.	GO TO “Final” subsection → (C)	
		<input type="checkbox"/>	Whether or not the Negative is “not significant” is decided by a vote.		
	Motion	The Negative is “not significant”.			
	Motion by/ 2 nd by	Name (Company)/Name (Company)			
	Vote	<input type="checkbox"/>	XX Y-XX N; Motion passed with simple majority	GO TO “Final” subsection → (D)	
<input type="checkbox"/>		XX Y-XX N; Motion failed with simple majority	GO TO “Final” subsection → (C)		
Final	(check if applicable)	<input type="checkbox"/>	(A)	Withdrawn (counted under h in disposition)	
		<input type="checkbox"/>	(B)	Not related (counted under i in disposition)	
		<input checked="" type="checkbox"/>	(C)	Related and not persuasive (significant)	
		<input type="checkbox"/>	(D)	Not significant (counted under j in disposition)	
		<input type="checkbox"/>	(E)	Related and persuasive and not addressed by technical change	DOCUMENT FAILS
		<input type="checkbox"/>	(F)	Addressed by technical change (counted under k disposition)	
	(check if applicable)	<input type="checkbox"/>	Comment generated. See Section V-(ii) Comment # X.		

Disposition of Voting Interest Reject 1

Check only when the Document has not been failed.

1	Original number (#) of Negatives	(g)	
#	Number of Negatives withdrawn	(h)	
#	Number of Negatives found not related	(i)	
#	Number of Negatives found not significant	(j)	
#	Number of Negatives addressed by technical change (Negative becomes not significant)	(k)	
Final	<input type="checkbox"/>	$g - (h + i + j + k) = 0$	Reject is Not Valid and is not included in the denominator of § VI. Approval Conditions Check
	<input checked="" type="checkbox"/>	$g - (h + i + j + k) > 0$	Reject is included in the denominator of § VI. Approval Conditions Check
	<input type="checkbox"/>	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 ¶ 9.4.3.3)

Note: A Negative addressed by a technical change is automatically considered to be not significant. (Regulations ¶ 9.6.1.4.5.2)

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* § 9.6.1.4.3 to make a technical change to the Document. (*Regulations* ¶ 9.6.1.4.2.5)

None

V. Comments

V- (i) Voters' 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* ¶ 9.6.2.1.2)

APPROVAL CONDITION 2: At least 90% of the sum of valid Voting Interest Accept and Voting Interest Reject Votes must be Accept. (*Regulations* ¶ 9.6.2.1.3)

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

		Accepts		(Accepts + Valid Rejects)				
Approval Rate	=	48	/	49	=	98.0%	≥90%	

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

Note: See *Regulations* § 9.6.2 for further information.

☒

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 Interest:	Returned Votes		Distribution		Return Rate	
Letter Ballot	69	÷	115	=	60.0%	≥60%
Intercommittee Ballot	36					
Voting Interest Reject(s)	0		Total Voters with Rejects			0
Voting Interest Accept(s)	48					

III. Rejects None

IV. Other Technical Issues None

V. Comments

V- (i) Voters' Comments

Commenter 1 (**Supika Mashiro/TEL**) - Comment 1

Comment	*TF/TC Chapter to fill in section/paragraph #, if necessary.				
	It seems ineffective to evaluate fire risks through harm to human rather than to directly evaluate potential magnitude of damage on properties (e.g., equipment or its subsystem), as most of the cases fire would affect human safety through burning of properties.				
Action	The TC Chapter agreed to do one of the following actions.				
	*No motion is required in this step.				
	<input type="checkbox"/>	Already addressed by Commenter #, Comment #			
	<input checked="" type="checkbox"/>	No further action was taken by the TC Chapter.			
	<input type="checkbox"/>	Refer to the TF for more consideration.			
	<input type="checkbox"/>	New Business			
	<input type="checkbox"/>	Editorial Change			
	Options for editorial change (check one)	<input type="checkbox"/>	Case 1: No vote in this section:		
			To be included and voted on as a group in § VI. Editorial Changes Other than Those Voted on in § V.		
		<input type="checkbox"/>	Case 2: Voted in this section:		
			Original section number and at least one full sentence are required in "FROM" and "TO" fields.		

Editorial Changes	1	FROM: Section/Paragraph xxx
		TO: Section/Paragraph xxx
		Justification (If necessary)
	2	FROM: Section/Paragraph xxx
		TO: Section/Paragraph xxx
		Justification (If necessary)
Motion		To approve above editorial change(s)
Motion by/2 nd by		Name (Company)/Name (Company)
Discussion		XXXX
Vote		XX Y-XX N; Motion passed/failed.

This table is needed for each Comment accompanied a Vote

V-(ii) Comments Created by Handling Negative None

VI. Editorial Changes Other than Those Voted on in § V None

VII. Approval Conditions Check

VII. - (i). Approval Rate

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

Note: See *Regulations* § 9.6.2 for further information.

☒

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 applies to the entire Standard or Safety Guideline including all the approved Line Items. See § 15 of the Regulations for further information.

Motion		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)
	x	This is a Safety Document , when all safety-related information is removed, the Document is not technically sound and complete. (<i>Regulations</i> ¶ 8.7.2)
	x	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		Eric Sklar (Safety Guru, LLC) / Edward Karl (Applied Materials, Inc.)
Discussion		None
Vote		7 Y-0 N; Motion passed

IX. Intellectual Property (IP) Check

Note: This Letter Ballot may cover all or part of a Standard or Safety Guideline. Regardless of the coverage, this IP check applies to the entire Standard or Safety Guideline including all the approved Line Items*. See Regulations § 16 for further information.

x	The TC Chapter meeting chair asked those participating, if they were aware of any patented technology that might be relevant (see <i>Regulations</i> ¶ 16.3.1.1) to the Standard or Safety Guideline; or, any copyrighted items or trademarks that are used/reproduced (see <i>Regulations</i> ¶ 16.4.1.2) in the Standard or Safety Guideline. (Also see, <i>Regulations</i> § 8.8)				
	x	The question is NOT answered in affirmative (No potentially material patented technology or use/reproduction of copyrighted items/trademarks is known.)	GO TO SECTION X.		
		The question is answered in affirmative	Is any of the known IPs a patented technology?	Yes, at least one of them is a patented technology	GO TO IX (a) "Patented Technology" subsection
				No	GO TO IX (b) "Copyright items" subsection

IX(a) Patented Technologies subsection

IX(a1) Total numbers of Patented Technologies to be dealt with

# Fill number	(l) Known Patented Technology that might be relevant to	# Fill number	(m) Number of patented technologies first became known to the TC Chapter on or after the day of the issuance of this Letter Ballot	Postpone assessment of such patented technologies to be performed at the next scheduled TC Chapter meeting.
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	the Standard/Safety Guideline	# Fill number	(n) Number of patented technologies first became known to the TC Chapter before the day of the issuance of this Letter Ballot	GO TO IX (a2)
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IX(a2) Assessment of disclosed patented technologies

Disclosed patented technology #1 (Brief description, e.g., patent title and number):				Date of Assessment (If different from the date of Letter Ballot adjudication) MM/DD/YYYY	
Is disclosed patented technology #1 found to be "might be material" to the Standard/Safety Guideline?		YES (It is a PMPT)	Is the use of this PMPT technically justified?	YES	PROCEED to assess NEXT one, or if this is the last one, GO TO IX(a3)
				NO	The Document is failed and returned to the TF
			NO	No further action is needed for patented technology #1	

This table is needed for each disclosed patented technology.

IX(a3) LOA status check of PMPT of which inclusion assessed to be justified

LOA Status of PMPT #1						
Has an LOA for this patented technology been received from every owner ?		YES	PROCEED to check NEXT one, or if this is the last one, GO TO IX(b)			
		NO	MOTION		Ask ISC for special permission to publish.	
					Quit activity.	The Document is failed and returned to the TF
					Wait for LOA	PROCEED to check NEXT one, or if this is the last one, GO TO IX(b1)
			Motion by/ 2 nd by		Name (Company)/Name (Company)	
			Discussion		XXXX	
			Vote		XX Y-XX N; Motion passed (or failed)	

This table is needed for each PMPT of which inclusion assessed to be justified.

IX(b1) Total numbers of copyrighted items to be dealt with

# Fill number	(o) Known copyrighted items that are used or reproduced to the Standard/Safety Guideline	o > 0 There is at least one known copy righted items that might be relevant to the Standard/Safety Guideline	GO TO IX (b2)
		o = 0 There is no disclosed copyrighted item	GO TO IX (c)

IX(b2) Assessment of disclosed copyrighted items

Disclosed copyrighted item #1 (Brief description of its use in the Document):					
Is disclosed copyrighted item #1 used or reproduced in the Standard/Safety Guideline?		YES	Is the use/reproduction of this copyrighted item technically justified?	YES	PROCEED to assess NEXT one, or if this is the last one, GO TO IX(b3)
				NO	The Document is failed and returned to the TF
		NO	No further action is needed for copyrighted item #1		

This table is needed for each disclosed copyrighted item.

IX(b3) Copyright release status check of copyrighted item of which inclusion assessed to be justified

Copyright release Status of copyrighted item #1					
Has the copyright release been received from its owner ?.		YES	PROCEED to assess NEXT one, or if this is the last one, GO TO IX(c)		
		NO	MOTION		Ask ISC for special permission to publish.
					Quit activity.
					Wait for copyright release letter
			Motion by/ 2 nd by		Name (Company)/Name (Company)
			Discussion		XXXX
			Vote		XX Y-XX N; Motion passed (or failed)

This table is needed for each copyrighted item of which use/reproduction assessed to be justified.

IX(c) Assessment of disclosed (identified) trademark

Is there any trademark in the Standard/Safety Guideline?		YES	Is every instance of trademark use technically justified?	YES	GO TO IX(d)
				NO	The Document is failed and returned to the TF
		NO	GO TO IX(d)		

IX(d) IP check completion condition check

The co-chair checks if any Patented Technologies first become known to the TC Chapter on or after the day of the issuance of this Letter Ballot? i.e., m>0 in IX(a1)		YES	Sections IX(a2) and IX(a3) shall be completed and recorded for such patented technologies at next scheduled meeting of the TC Chapter. Until then, the TC Chapter shall NOT go to X (making motion to pass/fail this Document) (see Regulations ¶ 16.4.1.2) Until then this Letter Ballot Review is on hold.		
		NO	GO TO X		

X. Action for This Document

Motion (Check all applicable items)	<input checked="" type="checkbox"/>	Line item(s) [1] and [2] passed TC Chapter review as balloted and will be forwarded to the ISC A&R SC for procedural review.
	<input type="checkbox"/>	Line item(s) [X], [X] and [X] passed TC Chapter review with editorial changes and will be forwarded to the ISC A&R SC for procedural review.
	<input type="checkbox"/>	Line item(s) [X], [X] and [X] passed TC Chapter review with technical changes and with or without editorial changes and will be forwarded to the ISC A&R SC for procedural review. A Ratification Ballot will be issued to verify the technical changes.
	<input type="checkbox"/>	Line item(s) [X], [X] and [X] failed TC Chapter review and will be returned to the TF for rework.
	<input type="checkbox"/>	Line item(s) [X], [X] and [X] failed TC Chapter review and work will be discontinued.
Motion by/ 2nd by		Edward Karl (Applied Materials, Inc.) / Andrew Petraszak (TEL)
Discussion		None
Vote		7 Y-0 N
Final Action	<input checked="" type="checkbox"/>	Motion passed
	<input type="checkbox"/>	Motion failed

Note: If the use of PMPT or copyrighted item is justified by the TC Chapter, LOA or release form must be received before publication can proceed.