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

Doc	ument Number	Document Title			
6593		Line Item Revision to SEMI S2-0818Ea,			
		Environmental, Health, and Safety Guideline for			
		Semiconductor Manufacturing Equipment (Delayed			
		Revision related to Section 18 Mechanical Design)			
о Г	Line Item 1	Line Item Title			
+ -	Line item i	Revision to section 18.7.5			

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	73	÷	119	=	61.3%	≥60%	
Intercommittee Ballot	46						
Voting Interest Reject(s)	2		Total	Vote	rs with Rejects	2	
Voting Interest Accept(s)	52	Ì					

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

III. Rejects

Voting Interest Reject 1 (Voting Interest Name: GlobalFoundries)
Voter Reject 1 (Voter: Lyman Tinc/GlobalFoundries)

Negative 1

<u>g</u>	ative 1				
7	Referenced Section/	*TF/	TC Chapter to fill in, in	cluding text in the ballot if nec	essary.
leg	Paragraph				
Negative	Negative Text		ginal complete Negativied. to concern with the us	ve text (e.g., issue, justification se of "should"	, suggestion) should be
TF	nput (optional)				
	Withdrawal	Х	No Negative withdrawa	I made by Voter.	GO TO "Related" subsection
	(check one)		Withdrawal document r MM/DD/YYYY.	eceived by Standards staff on	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	ne (Company)/Name (C		
Related	Discussion				
		XX Y	Y-XX N; Motion passed/	failed.	
	Result of Vote (check one)		[Negative is not related	.] < 2/3	GO TO "Persuasive" subsection
	(crocus croy		2/3 ≤ [Negative is not re	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)	х	Negative is related and	not persuasive. (Needs ≥2/3 vot	tes to pass.)

				Re	eason	additi perta to "sh use o stemi would 18.7.: concu long-s your	on or deletion of ns to the appropria all", it has been a f the word "shall" in ming for liability of like the words "s 5, you would new arrence to start a contract of standing SEMI re- negative, I would a	f the wateness standin criteria oncerns should ed to conew Tasquirement apprecial ess you should		
		otio 2 nd	n by/ by	Edward	d Karl (Applied Mate	erials, Ir	nc.)/ Lauren Crane	(TEL)		
	Di	scu	ssion	None						
				13 Y- 0	N ; Motion passed					
	Result of Vote				egative is related a rsuasive.] > 1/3	nd	ls a technical change recommended?	Y	Technical Change Option" subsection	
	(check one)		k one)		egative is related a ersuasive.] < 2/3	nd not	(check one)	N	GO TO "Final" subsection → (E)	
				v 2/3	3 ≤ [Negative is rela d not persuasive.] •		GO TO "Final" s	ubsecti		
				90	% ≤ [Negative is re d not persuasive.]		GO TO "Not Sign	nificant	Finding Option" subsection	
		inal			ommendations aph number and a	t least	one full sentence	are rec	juired in "FROM" and "TO"	
Ad			FROM:	Section	/Paragraph XXX					
ldres		1	TO: Se	ction/Pa	aragraph xxx					
s by	Tech		Justific	ation (I	ation (If necessary)					
Tech	Technical Changes		FROM:	Section	n/Paragraph XXX					
nica	Cha									
I Chan	nges	2	TO: Se	ction/Pa	aragraph xxx					
dress by Technical Change Option			Justific	ation (I	f necessary)					
on	Moti	on	-		Negative is addre	essed by	the technical cha	nge(s).		
	Moti	on k	y/2 nd by	/	Name (Company)/Name	(Company)			
	Disc	uss	ion							
	Result of Vote			XX Y-XX N; Motion	on pass	ed/failed.				

		(check on	e)		2/3 ≤ [N change	legative is addressed by the technical (s).]	GO TO "Incorporation of the Technical Change" subsection				
						ve is not addressed by the technical (s).] < 2/3	GO TO "Final" subsection → (E)				
		Motion		To	To incorporate the technical change(s).						
	Inco	Motion by/	2 nd b	y Na	Name (Company)/Name (Company)						
	Incorporation of the Technical Change	Discussion									
	itioi al C			XX	Y-XX N;	Motion passed/failed.					
	n of th hang	Result o		е	90% ≤ [Agree to incorporate.]	GO TO "Final" subsection → (F)				
	าe e	(check	one)		[Disagre	ee to incorporate.]>10%	GO TO "Final" subsection → (E)				
z						TC Chapter finds a Negative not pers ng on the action". (<i>Regulations</i> ¶ 9.6.					
ot Si	Use of "Not significant finding option" (check one)			It is mu signific		eed upon to term the Negative "not	GO TO "Final" subsection → (D)				
Not Significant Finding Option				It is mu "signifi		eed upon to term the Negative	GO TO "Final" subsection → (C)				
t Fi				Wheth	er or not tl	ne Negative is "not significant" is decide	ed by a vote.				
ndi	ı	Motion	The	Negati	pative is "not significant".						
ng Op		otion by/ 2 nd by	Nam	e (Con	npany)/Na	me (Company)					
tion		Vote		XX Y->	XX N; Moti	on passed with simple majority	GO TO "Final" subsection → (D)				
		vote		XX Y->	⟨X N ; Moti	on failed with simple majority	GO TO "Final" subsection → (C)				
					(A)	Withdrawn (counted under h in disp	oosition)				
					(B)	Not related (counted under i in disp	osition)				
	(0	check if	Х		(C)	Related and not persuasive (significal	nt)				
Final		plicable)			(D)	Not significant (counted under j in d	isposition)				
a					(E)	Related and persuasive and not addressed by technical change	DOCUMENT FAILS				
					(F)	Addressed by technical change (cou	nted under k disposition)				
	(check if applicable)			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)

#			of Negatives addressed by technical change (Negative s not significant) (k)								
			g - (h + i + j + k) = 0	Reject is Not Valid and denominator of § VI. A	l is not included in the pproval Conditions Check						
	Final	х	g - (h + i +j + k) >0	Reject is included in the Approval Conditions							
			Reject without a Negative								

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)

Voting Interest Reject 2 (Voting Interest Name: Safety Guru) Voter Reject 1 (Voter: Eric Sklar/Safety Guru)

Negative 1

1109	Negative 1								
	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary. 18.7.5							
Z		сор	ied.	ve text (e.g., issue, justification	,				
Negative			ative: Do not change agraph.	· "Lifting Equipment" to "Hinge	d Loads" at the start of the				
e	Negative Text	axis sup text pro	Reason/Justification: A "hinged load" is defined as a load supported by a hinge, the axis of which is not vertical. However, this paragraph is about the mechanisms that support and move hinged loads, not the hinged loads themselves. Therefore, the text in italics should not be "Subsequently produced hinged loads". "Subsequently produced mechanisms supporting and moving hinged loads" would work. Deleting the italicized text and the em dash would work, as well.						
TF input (optional) The TF vote was 8-2 in favor.									
	Withdrawal	х	No Negative withdrawa	GO TO "Related" subsection					
	(check one)		Withdrawal document r MM/DD/YYYY.	GO TO "Final" subsection → (A)					
	Motion and	×	'Related' is mutually ag	GO TO "Persuasive" subsection					
	Reason		Negative is not related.						
	(check one)		Reason	xxxx					
Rel	Motion by/ 2 nd by	Name (Company)/Name (Company)							
Related	Discussion								
		XX	Y-XX N; Motion passed/	failed.					
	Result of Vote (check one)		[Negative is not related	.] < 2/3	GO TO "Persuasive" subsection				
	(SHOOK OHE)		2/3 ≤ [Negative is not re	elated.]	GO TO "Final" subsection → (B)				

			x Ne	egative is related and	persu	asive. (Needs >1/	3 vo	tes t	to pass.)		
	F	tion and Reason	Ne	egative is related and	not pe	ersuasive. (Needs	≥2/3	3 vot	es to pass.)		
	(CII	eck one)	Re	eason 2	XXXX	(
ا		otion by/ 2 nd by	Edward	d Karl (Applied Materia	als, In	nc.)/ Lauren Crane	(TEI	_)			
Persuasive	Dis	scussion	None								
ıasi			13 Y- 0	N ; Motion passed							
ve	Resi	ult of Vote		X [Negative is related and persuasive.] > 1/3		ls a technical change recommended?	Х	Υ	GO TO "Address by Technical Change Option" subsection		
		eck one)	pe	egative is related and ersuasive.] < 2/3		(check one)		N	GO TO "Final" subsection → (E)		
				3 ≤ [Negative is relate id not persuasive.] < 9		GO TO "Final" s	ubse	ectio	n → (C)		
			90	90% ≤ [Negative is related and not persuasive.] GO TO "Not Significant Finding Option"							
	Tech	nical Chan	ge Reco	ommendations							
	Origi fields		/paragra	aph number and at l	east (one full sentence	are	requ	ired in "FROM" and "TO"		
		FROM:									
Address by T	Techr	assemb 18.7.4.4 accomp least 10	ly supp 1 <u>. and 1 vany eac</u>	oorting and moving have records kept	g a h in ac r y. Tl	ninged load shou ecordance with he supplier shoul	ald 1 § 18	be t 3.7. 4	pads — Each hinged load ested in accordance with § 1.5. Test certificates should a copy of test records for at		
Technical Change Option	nical Changes	Each su should 18.7.4. retain a 18.7.4.	be teste 5. Test of copy of 4.4.6), for	ed in accordance wit certificates should a of the test records, in for at least 10 years	ed loa h § 1 ccom icludi	nd assembly supp 8.7.4.4 <u>.</u> and have apany each unit u ing the results of	ortine rec pon the	ng ar ords deli test	Assemblies — nd moving a hinged load when the secondaria with		
				f necessary) vellow highlighted							
	Motic			Negative is address	sed by	the technical cha	nge(s).			
	Motic	n by/2 nd by	/	Eric Sklar (Safety G	iuru, l	LC) /John Visty (S	Salus	Eng	gineering)		
	Discu	ıssion		None							
		Result of V	ote	12 Y -0 N ; Motion pa	assec						

		(check on	e)		X	2/3 ≤ [Ne change(s	egative is addressed by the technical	GO TO "Incorporation of the Technical Change" subsection				
						[Negative change(s	e is not addressed by the technical s).] < 2/3	GO TO "Final" subsection → (E)				
	lr	Motion			To incorporate the technical change(s).							
	ncor Tecl	Motion by/	2 nd k	у	Eric	Sklar (Sa	nfety Guru, LLC) /John Visty (Salus Eng	gineering)				
	por,	Discussion)		None							
	atic				10 Y	′-0 N ; Mo	tion passed					
	Incorporation of the Technical Change	Result o			X	90% ≤ [A	gree to incorporate.]	GO TO "Final" subsection → (F)				
		(check					e to incorporate.]>10%	GO TO "Final" subsection → (E)				
Z							C Chapter finds a Negative not pers g on the action". (<i>Regulations</i> ¶ 9.6.					
lot Sig	Us	e of "Not		It is sign			ed upon to term the Negative "not	GO TO "Final" subsection → (D)				
Not Significant Finding Option	findi	significant nding option" (check one)			mutu nifica		ed upon to term the Negative	GO TO "Final" subsection → (C)				
t Fi	•	•		Whe	ther	or not the	e Negative is "not significant" is decide	d by a vote.				
ndi	N	Motion	The	Neg	egative is "not significant".							
ng Op		otion by/ 2 nd by	Nan	ne (C	omp							
tion		Vote		XX Y	Y-XX	(N; Motic	on passed with simple majority	GO TO "Final" subsection → (D)				
		VOLE		XΧ	Y-XX	(N; Motic	n failed with simple majority	GO TO "Final" subsection → (C)				
					(/	A)	Withdrawn <mark>(counted under h in disp</mark>	osition)				
					(l	B)	Not related (counted under i in disp	osition)				
	(0	heck if			(C)	Related and not persuasive (significar	nt)				
Final	ар	plicable)			(l	D)	Not significant <mark>(counted under j in d</mark> i	isposition)				
<u>a</u>						E)	Related and persuasive and not addressed by technical change	DOCUMENT FAILS				
	1.	la a ala id	X		(F)	Addressed by technical change (cour	nted under k disposition)				
	(check if applicable)			Com	nmer	ment generated. See Section V-(ii) Comment # X.						

Negative 2

Neg	ative 2												
	Referenced	*TF/TC Chapter to fill in, in	ncludir	ng text in the bal	ot if	nec	essary.						
	Section/ Paragraph	18.7.5											
Negative		*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.											
ative	Negative Text	Negative: Do not delete "and have records kept in accordance with 18.7.4.5".											
			t a min	imum, the records			g that specifies what is to be ontain the test procedure,						
TFi	nput (optional)	The TF vote was 9-0 in fav		·									
	Withdrawal	x No Negative withdrawa	ıl made	by Voter.			GO TO "Related" subsection						
	(check one)	Withdrawal document ro	eceive	d by Standards st	aff or	1	GO TO "Final" subsection → (A)						
	Motion and	'Related' is mutually ag	reed u	pon. (Needs no n	notio	n.)	GO TO "Persuasive" subsection						
	Reason	Negative is not related.	(Need	ls ≥2/3 votes to p	ass.)							
	(check one)	Reason											
Rel	Motion by/ 2 nd by	Name (Company)/Name (Company)											
Related	Discussion	None											
	Result of Vote	XX Y-XX N; Motion passed/failed.											
		[Negative is not related.		GO TO "Persuasive" subsection									
	(1 11 1 1)	2/3 ≤ [Negative is not re		GO TO "Final" subsection → (B)									
	Matters	x Negative is related and persuasive. (Needs >1/3 votes to pass.)											
	Motion and Reason (check one)	Negative is related and	not pe	ersuasive. (Needs	≥2/3	vot	es to pass.)						
_	,	Reason	xxxx										
Persuasive	Motion by/ 2 nd by	Edward Karl (Applied Mate	erials,	Inc.)/ Bert Planti	ng (A	SM	L Netherlands BV)						
Vise	Discussion	None											
ē		13 Y -0 N ; Motion passed.											
	Result of Vote (check one)	X [Negative is related and persuasive.] > 1/3		Is a technical change recommended?	х	Y	GO TO "Address by Technical Change Option" subsection						
		[Negative is related and persuasive.] < 2/3		N	GO TO "Final" subsection → (E)								

Ī	•									
						egative is related persuasive.] < 90%	GO TO "Final" subsection	$on \rightarrow (C)$		
				90%	ا] ≥ ہٰ	Negative is related	GO TO "Not Significant I	Finding Option" subsection		
	Tech	nic	al Chanc			persuasive.] ndations	To To Hot Olgimicant	manig option cascocion		
	Origi fields		section	paragra	ph n	umber and at least of	one full sentence are requ	uired in "FROM" and "TO"		
	Helas	•								
			FROM:							
	Tec		assemb 18.7.4.4 accomp	ly suppo 1 <u>. and h</u> pany each	ortin ave h un	g and moving a h	ninged load should be the coordance with § 18.7.4 he supplier should retain	coads — Each hinged load tested in accordance with § 1.5. Test certificates should a copy of test records for at		
	nic		TO:							
	S S	1	1875	Subseau	ontl-	v Produced Lifting.	Equipment <u>Hinged Load</u>	⊊4ssomhlios —		
Address by Technical Change Option	Technical Changes							nd moving a hinged load		
ess.	jes		should	be tested	l in a	accordance with § 1	8.7.4.4. and have records	s kept in accordance with §		
by								ivery. The supplier should (¶ 18.7.4.4.4.1 through		
Tec							the date of shipment.	(10.7.4.4.1 unougn		
hni							1			
cal			Justification (If necessary) Added text in yellow highlighted							
Cha	Motic	ı n	n Negative is addressed by the technical change(s).							
nge					Edward Karl (Applied Materials, Inc.)/ Bert Planting (ASML Netherlands BV)					
ဝ	Motic	n l	oy/2 nd by	<u> </u>		, , , , , , , , , , , , , , , , , , ,				
tion	Discı	ıss	ion		None					
					9 Y-	0 N ; Motion passed		_		
		_	sult of V		x	2/3 ≤ [Negative is ac change(s).]	ddressed by the technical	GO TO "Incorporation of the Technical Change" subsection		
						[Negative is not addichange(s).] < 2/3	ressed by the technical	GO TO "Final" subsection → (E)		
	l _⊐ ₅		otion		To incorporate the technical change(s).					
	ech		otion by/		Eric Sklar (Safety Guru, LLC) / Lucian Girlea (Nikon Precision Inc.)					
	pora	Dis	scussior	1	None					
	atior				11 Y-0 N; Motion passed			GO TO "Final" subsection		
	Incorporation of the Technical Change		Result o		X	90% ≤ [Agree to inco	orporate.]	\rightarrow (F)		
	the ge		(check	one)		[Disagree to incorpo	rate.]>10%	GO TO "Final" subsection → (E)		
S	This	opt	ion can	be used	only	"if the TC Chapter	finds a Negative not pers	uasive by a vote equal to or		
Not Significan	great	er	than 90%	of the p	ers	ons voting on the ac	ction". (Regulations ¶ 9.6.	1.4.5.2)		
Not nifica				It is	mut	ually agreed upon to	term the Negative "not	GO TO "Final" subsection		
ıs					ifica		<u> </u>	→ (D)		

	Use of "Not significant finding option"		"significant".	greed upon to term the Negative	GO TO "Final" subsection → (C)	
	(check one)		<u> </u>	t the Negative is "not significant" is dec	eided by a vote.	
	Motion	The	Negative is "no	t significant".		
	Motion by/ 2 nd by	Name (Company)/Name (Company)				
	Vote		XX Y-XX N; M	otion passed with simple majority	GO TO "Final" subsection → (D)	
	Vote		XX Y-XX N; M	otion failed with simple majority	GO TO "Final" subsection → (C)	
			(A)	Withdrawn (counted under h in d	isposition)	
			(B)	Not related (counted under i in di	isposition)	
	(check if		(C)	Related and not persuasive (signification)	icant)	
팔	applicable)		(D) Not significant (counted under j		in disposition)	
nal			(E)	Related and persuasive and not addressed by technical change	DOCUMENT FAILS	
		Χ	(F)	Addressed by technical change (co	ounted under k disposition)	
	(check if applicable)		Comment gene	erated. See Section V-(ii) Comment #	X.	

Disposition of Voting Interest Reject 2

Check only when the Document has not been failed.

2	Original	Original number (#) of Negatives (g)						
#	Number	of N	egatives withdrawn		(h)			
#	Number	of N	egatives found not related		(i)			
#	Number of Negatives found not significant (j)							
2	Number of Negatives addressed by technical change (Negative becomes not significant) (k)							
	Final		g - (h + i + j + k) = 0	_	t Valid and is not included in the r of § VI. <i>Approval Conditions Check</i>			
			g - (h + i +j + k) >0	Reject is included in the denominator of § VI. Approval Conditions Check				
			Reject without a Negative					

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)

TC discussion of the technical change Referenced Section/ Paragraph *Original Comment text, if applicable, and problem statement, including and suggestion, should be copied. ¶ the use of 'shipment' in 18.7.5 and 18.6.3, is not aligned with the Mac Directive, which notes indicate we are striving to be in alignment with convenient to industry which tends to record date of manufacture modulate of shipment - without a commensurate benefit to safety.	te response					
Referenced Section/Paragraph *Original Comment text, if applicable, and problem statement, includir and suggestion, should be copied. Reason Reason *TF/TC Chapter to fill in including text in the ballot as appropriate. *Original Comment text, if applicable, and problem statement, includir and suggestion, should be copied. ¶ the use of 'shipment' in 18.7.5 and 18.6.3, is not aligned with the Mac Directive, which notes indicate we are striving to be in alignment with convenient to industry which tends to record date of manufacture modate of shipment - without a commensurate benefit to safety. Handle technical issue identified above as a Negative. 'Related' is mutually agreed upon. (Needs no motion.) X Negative is not related. (Needs ≥2/3 votes to pass.) Negative is not related and placed on agenda of current TC Chapter materials.	Comment # (Voter: Name and company) / A reason not addressed by a Vote response					
Reason The use of shipment in 16.7.5 and 16.6.3, is not aligned with the Mac Directive, which notes indicate we are striving to be in alignment with convenient to industry which tends to record date of manufacture mo date of shipment - without a commensurate benefit to safety. Handle technical issue identified above as a Negative. 'Related' is mutually agreed upon. (Needs no motion.) X Negative is not related. (Needs ≥2/3 votes to pass.) Negative is not related and placed on agenda of current TC Chapter in						
Reason The use of shipment in 16.7.5 and 16.6.3, is not aligned with the Mac Directive, which notes indicate we are striving to be in alignment with convenient to industry which tends to record date of manufacture mo date of shipment - without a commensurate benefit to safety. Handle technical issue identified above as a Negative. 'Related' is mutually agreed upon. (Needs no motion.) X Negative is not related. (Needs ≥2/3 votes to pass.) Negative is not related and placed on agenda of current TC Chapter in						
Reason The use of shipment in 16.7.5 and 16.6.3, is not aligned with the Mac Directive, which notes indicate we are striving to be in alignment with convenient to industry which tends to record date of manufacture mo date of shipment - without a commensurate benefit to safety. Handle technical issue identified above as a Negative. 'Related' is mutually agreed upon. (Needs no motion.) X Negative is not related. (Needs ≥2/3 votes to pass.) Negative is not related and placed on agenda of current TC Chapter in	ng justification					
Wotion and Reason Related' is mutually agreed upon. (Needs no motion.) GO TO "subsection	, and it is not					
Motion and Reason Motion and Reason Motion and Reason Negative is not related. (Needs ≥2/3 votes to pass.) Negative is not related and placed on agenda of current TC Chapter makes the contract of the c						
Reason Negative is not related and placed on agenda of current TC Chapter m	Persuasive" on					
Reason Negative is not related and placed on agenda of current TC Chapter m						
huginoss /Nasada >2/2 vatas ta nasa \	neeting as new					
(check one) business. (Needs ≥2/3 votes to pass.)						
Reason XXXX						
Motion by/ 2nd by Eric Sklar (Safety Guru, LLC)/ John Visty (Salus Engineering)						
Eric Sklar: Not related to the balloted changes. The ballot does not include a to record retention period in section 18.7.5, and it includes no changes to Therefore, I do not believe it is related to the ballot. Discussion Lauren Crane: The technical changes proposed and accepted by the commendation of the details of what about the record laborated and accepted by the commendation of the details of what about the record laborated and accepted by the commendation of the details of what about the record laborated and accepted by the commendation of the details of what about the record laborated and accepted by the commendation of the details of what about the record laborated and accepted by the commendation of the details of the d	to section 18.6.3. mittee are related					
to the details of what should form 'the record' I am persuaded that a change of the 10 year clock is related, and that the similar section based on the likewise related.						
5 Y- 5 N; Motion failed.						
Result of Vote	Persuasive" on					
(check one) 2/3 ≤ [Negative is not related] and assigned to TF.	Final"					
1 1 2/2 < Nogotivo io not related and placed on agenda at I	ion → (B)					
X Negative is related and persuasive. (Needs >1/3 votes to pass.)						
Motion and Reason (check one) Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)						
Reason XXXX						

	Motion by/ 2 nd by	Andrew Petraszak (TEL)/ Lauren Crane (TEL)						
	Discussion	Eric Sklar: If this negative is found persuasive, the technical change is needed to make from shipment to manufacture. Supika Mashiro: If proposed technical change does not approved, the entire line item ballot fails. Andrew Petraszak: For the interest of time, he will lead the administrative process to create a new SNARF dealing with this negative in a different ballot. Lauren Crane withdraws the negative, but he presented the flaw in the ballot and svm.						
		XX	Y-XX N; Motion pa	ssed/failed.	Ī			
	Result of Vote	[Negative is rela persuasive.] > 1					Y	GO TO "Address by Technical Change Option" subsection
	(check one)		[Negative is related persuasive.] < 2/3		(check one)		N	GO TO "Final" subsection → (E)
			2/3 ≤ [Negative is related and not persuasive.] < 90%		GO TO "Final" subsection → (C)			
		Х	(A)	Withdrawn				
			(B)	Not related	ed .			
	(check one)		(C)	Related and	d not persuasive			
Final	(Siloun Gilo)		(E)		d persuasive and not by technical change		DOCUMENT FAILS	
			(F)	Addressed	by technical change)		
	(check if applicable)		Comment genera	ted. See Sec	tion V-(ii) Comment	# X.		

V. Comments

V- (i) Voters' Comments
Commenter 1 (Eric Sklar/Safety Guru) - Comment 1

_	Title Charles Salary Commone							
ري ري	*TF/TC Chapter to fill in section/paragraph #, if necessary.							
B	Ball	ot Title						
Comment	_	Comment: There appears to be a ballot preparation error in that the title includes "Line Item Revisions", but only one Line Item appears in the ballot.						
	The	e TC Chapt	ter aç	greed to do one of the following actions.				
	*No	*No motion is required in this step.						
Δ		Already addressed by Commenter #, Comment #						
Action	Х	No further action was taken by the TC Chapter.						
		Refer to the TF for more consideration.						
		New Business						
	Editorial Change							
		Options		Case 1: No vote in this section:				
		for editorial		To be included and voted on as a group in \S VI. Editorial Changes Other than Those Voted on in \S V.				

		change		Case 2: Voted in this section:			
		(check one)		Original section number and at least one full sentence are required in "FROM" and "TO" fields.			
		FROM: S	ectio	n/Paragraph xxx			
Ed	1	TO: Section/Paragraph xxx					
itorial (Justifica	tification (If necessary)				
Editorial Changes		FROM: Section/Paragraph xxx					
ľ	2	TO: Section/Paragraph xxx					
		Justification (If necessary)					
M	Motion		T	To approve above editorial change(s)			
M	Motion by/2 nd by		N	Name (Company)/Name (Company)			
Di	iscus	sion	X	XXXX			
V	Vote			X Y-XX N; Motion passed/failed.			

This table is needed for each Comment accompanied a Vote

Commenter 1 (Eric Sklar/Safety Guru) - Comment 2

				Todioty Gara, Gommont 2						
Co	*TF	*TF/TC Chapter to fill in section/paragraph #, if necessary.								
Comment	Pre	fatory Text								
ent		Comment: The note explaining the editorial changes is incomplete. There is a Section symbol (§) with no number following it in the last clause.								
	The	TC Chapt	ter aç	greed to do one of the following actions.						
	*No	motion is	requ	ired in this step.						
Δ		Already ad	Already addressed by Commenter #, Comment #							
Action	Х	No further	rther action was taken by the TC Chapter.							
		Refer to the	Refer to the TF for more consideration.							
		New Busin	lew Business							
Editorial Change				ge						
		Ontions		Case 1: No vote in this section:						
		Options for editorial		To be included and voted on as a group in § VI. Editorial Changes Other than Those Voted on in § V.						
				Case 2: Voted in this section:						

		change (check one)	Original section number and at least one full sentence are required in "FROM" and "TO" fields.				
	1	FROM: S	ction/Paragraph xxx				
Εd		TO: Section/Paragraph xxx					
itorial (Justificat	on (If necessary)				
Editorial Changes		FROM: Section/Paragraph xxx					
S	2	TO: Section/Paragraph xxx					
		Justificat	on (If necessary)				
М	Motion		To approve above editorial change(s)				
M	Motion by/2 nd by		Name (Company)/Name (Company)				
Di	Discussion		XXXX				
V	Vote		XX Y-XX N; Motion passed/failed.				

Commenter 1 (Eric Sklar/Safety Guru) - Comment 3

	*TF	*TF/TC Chapter to fill in section/paragraph #, if necessary.						
, 10 10 10 10 10 10 10 10 10 10 10 10 10	Dela	ayed Revisi	on X					
Comment	Comment: Why include several sections that do not contain changes in the DR Section? The DR Section should include only those portions of the document being changed. The ballot, however, is required to contain at least the prefatory Sections and the entirety of the Section(s) proposed to be changed.							
	The	e TC Chapt	ter aç	greed to do one of the following actions.				
	*No	*No motion is required in this step.						
A		Already addressed by Commenter #, Comment #						
Action		No further action was taken by the TC Chapter.						
		Refer to the TF for more consideration.						
		New Business						
	Х	Editorial Change						
		Options		Case 1: No vote in this section:				
		for editorial		To be included and voted on as a group in § VI. Editorial Changes Other than Those Voted on in § V.				
		change (check		Case 2: Voted in this section:				
		one)	Х	Original section number and at least one full sentence are required in "FROM" and "TO" fields.				

Current ballot

SEMI Draft Document #6593

Line Item Revisions to SEMI S2-0818E, Environmental, Health, and Safety Guideline for Semiconductor Manufacturing Equipment (Re: Delayed Revision on Mechanical Design, Hinged Load Assembly)

1 Purpose

2 Scope

3 Limitation

.

18 Mechanical Design

Line Item 1: Revision of 18.7.5.

18.7.5 Subsequently Produced Lifting Equipment Hinged Loads — Each hinged load assembly supporting and moving a hinged load should be tested in accordance with § 18.7.4.4. and have records kept in accordance with § 18.7.4.5. Test certificates should accompany each unit upon delivery. The supplier should retain a copy of test records for at least 10 years from the date of shipment.

TO:

1

SEMI Draft Document #6593

Line Item Revisions to SEMI S2-0818E, Environmental, Health, and Safety Guideline for Semiconductor Manufacturing Equipment (Re: Delayed Revision on Mechanical Design, Hinged Load Assembly)

Line Item 1: Revision of 18.7.5.

18.7.5 Subsequently Produced Lifting Equipment Hinged Loads — Each hinged load assembly supporting and moving a hinged load should be tested in accordance with § 18.7.4.4. and have records kept in accordance with § 18.7.4.5. Test certificates should accompany each unit upon delivery. The supplier should retain a copy of test records for at least 10 years from the date of shipment.

1 Purpose

2 Scope

3 Limitation

.

18 Mechanical Design

Justification (If necessary)

Error in ballot prep. Move all the entire prefatory Sections to the end of ballot.

Motion	To approve above editorial change(s)
Motion by/2 nd by	Edward Karl (Applied Materials, Inc.)/ Clifton Brick (KLA)
Discussion	XXXX
Vote	11 Y-0 N; Motion passed.

Commenter 2 (Lauren Crane (TEL)) - Comment 1

	*TF	/TC Chapter	to fill in section/paragraph #, if necessary.				
Comment	sectors sector	I accept the change as indicated in the Line item box. However, I think the ballot is poorly constructed and is ambiguous with regard to what will actually appear as a new delayed revision section in S2. My concern is roughly> The proposed delayed revision section does not currently exist in S2. Therefore, all of the proposed delayed revision text should be underlined. The current ballot shows a very large amount of existing S2 text repeated in the DR section which is not actually undergoing any change. It would like to see precise clarity in the text that will actually appear in the DR section, and how that DR section expresses the change that it will make to the body of the document when it it's date arrives.					
	The	e TC Chapter	agreed to do one of the following actions.				
	*No	motion is re	equired in this step.				
A		Already add	ressed by Commenter #, Comment #				
Action	Х	No further a	ction was taken by the TC Chapter.				
		Refer to the	TF for more consideration.				
		New Busines	ss				
		Editorial Cha	-				
		Options	Case 1: No vote in this section:				
		for editorial	To be included and voted on as a group in § VI. Editorial Changes Other than Those Voted on in § V.				
		change (check	Case 2: Voted in this section:				
		one)	Original section number and at least one full sentence are required in "FROM" and "TO" fields.				
		FROM: Section/Paragraph xxx					
Edito	1	TO: Section/Paragraph xxx					
itorial C		Justification (If necessary)					
rial Changes		FROM: Sec	tion/Paragraph xxx				
	2		n/Paragraph xxx				
		Justificatio	n (If necessary)				
M	otion	1	To approve above editorial change(s)				
M	otion	by/2 nd by	Name (Company)/Name (Company)				
Di	iscus	sion	XXXX				
V	ote		XX Y -XX N ; Motion passed/failed.				

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 other than listed in section V above.

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	=	52	/	53	=	98.1%	≥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.
x	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.

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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.

				ot a Safety Document, when all safety-related information is removed, the Document inically sound and complete. ($Regulations$ ¶ 8.7.1)										
Motion	x	Tr ted	nis is a Safe chnically sou	ty Document , when all safety-related information is removed, the Document is not and complete. (<i>Regulations</i> ¶ 8.7.2)										
		х		ecklist ($Regulations$ ¶ 15.3) is complete and has been included with the Document the balloting process. ($Regulations$ ¶ 15.1.2)										
	Moti	on	by/2 nd by	Lucian Girlea (Nikon Precision Inc.) / John Visty (Salus Engineering)										
	D	iscı	ussion	None										
Vote 11 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 <u>applies to the entire Standard or Safety Guideline</u> 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)											
	The question is NOT answered in affirmative (No potentially material patented technology or use/reproduction of copyrighted items/trademarks is known.)											
		The question is answered in affirmative		Yes, at least one of them is a patented technology	GO TO IX (a) "Patented Technology" subsection							
			technology?		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	(I) Known Patented Technology that might be relevant to	Fill	(m) Number of patented technologies first became known to the TC Chapter on or after the day of the issuance of this Letter Ballot	performed at the next
------	---------------------------------------------------------------	------	------------------------------------------------------------------------------------------------------------------------------------	-----------------------

the Standard/Safety Guideline	Fill	(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)
----------------------------------	------	-------------------------------------------------------------------------------------------------------------------------------	---------------

IX(a2) Assessment of disclosed patented technologies

Disclosed patented techno (Brief description, e.g., pate		Date of Assessment (If different from the date of Letter Ballot adjudication) MM/DD/YYYY							
Is disclosed patented	P		Is the use of this PMPT technically			PROCEED to assess NEXT one, or if this is the last one GO TO IX(a3)			
technology #1 found to be "might be material" to the Standard/Safety Guideline?				justified?		NO	The Document is failed and returned to the TF		
		NO	No furth	er action is nee	ded f	or patente	d 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												
		YES		PROCEED to check NEXT one, or if this is the last one, GO TO IX(b)								
Has an LOA for this patented technology		NO	ЭM		Ask ISC for spe	pecial permission to publish.						
been received from every owner?			MOTION		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)						
			Mot	tion	by/ 2 nd by	Name (Company)/Name (Company)						
			Discussion			XXXX						
			Vot	е		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		(o) Known copyrighted items that are used or reproduced to the	o > 0 There is at least one known copy righted items that might be relevant to the Standard/Safety Guideline	GO TO IX (b2)
nu	mber	Standard/Safety Guideline	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		YES	Is the use/reproduction of		YES	PROCEED to assess NEXT one, or if this is the last one, GO TO IX(b3)					
item #1 used or reproduced in the Standard/Safety Guideline?			this copyrighted item technically justified?		NO	The Document is failed and returned to the TF					
		NO	No further action is nee	ded f	for copyrig	hted 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

stinea										
Copyright release Status of copyrighted item #1										
		YES		PROCEED to assess NEXT one, or if this is the last one, GO TO IX(c)						
Has the copyright		NO	ЭM		Ask ISC for special po	ermission to publish.				
release been received from its owner?.			MOTION		Quit activity.	The Document is failed and returned to the TF				
					Wait for copyright release letter	PROCEED to check NEXT one, or if this is the last one, GO TO IX(c)				
			Mo	tion	by/ 2 nd by	Name (Company)/Name (Company)				
			Dis	cuss	ion	XXXX				
				е		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

	,		YES	GO TO IX(d)
Is there any trademark in the Standard/Safety Guideline?	YES	Is every instance of trademark use technically justified?	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

<u>a</u>			Line item(s) [X], [X] and [X] passed TC Chapter review as balloted and will be forwarded to the ISC A&R SC for procedural review.				
M (Ch pplica		Line	ine 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.				
Motion (Check all applicable items)	X	be for	Line item(s) [1] passed TC Chapter review with technical changes and with 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.				
ıs)		Line item(s) [X], [X] and [X] failed TC Chapter review and will be returned to the TF for rework. 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.) / Clifton Brick (KLA)							
Discussion Eric Sklar: What is the consequences of voting no? Supika Mashiro: This is required per Regulations. The vote to pass is a simple majority.		Supika Mashiro: This is required per Regulations.					
Vo	Vote 11 Y-0 N		11 Y-0 N				
Final Action		'n	x Motion passed				
		111	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.