Record of Letter Ballot Review by TC Chapter for Procedural Review

Region/Locale: Europe
Global Technical Committee: Compound Semiconductor Materials
TC Chapter Cochairs: Arnd Weber (SiCrystal)
Standards Staff: Kevin Nguyen

	Scheduled in Background Statement	Actual
Date	April 9, 2024	April 9, 2024
Location	OVTCCM	OVTCCM
Reason for Change of Date and/or Location (if changed)		

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

I. Document Number, Title, Lists of Line Items

Document Number	Document Title
7161	LINE-ITEM REVISION OF SEMI M93-0923 TEST METHOD FOR QUANTIFYING BASAL PLANE DISLOCATION DENSITY IN 4H-SIC BY X-RAY DIFFRACTION TOPOGRAPHY/IMAGING

	Line Item 1	Line Item Title
2 ⊏		Make changes in Appendix 1 as noted

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	70	÷	116	=	60.3%	≥60%
Intercommittee Ballot	38					
Voting Interest Reject(s)	0		Total Voters with Rejects			0
Voting Interest Accept(s)	65					

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

III. Rejects

None

IV. Other Technical Issues

None

V. Comments

V- (i) Voters' Comments

Commenter 1 (Kitabatake, Makoto (Self) - Comment 1

Comment	*TF/TC Chapter to fill in section/paragraph #, if necessary.	
	Appendix 1 is ok. I would like to comment on 3. Limitations. 3.3 The BPD density is assumed to be constant along the sample normal within the volume probed, which depends on the (hkil) reflection used (between 20 um and the full wafer thickness). The expression is not clear. The real BPD density should not be constant, because the BPD is not a threading dislocation. One possible guess is "The measured BPD density is assumed to be constant".	
Action	**The TC Chapter agreed to do one of the following actions.**	
	*No motion is required in this step.	
		Already addressed by Commenter #, Comment #
		No further action was taken by the TC Chapter.
	x	Refer to the TF for more consideration.
		New Business
		Editorial Change

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	=	65	/	65	=	100.0%	≥90%

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

Note: See *Regulations* § 9.6.2 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 global technical committee.**

Checks for Entire Document Including All Approved Line Items

VIII. Safety Check

Note: See *Regulations* § 15 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. (*Regulations* ¶ 8.7.1)
		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 (*Regulations* ¶ 15.3) is complete and has been included with the Document throughout the balloting process. (*Regulations* ¶ 15.1.2)
Motion by/2nd by		By: Christian Kranert / Fraunhofer IISB Second: Maria Cristina Sanna / GlobalWafers Company
Discussion		None
Vote		Result: 6-Y 0-N Voting Result: Pass - 100.00%

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*. 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 *Regulations* ¶ 16.3.1.1) to the Standard or Safety Guideline; or, any copyrighted items or trademarks that are used/reproduced (see *Regulations* ¶ 16.4.1.2) in the Standard or Safety Guideline. (Also see, *Regulations* § 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

X. Action for This Document

Motion	**x**	Line item(s) [1] passed TC Chapter review as balloted and will be forwarded to the ISC A&R SC for procedural review.
		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.
		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.
		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		By: Christian Kranert / Fraunhofer IISB Second: Shailaja Rao / Wolfspeed
Discussion		None
Vote		6-Y 0-N
Final Action	x	Motion passed
		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.