

Record of 6145A Line-item Letter Ballot Review by TC Chapter for Procedural Review

Region/Locale: **North America**

Global Technical Committee: **Metrics**

TC Chapter Cochairs: **David L. Bouldin/Fab Consulting, Vladimir Kraz/Best ESD, Mark Frankfurth (Cymer)**

Standards Staff: **Inna Skvortsova**

	Scheduled in Background Statement	Actual
Date	Wednesday, November 8, 2017	Wednesday, November 8, 2017
Location	SEMI HQ	SEMI HQ
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

Document Number 6145A		Document Title LINE ITEM REVISIONS TO SEMI E35-0312, GUIDE TO CALCULATE COST OF OWNERSHIP (COO) METRICS FOR SEMICONDUCTOR MANUFACTURING EQUIPMENT
List of Line Items	Line Item 1	Line Item Title Standardize terminology (e.g., measurement system, measurement system analysis [MSA]) to harmonize with SEMI E89.
	Line Item 2	Line Item Title Implement required changes due to the major revision and scope change implemented in referenced SEMI S16.
	Line Item 3	Line Item Title Add clarification on the 'good unit equivalents (GUE) per year' term.
	Line Item 4	Line Item Title Update the Related Documents section.
	Line Item 5	Line Item Title Miscellaneous minor technical and/or editorial changes needed.

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 (Line Item 1):

Voting Interest:	Returned Vote	Distributio	Return Rate	
Letter Ballot	33	÷ 55	= 60.0%	≥60%
Intercommittee Ballot	27			
Voting Interest Reject(s)	0	Total Voters with Rejects		0
Voting Interest Accept(s)	25			

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

III. Rejects - None

IV. Other Technical Issues - None

V. Comments - None

VI. Editorial Changes Other than Those Voted on in § V - 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APPROVAL CONDITION 1: All Negatives have been discussed and were withdrawn, found not related, found not persuasive, or addressed by a technical change.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	=	25	/	25	=	100.0%	≥90%

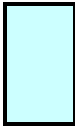
VII. – (ii) Approval Level (check one)

Note: See Regulations § 9.7.2 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 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 (Line Item 2):

Voting Interest:	Returned Vote	Distributio	Return Rate	
Letter Ballot	33	÷ 55	= 60.0%	≥60%
Intercommittee Ballot	27			
Voting Interest Reject(s)	0	Total Voters with Rejects		0
Voting Interest Accept(s)	25			

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

III. Rejects - None

IV. Other Technical Issues - None

V. Comments - None

VI. Editorial Changes Other than Those Voted on in § V - 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	=	25	/	25	=	100.0%		≥90%

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

Note: See Regulations § 9.7.2 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.

Line Item 3 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 (Line Item 3):

Voting Interest:	Returned Vote		Distributio		Return Rate	
Letter Ballot	33	÷	55	=	60.0%	≥60%
Intercommittee Ballot	27					
Voting Interest Reject(s)	0		Total Voters with Rejects		0	
Voting Interest Accept(s)	23					

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

III. Rejects - None

IV. Other Technical Issues - None

V. Comments - None

VI. Editorial Changes Other than Those Voted on in § V - 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	=	23	/	23	=	100.0%	≥90%

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

Note: See Regulations § 9.7.2 for further information.

Globally Approved (No Ratification Ballot needed):

Line Item 3 meets the Letter Ballot approval conditions for the global technical committee.

Need a Ratification Ballot:

Line Item 3 meets the Letter Ballot approval conditions for the TC Chapter and a Ratification Ballot will be issued to validate technical changes.

Line Item 4 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 (Line Item 4):

Voting Interest:	Returned Vote	Distributio	Return Rate	
Letter Ballot	33	÷ 55	= 60.0%	≥60%
Intercommittee Ballot	27			
Voting Interest Reject(s)	0	Total Voters with Rejects		0
Voting Interest Accept(s)	24			

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

III. Rejects - None

IV. Other Technical Issues - None

V. Comments - None

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

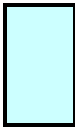
Note: If both approval conditions are not satisfied, the Document fails.

		Accepts	(Accepts + Valid Rejects)			
Approval Rate	=	24	/ 24	=	100.0%	≥90%

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

Note: See Regulations § 9.7.2 for further information.

X	<p>Globally Approved (No Ratification Ballot needed): Line Item 4 meets the Letter Ballot approval conditions for the global technical committee.</p>
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Need a Ratification Ballot:

Line Item 4 meets the Letter Ballot approval conditions for the TC Chapter and a Ratification Ballot will be issued to validate technical changes.

Line Item 5 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 (Line Item 5):

Voting Interest:	Returned Vote	Distributio	Return Rate	
Letter Ballot	33	÷ 55	= 60.0%	≥60%
Intercommittee Ballot	27			
Voting Interest Reject(s)	0	Total Voters with Rejects		0
Voting Interest Accept(s)	25			

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

III. Rejects - None

IV. Other Technical Issues - None

V. Comments - None

VI. Editorial Changes Other than Those Voted on in § V - 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	=	25	/ 25	=	100.0%		≥90%	

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

Note: See *Regulations § 9.7.2* for further information.

Globally Approved (No Ratification Ballot needed):

Line Item 5 meets the Letter Ballot approval conditions for the global technical committee.

Need a Ratification Ballot:

Line Item 5 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	<input checked="" type="checkbox"/>	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)
	<input type="checkbox"/>	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)
	<input type="checkbox"/>	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/2nd by		Vladimir Kraz (BestESD) / Supika Mashiro (TEL)
Discussion		NONE
Vote		5 Y-0 N; Motion passed

IX. Intellectual Property (IP) Check

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

<input checked="" type="checkbox"/>	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)	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	No potentially material patented technology or reproduction of copyrighted items is known. GO TO SECTION X.

* **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

Motion (Check all applicable items)	<input checked="" type="checkbox"/>	Line item(s) [1], [2], [3], [4] and [5] passed TC Chapter review as balloted and will be forwarded to the ISC A&R SC for procedural review.
	Motion by/ 2nd by	
	Vladimir Kraz (Best ESD) / Russell Fitzpatrick (Applied Materials)	
	Discussion	
	NONE	
Vote		
5 Y-0 N		
Final Action		
<input checked="" type="checkbox"/>	Motion passed	
<input type="checkbox"/>	Motion failed	

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

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