

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

Region/Locale: **Korea**

Global Technical Committee: **Information & Control**

TC Chapter Cochairs: **Chulhong Ahn/SK hynix, Kelvin Lee/Lam Research, Hyungsu Kim/Doople**

Standards Staff: **Natalie Shim**

	Scheduled in Background Statement	Actual
Date	03/19/2021	04/09/2021
Location	SEMI Korea, Seoul	SEMI Korea, Seoul
Reason for Change of Date and/or Location (if changed)	Force majeure caused by the corona virus.	

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

Document Information

I. Document Number, Title, Lists of Line Items

Document Number 6695	Document Title Line Item Revision to SEMI E87-0619 Specification for Carrier Management (CMS) and SEMI E87.1-0619 Specification for SECS-II Protocol for Carrier Management (CMS)
List of Line Items	Line Item 1 Line Item Title Modify the Statement of the “Carrier Ready To Unload Prediction” Specification

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 (with example values):

Voting Interest:	Returned Votes	Distribution	Return Rate	
Letter Ballot	91	÷ 151	= 60.3%	≥60%
Intercommittee Ballot	29			
Voting Interest Reject(s)	1	Total Voters with Rejects		1
Voting Interest Accept(s)	61			

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

III. Rejects

Voting Interest Reject 1 (Voting Interest Name: PEER Group)

Voter Reject 1 (Voter: Christian Hoffmann / PEER Group)

Negative 1

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary.			
	Negative Text	<p>*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.</p> <p>The state has been squeezed into the state machine and it has resulted in the need for changing the numbering for the states as well as the transitions. For the ease of implementation adjustments, I strongly recommend adding the new state to the end, i.e., associating SCT #29 to its transition for entering the sub-state. Consequentially in E87.1 the new state shall be represented as enum value 5 rather than injecting it as #1. Following this suggestion made the modification more easy to adopt and allowed for co-existence of earlier version of the standard and its protocol as well.</p>			
TF input (optional)					
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/ 2nd by	Name (Company)/Name (Company)			
	Discussion				
Result of Vote (check one)	<input type="checkbox"/>	XX Y-XX N; Motion passed/failed.			
	<input type="checkbox"/>	[Negative is not related.] < 2/3	GO TO "Persuasive" subsection		

			2/3 ≤ [Negative is not related.]			GO TO “Final” subsection → (B)	
Persuasive	Motion and Reason (check one)		Negative is related and persuasive. (Needs >1/3 votes to pass.)				
		X	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)				
			Reason	As with the modification of the Status Diagram, the Transition Number and Enumerated values are modified, and the compatibility with the earlier version of the standard was not maintained. The reason for doing this is to help users who use the standard to understand more easily because the transition numbers are sequentially arranged according to the order in which transitions between each state occur. In addition, since the CaRTUP function has been released as a standard and practically not applied in many cases, and there may be an opportunity to change the Transition Number sequentially. I look forward to your understanding.			
	Motion by/ 2 nd by	Byoung Min Im(Tokyo Electron Korea) / Jongsub Shim(ASMK)					
	Discussion	None					
	Result of Vote (check one)	9 Y - 0 N; 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)
			2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO “Final” subsection → (C)			
		X	90% ≤ [Negative is related and not persuasive.]	GO TO “Not Significant Finding Option” subsection			
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 ¶ 9.6.4.4.2)						
	Use of “Not significant finding option” (check one)	X	It is mutually agreed upon to term the Negative “not significant”.			GO TO “Final” subsection → (D)	
			It is mutually agreed upon to term the Negative “significant”.			GO TO “Final” subsection → (C)	
			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		XX Y-XX N; Motion passed with simple majority			GO TO “Final” subsection → (D)	
		XX Y-XX N; Motion failed with simple majority			GO TO “Final” subsection → (C)		
Final	(check if applicable)		(A)	Withdrawn (counted under h in disposition)			
			(B)	Not related (counted under i in disposition)			
			(C)	Related and not persuasive (significant)			

	<input checked="" type="checkbox"/>	(D)	Not significant (counted under j in disposition)
	<input type="checkbox"/>	(E)	Related and persuasive and not addressed by technical change
	<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)	
0	Number of Negatives withdrawn	(h)	
0	Number of Negatives found not related	(i)	
1	Number of Negatives found not significant	(j)	
0	Number of Negatives addressed by technical change (Negative becomes not significant)	(k)	
Final	<input checked="" 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 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 ¶ 9.6.4.4.2)

IV. Other Technical Issues

None

V. Comments

V- (i) Voters' Comments

Commenter 1 (Yao Ming / SMEE) - Comment 1

Comment	*TF/TC Chapter to fill in section/paragraph #, if necessary.	
	From the description of trigger 24, we still don't know how to determine to get into the PREDICTED state.	
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.

	Refer to the TF for more consideration.
	New Business
	Editorial Change

Commenter 1 (Yao Ming / SMEE) - Comment 2

Comment	*TF/TC Chapter to fill in section/paragraph #, if necessary.	
	if the exception occurred after Tp, it should enter either PREDICT ABORTED or PREDICTION COMPLETED state?	
Action	The TC Chapter agreed to do one of the following actions.	
	*No motion is required in this step.	
		Already addressed by Commenter #, Comment #
	X	No further action was taken by the TC Chapter.
		Refer to the TF for more consideration.
		New Business
		Editorial Change

Commenter 2 (Gino Crispieri / Gino Crispieri) - Comment 1

Comment	*TF/TC Chapter to fill in section/paragraph #, if necessary.	
	It appear to me that the state been proposed is not needed. The carrier object is created when a carrier is been known by the equipment. Therefore you either have prediction disabled or you are waiting to predict if predictions is enabled.	
Action	The TC Chapter agreed to do one of the following actions.	
	*No motion is required in this step.	
		Already addressed by Commenter #, Comment #
	X	No further action was taken by the TC Chapter.
		Refer to the TF for more consideration.
		New Business
		Editorial Change

Commenter 3 (Mie Sasaki / TokyoSeimitsu) - Comment 1

Comment	*TF/TC Chapter to fill in section/paragraph #, if necessary.	
	Is the state "WAITING FOR CARRIER" added to the model diagram showing the state of the carrier? I think it is the load port that waits for the carrier, not the carrier itself.	
Action	The TC Chapter agreed to do one of the following actions.	
	*No motion is required in this step.	
		Already addressed by Commenter #, Comment #
	X	No further action was taken by the TC Chapter.

	Refer to the TF for more consideration.
	New Business
	Editorial Change

Commenter 4 (Srinidhi Upadhya / Lam Research) - Comment 1

Comment	*TF/TC Chapter to fill in section/paragraph #, if necessary.	
	Out of current scope for Fundamental GEM300 requirements.	
Action	The TC Chapter agreed to do one of the following actions.	
	*No motion is required in this step.	
		Already addressed by Commenter #, Comment #
	X	No further action was taken by the TC Chapter.
		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
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			
Approval Rate	=	61	/	61	=	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.

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	X	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)
		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)
		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		Byoung Min Im (Tokyo Electron Korea) / Hyungsu Kim (Doople)
Discussion		None
Vote		9 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.

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)	
	X	No potentially material patented technology or reproduction of copyrighted items is known. GO TO SECTION X.
		Potentially material patented technology or reproduction of copyrighted items is known, but a Letter of Assurance (LOA) or copyright release letter for such items has been obtained or presented to the TC Chapter. GO TO SECTION X.
		Potentially material patented technology or reproduction of copyrighted items is known and use of such materials is technically justified by the TC Chapter, but an LOA or copyright release letter for some of the item(s) has NOT been obtained or presented to the TC Chapter.
M		Ask ISC for special permission to publish.

	<input type="checkbox"/>	Quit activity.
	<input type="checkbox"/>	Wait for LOA for patented technology or release of copyrighted items.
Motion by/2nd by	Byoung Min Im (Tokyo Electron Korea) / Hyungsu Kim (Doople)	
Discussion	None	
Vote	9 Y- 0 N	
Final Action	<input checked="" type="checkbox"/>	Motion passed
	<input type="checkbox"/>	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

Motion (Check all applicable items)	<input checked="" type="checkbox"/>	Line item [1] 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	Byoung Min Im (Tokyo Electron Korea) / Hyungsu Kim (Doople)	
Discussion	None	
Vote	9 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	<input type="checkbox"/>	Line item(s) [X], [X] and [X] are Approved for publication
	<input type="checkbox"/>	Line item(s) [X], [X] and [X] are Approved pending acceptance of the Ratification Ballot
	<input type="checkbox"/>	Line item(s) [X], [X] and [X] are Not approved
	Reason:	