Record of Letter Ballot Review by TC Chapter for Procedural Review

Region/Locale: Japan Global Technical Committee: Assembly & Packaging TC Chapter Cochairs: Kazunori Kato / AiT, Masahiro Tsuriya / iNEMI Standards staff: Chie Yanagisawa

	Scheduled in Background Statement	Actual
Date	10/16/2015	10/16/2015
Location	SEMI Japan office, Tokyo	SEMI Japan office, Tokyo

I. Document Number and Title

Document Number	Document Title
5835	New Standard: SPECIFICATION FOR ADHESIVE
	TRAY USED FOR THIN CHIP HANDLING

II. Tally (Standards staff to fill in)

Voting Tally: As-cast tally after close of voting period

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* \P 9.7.1.1)

Voting Tally (with	example values):
--------------------	------------------

Voting Interest:	Returned Votes		Distribution		Return Rate	
Letter Ballot	32	÷	53	=	60.4%	>=60%
Intercommittee Ballot	24]				
Voting Interest Reject(s)	1]	Total	l Vot	er with Rejects	1
Voting Interest Accept(s)	24]				
		-				

III. Rejects Voting Interest Reject 1 (Voting Interest Name: NIST) Voting Interest Reject 1- Voter Reject 1 (Voter: Richard Allen (NIST)) Negative 1 of Voting Interest Reject 1- Voter Reject 1

		*TF/	TC Chapter to fill in in	cluding text in the ballot if neces	sary.					
	Referenced									
7	Section/ Paragraph									
leg	i alagiapii									
Negative		*Original complete Negative text (e.g., issue, justification, suggestion) should be								
e		copi								
	Negative Text		General comments: Perhaps there should be a table showing the data that should be collected as part							
		of th	ne experiment (similar	to the list in the cited 2248)						
TFi	input (optional)			the experimental data. If it is need						
	,			ribes detail of measurement meth	GO TO "Related"					
	Withdrawal	X	No Negative withdrawa	al made by Voter.	subsection					
	(check one)			received by Standards staff on	GO TO "Final"					
			MM/DD/YYYY.		subsection → (A) GO TO "Persuasive"					
	Motion and	X	'Related' is mutually ag	greed upon. (Needs no Motion.)	subsection					
	Reason		Negative is not related	(Needs ≥2/3 votes to pass.)						
	(check one)		Reason	XXXX						
			Reason	~~~~						
Re	Motion by/2nd by	Nam	ne (Company)/Name (C	ompany)						
Related	Ē									
þ	Discussion									
		XX-X	XX; Motion passed/faile	ed.						
	Result of Vote		[Negative is not related	.] <2/3	GO TO "Persuasive"					
	(check one)		[subsection					
			2/3≤ [Negative is not re	elated.]	GO TO "Final" subsection → (B)					
			Negative is related and	persuasive. (Needs >1/3 votes to	nass)					
			regative is related and		puss./					
	Motion and Reason	x	Negative is related and	l not persuasive. <mark>(Needs ≥2/3 vote</mark> s	s to pass.)					
	(check one)			It is not necessary for this sp						
P			Reason	showing the data that should I experiment.	be collected as part of the					
Persuasive	Motion by/2nd				`					
las	by	Haru	uo Shimamoto (AIST) /	Nobuhiro Shinozuka (Shin-Etsu Pol	ymer)					
ive	Discussion	Non	е							
		12-0	; Motion passed.							
	Result of Vote		[Negative is related an	d persuasive.] Is a Technical Y						
	(check one)		>1/3	Change Recommended	Technical Change Option" subsection					
			[Negative is relate	d and not?	GO TO "Final"					
			persuasive.] <2/3	(Y/N)	subsection → (E)					

		2/3≤ pers					egative is related and not ive.] <90%	GO TO "Final" sub	section → (C)			
					90%		Negative is related and not	GO TO "Not Signific subsection	cant Finding Option"			
	Tech	nica	al Chang	je Re	econ	nme	nded by the TF					
	Note "TO'			ctio	n/pa	ragr	aph number and at least or	ne full sentence are	required in "FROM" a	nd		
			FROM: \$	Secti	ion/I	Para	graph XXX					
		1	TO: Sec	ction	/Par	agra	aph xxx					
	Techr		Justific	eation (If necessary)								
⊳	Technical Change		FROM: \$	Section/Paragraph XXX								
Address by Technical Change Option	hange	2	TO: Sec	ction	/Par	agra	aph xxx					
s by			lustific	ation	2 (If	noci	assaru)					
Techr			Justine	Justification (If necessary)								
nical	Moti	on				Negative is addressed by the Technical Change.						
Cha	Moti	on k	y/2nd by	y		Name (Company)/Name (Company)						
nge	Disc	ussi	ion									
Opti						XX-XX; Motion passed/failed.						
on	Res	Result of Vote (check one)					2/3≤ [Negative is addressed Change.]	l by the Technical	GO TO "Incorporatio the Technical Chang subsection			
							[Negative is not addressed b Change.] < 2/3	by the Technical	GO TO "Final" subsection → (E)			
		Мо	otion			To incorporate the Technical Change.						
	nco Tec	Мо	otion by/2	2nd l	бу	Nan	ne (Company)/Name (Compa	any)				
	hnic	Dis	scussion									
	al C					XX-	XX; Motion passed/failed.					
	Incorporation of the Technical Change		Result of				90% ≤ [Agree to incorporate	.]	subsection → (F)	Final"		
			(check	-			[Disagree to incorporate.]>1		subsection → (E)	Final"		
Not Sig							I "if the TC Chapter finds a ons voting on the action". (to or		
gnifican	Us	e of	f "Not	X		s mu iifica	utually agreed upon to tern nt".	m the Negative "no	t GO TO "I subsection → (D)	Final"		
Not Significant Finding Option	si find	gnif ing	icant option" (one)			s n nifica	nutually agreed upon to ant".	term the Negative	GO TO "∣ subsection → (C)	Final"		
Opti			,		Whe	ethei	or not the Negative is "not si	ignificant" is decided l	by a vote.			
on	Motion The N					legative is "not significant".						

	Motion by/2nd by	Nan	ne (Company)/Name (Company)									
	Vote		XX-XX; Motion	passed with simple majority	GO TO "Final" subsection → (D)							
	vote		XX-XX; Motion	failed with simple majority	GO TO "Final" subsection → (C)							
	(check if		(A)	withdrawn (counted under h in disposit	tion)							
			(B)	not related (counted under i in disposition)								
_			(C)	related and not persuasive (significant))							
Final	applicable)	X	(D)	not significant (counted under j in disp	osition)							
<u></u>			(E)	related and persuasive and not addressed by Technical Change	DOCUMENT FAILS							
			(F)	addressed by Technical Change (coun	nted under k disposition)							
	(check if applicable)		Comment gene	erated. See Section V-(ii) Comment # X.								

Negative 2 of Voting Interest Reject 1- Voter Reject 1

<u> </u>		_	interest Reject I- V					
	Referenced Section/	*TF/	TC Chapter to fill in in	cluding text in the ballot if neces	sary.			
Negative	Paragraph							
ıtive		сор	ied.	ve text (e.g., issue, justification, s	suggestion) should be			
	Negative Text	١v	General comments: I would expect to also see a note to capture if the adhesion strength exceeds the strength of the adhesion layer					
TF	input (optional)			s dedicated only for thin chip ha sion layer, this tray is not suitable				
	Withdrawal		No Negative withdrawa	al made by Voter.	GO TO "Related" subsection			
	(check one)		Withdrawal document r MM/DD/YYYY.	GO TO "Final" subsection → (A)				
	Motion and	x	'Related' is mutually ag	reed upon. (Needs no Motion.)	GO TO "Persuasive" subsection			
	Reason		Negative is not related. (Needs ≥2/3 votes to pass.)					
	(check one)		Reason	xxxx				
Rel	Motion by/2nd by	Nam	ne (Company)/Name (C	ompany)				
Related	Discussion							
		XX-	XX; Motion passed/faile	ed.				
	Result of Vote (check one)		[Negative is not related	GO TO "Persuasive" subsection				
			2/3≤ [Negative is not re	lated.]	GO TO "Final" subsection → (B)			
	Motion and Reason		Negative is related and	persuasive. (Needs >1/3 votes to	pass.)			

	(cł	eck	(one)		notivo	in related and		(Neede 22/2 yr		
					egative is related and not persuasive. (Needs ≥2/3 votes to pass.)					
	Rea					There is no need for this specification to have that note. This specification does not define the strength of the adhesion layer, but defines the usage of adhesive tray in § 5.4 and so dedicated to the thin chip usage in the title itself.				
P	Mot	ion b	by/2nd v	Haruo S	hima	moto (AIST) / I	Nobuhiro Shin	ozuka (Shin-Etsu	Polymer)	
ersu	Di		ssion	None						
Persuasive				12-0; Mo	otion	passed.				
ve			of Vote (one)	[Ne	gativ	ative is related and persuasive.] Change Recommendative is related and not ?		Recommended ?	Y GO TO "Address by Technical Change Option" subsection N GO TO "Final"	
		ICCr	(one)			ive.] <2/3 egative is rela	ated and not	(Y/N)	subsection \rightarrow (E)	
						ive.] <90%			subsection → (C)	
	x 90%					Vegative is rela	ated and not	GO TO "Not Sign subsection	nificant Finding Option"	
	Tech	nica	al Chang	je Recon	nmei	nded by the T	F			
	Note "TO"			ection/pa	iragr	aph number a	and at least or	ne full sentence a	are required in "FROM" and	
			FROM:	Section/Paragraph XXX						
			TO: Sec	ction/Pa	ragra	aph xxx				
	-	1				-				
Þ	Technical Change		Justific	ation (If	nece	essary)				
Address by	ical C		FROM: S	Section/	Para	graph XXX				
d ss	Shan		TO: 0:							
	ıge	2	10: 560	ction/Pa	ragra	apn xxx				
)chn			Justific	ation (If	nece	essarv)				
echnical Change Option			ouotino	ution (n	moot	Joeur yy				
;han	Motio	on			Negative is addressed by the Technical Change.					
ge (Moti	on b	y/2nd by	y	Name (Company)/Name (Company)					
Optio	Disc	ıssi	ion							
n					XX-X	XX; Motion pa	ssed/failed.			
	Resı	ılt o	f Vote one)	(check		Change.]		by the Technical	GO TO "Incorporation of the Technical Change" subsection	
						[Negative is no Change.] < 2/3		by the Technical	GO TO "Final" subsection → (E)	
	د ۱	Мо	tion		To i	ncorporate the		hange.		
	ncorpora on of the	Мо	tion by/2	2nd by	Nam	ne (Company)/	Name (Compa	iny)		
	Incorporati on of the	Dis	scussion)						
	l <u>.</u>									

			XX-XX; Motio	n passed/failed.					
	Result o		90% ≤ [A	Agree to incorporate.]	GO TO "Fin subsection → (F)	al"			
	(check				GO TO "Fin subsection → (E)				
				FC Chapter finds a Negative not persua g on the action". (<i>Regulations</i> ¶ 9.6.4.4		or			
Not \$	Use of "Not		s mutually aç nificant".	greed upon to term the Negative "not	GO TO "Fin subsection → (D)	al"			
Not Significant Finding Option	significant finding option" (check one)		is mutually Inificant".	agreed upon to term the Negative	GO TO "Fin subsection → (C)	al"			
t Fin		Wh	Whether or not the Negative is "not significant" is decided by a vote.						
ding	Motion	The Neg							
Optio	Motion by/2nd by	Name ((Company)/Nan	ne (Company)					
2	Vote	XX	-XX; Motion pa	assed with simple majority	GO TO "Fin subsection → (D)	al"			
	Vole	XX	-XX; Motion fai	iled with simple majority	GO TO "Fin subsection → (C)	al"			
			(A) withdrawn (counted under h in disposition)						
			(B)	not related (counted under i in disposition	n)				
	(check if		(C)	related and not persuasive (significant)					
Final	applicable)	X	(D)	not significant (counted under j in dispos	ition)				
al			(E)	related and persuasive and not addressed by Technical Change	DOCUMENT FAILS				
			(F)	addressed by Technical Change (counte	d under k disposition)				
	(check if applicable)	Со	mment genera	ted. See Section V-(ii) Comment # X.					

Negative 3 of Voting Interest Reject 1- Voter Reject 1

neg		ng Interest Reject 1-		i							
	Referenced Section/		including text in the ballot if neces								
z	Paragraph	trays are used for manuf	trays which have adhesion layer t facturing, shipping and storage of	thin chips.							
Negative		copied.	tive text (e.g., issue, justification, is is the first SEMI standard to defi								
e	Negative Text	noted in the Background industry for many years, the following wording: "adhesive trays – trays	I Statement), even though they ha I would write this definition more with an adhesion layer to hold ma ring, shipping, and/or storage of th	ve been widely used in the broadly. I would suggest aterials, such as IC chips, in							
TF i	input (optional)		tray is only dedicated for thin chi								
	Withdrawal	X No Negative withdrav	val made by Voter.	GO TO "Related" subsection							
	(check one)	Withdrawal documen MM/DD/YYYY.	t received by Standards staff on	GO TO "Final" subsection → (A)							
	Motion and	X 'Related' is mutually a	agreed upon. (Needs no Motion.)	GO TO "Persuasive" subsection							
	Reason	Negative is not relate	d. (Needs ≥2/3 votes to pass.)								
	(check one)	Reason	XXXX								
Reli	Motion by/2nd by	Name (Company)/Name (Name (Company)/Name (Company)								
Related	Discussion										
		XX-XX; Motion passed/fai	led.								
	Result of Vote (check one)	[Negative is not relate	ed.] <2/3	GO TO "Persuasive" subsection							
	· · · ·	2/3≤ [Negative is not	related.]	GO TO "Final" subsection <mark>→ (B)</mark>							
		Negative is related ar	nd persuasive. <mark>(Needs >1/3 votes to</mark>	pass.)							
	Motion and Reason	X Negative is related ar	nd not persuasive. <mark>(Needs ≥2/3 vote</mark>	. ,							
Persuasive	(check one)	Reason	Reason Adhesive trays have been widely used in the industry, there is no definition in Terminology section of any Si Standards document. This specification defines usage of adhesive tray only for thin chip handling.								
uasi	Motion by/2nd by	Haruo Shimamoto (AIST)	/ Nobuhiro Shinozuka (Shin-Etsu Po	lymer)							
ve	Discussion	None									
		12-0; Motion passed.	Is a Technical Y	GO TO "Addrose by							
	Result of Vote (check one)	[Negative is related a >1/3	Change Recommended	Technical Change Option" subsection							
		[Negative is relat persuasive.] <2/3	ted and not ? N (Y/N)	GO TO "Final" subsection → (E)							

		2/3≤ pers					[Negative is related and not GO TO "Final" subsection → (C)					
				x	90%		legative is related and not	GO TO "Not Signific subsection	ant Finding Option	"		
	Tech	nica	al Chang	je Re	Recommended by the TF							
	Note "TO"			ctio	n/pa	ragra	aph number and at least or	ne full sentence are i	equired in "FROM"	' and		
			FROM: \$	Secti	ion/F	Para	graph XXX					
		1	TO: Sec	ction	/Par	agra	iph xxx					
	Tech		Justific	atior	า <mark>(lf</mark>	nece	essary)					
	Technical Change	┝	FROM: \$	Secti	ction/Paragraph XXX							
Add	Chanç		TO: Sec	ction	/Par	agra	iph xxx					
ress	je	2				J	r					
by Te			Justific	atior	า (lf	nece	essary)					
chnic	Moti	 on				Neg	ative is addressed by the Teo	chnical Change.				
al Cl	Moti	on k	y/2nd by	y		Name (Company)/Name (Company)						
Address by Technical Change Option	Disc	ussi	ion	- -								
Opt						XX-XX; Motion passed/failed.						
tion	Result of Vote (check one)						2/3≤ [Negative is addressed Change.]	by the Technical	GO TO "Incorpora the Technical Char subsection			
							[Negative is not addressed b Change.] < 2/3	by the Technical	GO TO "Final" subsection \rightarrow (E)			
			tion			To ii	ncorporate the Technical Cl	hange.				
	Inco Tec		tion by/2		ру	Nam	ne (Company)/Name (Compa	any)				
	ncorporation of the Technical Change	Dis	scussion	1								
	al Ch					XX-X	XX; Motion passed/failed.			" F ' III		
	Incorporation of the Technical Change		Result of (check				90% ≤ [Agree to incorporate	.]	GO TO subsection → (F)	"Final"		
			·	-			[Disagree to incorporate.]>10		GO TO subsection → (E)	"Final"		
Not Sig							l "if the TC Chapter finds a ons voting on the action". (ial to or		
nifican	Us	e of	"Not	x		s mu ificar	itually agreed upon to terr nt".	m the Negative "not	t GO TO subsection \rightarrow (D)	"Final"		
Not Significant Finding Option	si findi	gnif ng	icant option" (one)			s m nifica	nutually agreed upon to ant".	term the Negative	GO TO subsection → (C)	"Final"		
Optic	Ĺ						or not the Negative is "not si	ignificant" is decided b	oy a vote.			
ň		Mot	ion	The	Neg	ative	is "not significant".					

	Motion by/2nd by	Nar	ne (Company)/N	lame (Company)				
	Vote		XX-XX; Motion	passed with simple majority	GO TO "Final" subsection → (D)			
	vole		XX-XX; Motion	failed with simple majority	GO TO "Final" subsection → (C)			
	(check if applicable)		(A)	withdrawn (counted under h in dispositi	on)			
			(B)	not related (counted under i in disposition	on)			
			(C)	related and not persuasive (significant)	cant)			
Final		X	(D)	not significant (counted under j in dispo	sition)			
<u> </u>			(E)	related and persuasive and not addressed by Technical Change	DOCUMENT FAILS			
			(F)	addressed by Technical Change (count	ed under k disposition)			
	(check if applicable)		Comment gene	erated. See Section V-(ii) Comment # X.				

Negative 4 of Voting Interest Reject 1- Voter Reject 1

neg			iterest Reject 1- V	icluding text in the ballot if neces	carv									
	Referenced			icidaning text in the ballot if neces	sary.									
Ne	Section/ Paragraph	5.2.1.3 Size of collet — A collet which is the same size as or slightly larger than a chip shall be used. The collet shall not come into contact with the adhesive area of the tray.												
Negative	Negative Text	*Orig copie Secti I thin colle	Original complete Negative text (e.g., issue, justification, suggestion) should be copied. Section 5.2.1.3: Size of collet think the term "slightly larger" needs to be more specific; in particular, since the collet is not to be allowed to contact the adhesive area, suggest that limits should be written in on the allowed size of the collet.											
TFi	input (optional)		show the relation of s bility to choose the c	ize in the figure. And prevents fro ollet.	om limitation of user's									
	Withdrawal		No Negative withdrawa		GO TO "Related" subsection									
	(check one)		Withdrawal document MM/DD/YYYY.	GO TO "Final" subsection → (A)										
	Motion and	x	'Related' is mutually ag	greed upon. (Needs no Motion.)	GO TO "Persuasive" subsection									
	Reason		Negative is not related	. (Needs ≥2/3 votes to pass.)										
	(check one)		Reason	хххх										
Re	Motion by/2nd by	Nam	Name (Company)/Name (Company)											
Related	Discussion													
	Result of Vote (check one)	XX-X	X; Motion passed/faile	ed.										
			[Negative is not related	d.] <2/3	GO TO "Persuasive" subsection									
			2/3≤ [Negative is not re	elated.]	GO TO "Final" subsection → (B)									
			Negative is related and	d persuasive. <mark>(Needs >1/3 votes to</mark>	pass.)									
	Motion and	x	Negative is related and	d not persuasive. <mark>(Needs ≥2/3 vote</mark> :	s to pass.)									
Pers	Reason (check one)		Reason	The expression of "slight specification does not define the possible for the users of this sp of the size of collet. About the to contact the adhesive area is Fig.3.	ne limit so that it could be becification to have options ne notice of collet size, not									
Persuasive	Motion by/2nd by	Haru	o Shimamoto (AIST) /	Nobuhiro Shinozuka (Shin-Etsu Pol	ymer)									
/e	Discussion	None)											
	Result of Vote (check one)		Abstain 2. Motion p [Negative is related ar >1/3 [Negative is relate persuasive.] <2/3 2/3≤ [Negative is re	nd persuasive.] Is a Technical Y Change Recommended ed and not ? N (Y/N)	GO TO "Address by Technical Change Option" subsection GO TO "Final" subsection → (E)									
			2/3≤ [Negative is re persuasive.] <90%	GO TO "Final" sub	section → (C)									

	^ pe						% ≤ [Negative is related and not subsection GO TO "Not Significant Finding Option" subsection						
	Tech	nica	al Chang	je Ro	econ	nme	nded by the TF						
	Note "TO'			ectio	n/pa	ragr	aph number and at least c	one full sentence are	required in "FROM'	' and			
			FROM:	Sect	ion/l	Para	graph XXX						
		1	TO: See	ction/Paragraph xxx									
Address by Technical Change Option	Techi		Justific	cation (If necessary)									
	Technical Change		FROM: S	Sect	ion/l	Para	graph XXX						
	nange	2	TO: See	ctior	ion/Paragraph xxx								
			Justific	atio	n (lf								
Techn													
ical	Moti		<i>/a</i>			Negative is addressed by the Technical Change.							
Cha	Moti	on k	y/2nd b	У		Name (Company)/Name (Company)							
nge	Disc	ussi	ion										
Opt							XX; Motion passed/failed.			tion of			
ion	Res	Result of Vote (check one)					2/3≤ [Negative is addresse Change.]	GO TO "Incorpora the Technical Cha subsection					
							[Negative is not addressed Change.] < 2/3	GO TO "Final" subsection → (E)					
			tion		_	To incorporate the Technical Change.							
	Inco Tec		tion by/2		by	Name (Company)/Name (Company)							
	rpora	Dis	scussion	1									
	ation al Cl					XX-	XX; Motion passed/failed.						
	orporation of the chnical Change		Result o (check	-			90% ≤ [Agree to incorporat	e.]	GO TO subsection → (F)	"Final"			
			CHECK	one	,		[Disagree to incorporate.]>	10%	GO TO subsection → (E)	"Final"			
Not							I "if the TC Chapter finds ons voting on the action".			ial to or			
Signific	Us	e of	"Not	x		s mu nifica	utually agreed upon to te nt".	rm the Negative "no	t GO TO subsection → (D)	"Final"			
Not Significant Finding Option	si find	significant finding option" (check one)				is mutually agreed upon to term the Negative GO TO "Fi gnificant".							
ing O		_	- /		Whe	ethei	or not the Negative is "not	significant" is decided I	by a vote.				
ption	Motion The Negative is "not significant".												
	Motion by/2nd by Name (Company)/Name (Company)												

	Vote		XX-XX; Motion	passed with simple majority	GO TO "Final" subsection → (D)				
	Vole		XX-XX; Motion	failed with simple majority	GO TO "Final" subsection → (C)				
	(check if applicable)		(A)	withdrawn (counted under h in dispositi	on)				
			(B)	not related (counted under i in disposition	ion)				
-			(C)	related and not persuasive (significant)	related and not persuasive (significant)				
Final		X	(D)	not significant (counted under j in dispo	sition)				
<u>=</u>			(E)	related and persuasive and not addressed by Technical Change	DOCUMENT FAILS				
			(F)	addressed by Technical Change (counted under k disposition)					
	(check if applicable)		Comment gene	Comment generated. See Section V-(ii) Comment # X.					

Negative 5 of Voting Interest Reject 1- Voter Reject 1

i i cg		ng Interest Reject 1- Voter Reject 1							
		*TF/TC Chapter to fill in including text in the ballot if necess	ary.						
	Referenced Section/ Paragraph	5.3.2.1 Collet position — Place the collet on the chip. Hold the chip by the collet. The chip shall be suctioned or adhered by the collet. See Figure 3 for side view and sizes.							
Negative	Negative Text	 *Original complete Negative text (e.g., issue, justification, si copied. Section 5.3.2.1: "Collet position — Place the collet on the cl collet. The chip shall be suctioned or adhered by the collet. and sizes." Could you clarify what is meant by the bolded clause? Is i other semi-permanent method? Email by the voter on October 16, 2015 Dear Chie Yanagisawa, Thanks to the Task Force and Committee for considering m My concern about section 5.3.2.1 was that I do not find the v first reading, which this part of my negative vote was based description allows the chip to be adhered to the collet for pl later, for removal from the adhesive tray using either suctio (could include, for example, glue, electrostatic, etc.). If this other adhesion techniques would introduce issues with the and results and this should be discussed in the document. adhesion technique which works, then it should be specifie that the text of the rest of the document implies that the coll the chip for placement and removal from the adhesive tray. In re-reading the ballot this morning, I thought that the intersomething like: 5.3.2.1 Collet position — Center the collet over the chip an the chip to the collet. See Figure 3 for side view and sizes. Also, in re-reading the document this morning, I see that the section 5.2.1.2. A similar change to that in the paragraph a like: 5.2.1.2 Collet — apparatus for placing and removing the cl which holds the chip in place during motion by suction I am sorry that my initial comments to the ballot on this isst hope the above explanation helps. If you have any additio meeting, please email me and copy my personal email addr c'd to this message), which I am more likely to read outsid will probably see emails to this address received until about JST. 	hip. Hold the chip by the See Figure 3 for side view t a gluing process or y comments to the ballot. wording to be clear. My on, is that this lacement on and, then n or an alternate method s is the case, I think such measurement procedure If there is an alternative d explicitly. I will note let uses suction to adhere thion might be to say and apply suction to adhere ere is similar wording in above would be something hip from the adhesive tray, use weren't clear and I nal questions before the ess (raasqrd@live.com, e of business hours. I t 10:45 pm EDT/11:45 am						
TF i	nput (optional)	There is no need to define the details in order that a person to measure could choose "suctioned" or "adhered" as a test method.							
	Withdrawal	X No Negative withdrawal made by Voter.	GO TO "Related" subsection						
	(check one)	Withdrawal document received by Standards staff on MM/DD/YYYY.	GO TO "Final" subsection <mark>→ (A)</mark>						

			_	x	'Related' is mutually ag	reed upon. (N	eeds no Motion.)		O TO ubsection	"Persuasive"					
			n and son		Negative is not related.	(Needs ≥2/3	votes to pass.)								
	(cł	necł	(one)		Reason										
Reli	Mot	ion b	by/2nd y	Nam	ne (Company)/Name (Co	ompany)									
Related	Di	scu	ssion												
				XX-	XX-XX; Motion passed/failed.										
			of Vote (one)		[Negative is not related		O TO "Per ubsection	suasive"							
	(0.		,		2/3≤ [Negative is not re	lated.]			O TO "Fin ubsection						
	D.A.				Negative is related and	persuasive. (I	Needs >1/3 votes	to pa	ss.)						
	Motion and Reason (check one)			x	Negative is related and	tes to	pass.)								
					Reason	The expres understanda	texts	of 5.3.2	.1 could be						
Pei	Mot	ion b	by/2nd y	Haru	uo Shimamoto (AIST) / N	Polym	er)								
Persuasive	Di	scu	ssion	None											
ISIVE				13-0); Motion passed.		. <u> </u>	X .	• • • • •						
ζυ.					Negative is related and persuasive.] Is a Technical Y >1/3 Recommended			Т	O TO "Ade echnical C ption" sub	hange					
	Result of Vote (check one)			[Negative is related persuasive.] <2/3		? (Y/N)	N G	O TO "Fin ubsection	al"						
					2/3≤ [Negative is rela persuasive.] <90%	[Negative is related and not go TO suasive.] <90%									
				X					icant Finding Option"						
1	Tech	nica	al Chang	je Re	ecommended by the T	F									
Address by Technical Change Option	Note "TO"			ectio	n/paragraph number a	nd at least or	ne full sentence a	re req	quired in "I	FROM" and					
s by			FROM:	Sect	ion/Paragraph XXX										
Techr	Ţ	1	TO: Sec	ctior	n/Paragraph xxx										
ical C	Technical		Justific	atio	n (If necessary)										
hang	;al Ch	┝	FROM: S	Sect	ion/Paragraph XXX										
e Op	Change	2													
tion		2	TO: See	ctior	n/Paragraph xxx										

		Justification (If necessary)										
	Motic	n			Neg	ative is a	ade	dressed by the Technical Change.				
	Motic	n by/2nd b	у		Name (Company)/Name (Company)							
	Discu	ission										
				XX-2	X-XX; Motion passed/failed.							
	Resu	Result of Vote (check one)				2/35 [Negative is addressed by the Technical			GO TO "Incorporation of the Technical Change" subsection			
					[Negativ Change.		is not addressed by the Technical < 2/3		GO TO "Final" subsection → (E)			
		Motion			To i	ncorpora	rate	e the Technical Change.				
	Inco Te	Motion by/	2nd	by	Nam	ne (Comp	npa	ny)/Name (Company)				
	orpoi chnie	Discussior	۱									
	ratio cal C				XX-	XX; Motic	ion	passed/failed.				
	Incorporation of the Technical Change	Result o				90% ≤ [<i>I</i>	[Ag	ree to incorporate.]		GO TO subsection \rightarrow (F)	"Final"	
	e e	(check one))		[Disagre	ee	to incorporate.]>10%		GO TO subsection \rightarrow (E)	"Final"	
								C Chapter finds a Negative not per on the action". (<i>Regulations</i> ¶ 9.6.			ual to or	
Not	lle				s mu nifica		agr	eed upon to term the Negative "		GO TO subsection \rightarrow (D)	"Final"	
Not Significant Finding Option	sig findi	nificant ng option" eck one)				mutually agreed upon to term the Negative ficant".				GO TO subsection → (C)	"Final"	
ıt Fin	•			Whe	ether	or not th	the	Negative is "not significant" is decide	d b	y a vote.		
dina	ſ	Notion	The	Neg	ative	e is "not s	sig	nificant".				
Ontio	Moti	on by/2nd by	Nam	ne (C	Comp	any)/Nar	ame	e (Company)				
-		Vote		xx-	XX; I	Motion pa	bas	sed with simple majority		$\begin{array}{cc} \text{GO} & \text{TO} \\ \text{subsection} \rightarrow \text{(D)} \end{array}$	"Final"	
		VOLE		XX-	XX; I	Motion fa	aile	ed with simple majority		$\begin{array}{ll} GO & TO \\ subsection (C) \end{array}$	"Final"	
					(,	A)	١	withdrawn (counted under h in dispos	itio	n)		
					(B)	r	not related (counted under i in dispos	itior	n)		
-		heck if			(C)	r	elated and not persuasive (significan	t)			
Final	ар	applicable)			(D)	r	not significant (counted under j in disp	oosi	ition)		
-					(E)		elated and persuasive and not addressed by Technical Change		DOCUMENT FAI	LS	
					(F)	á	addressed by Technical Change (cou	nte	d under k dispositio	n)	
	(check if applicable)				nmei	iment generated. See Section V-(ii) Comment # X.						

Disposition of Voting Interest Reject 1

5	Original number	r of N	legatives		(g)						
0	# of Negatives v	withd	rawn		(h)						
0	# of Negatives found not related (i)										
5	# of Negatives found not significant (j)										
0	# of Negatives a not significant)	(k)									
		x	g - (h + i + j + k) = 0	Reject is Not Valid and is not included in the denominator of § VI. <i>Approval Conditions Check</i>							
	Final				Reject is included in the denominator of § VI. <i>Approval Conditions Check</i>						
			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

There was no Other Technical Issues for Ballot 5835.

V. Comments

There was no vote with comment received for Ballot 5835.

V-(ii) Comments Created by handling Negative Comment (Created by handling Negative) NC – 1

nme	ent (Created by handling Negative) NC – 1									
	*TF	/TC Chapter	r to	fill in						
Comment	Section 3.2: I don't think it is necessary to specify these particular published versions of the ISO documents (ISO 2248:1985 and ISO 13355:2001). That is, citing these without date and these are the most recent revisions (see the wording in the "NOTICE").									
┢	The	The TC Chapter agreed to do one of the following actions.								
	*No	*No motion is required in this step.								
A	Already addressed by Commenter #, Comment #									
Action		No further a	actio	on was taken by the TC Chapter.						
n		Refer to the	e TF	for more consideration.						
		New Busin	ess							
	X	Editorial Ch	nang							
		Options		Case 1: No vote in this section :						
		for Editorial		To be included and voted on in <u>§ VI. Editorial Changes other than</u> those dealt with in Section V.						
		Change		Case 2: Voted in this section :						
		(check one)	X	Original section number and at least one full sentence are required in "FROM" and "TO" fields.						
		FROM: Section/Paragraph ISO 2248:1985 — Packaging: Complete, Filled Transport Packages-Vertical Impac Test by Dropping ISO 13355:2001 — Packaging: Complete, Filled Transport Packages and Unit Load -Vertical Random Vibration Test								
Editorial	1	TO: Section/Paragraph ISO 2248 — Packaging: Complete, Filled Transport Packages-Vertical Impact Test by Dropping ISO 13355 — Packaging: Complete, Filled Transport Packages and Unit Loads -Vertical Random Vibration Test								
orial Change		Justification (If necessary)								
ge		FROM: Se	ectio	on/Paragraph xxx						
	2	TO: Section	on/F	Paragraph xxx						
		Justificati	on	(If necessary)						
М	otion		Т	o approve above editorial change(s)						
м	otion	by/2nd by	ŀ	łaruo Shimamoto (AIST) / Nobuhiro Shinozuka (Shin-Etsu Polymer)						
D	iscus	sion	N	lone						
Ve	ote		1	3-0; Motion passed.						

Comment (Created by handling Negative) NC - 2

*TE	*TF/TC Chapter to fill in									
	Section 4.1.1: Please use "3DS-IC" to conform to other SEMI usages (such as the name									
	of the technical committee)									
Th	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.										
No further action was taken by the TC Chapter.										
	Refer to the	TF for more consideration.								
	New Busine	SS								
X	Editorial Cha	5								
	Options	Case 1: No vote in this section :								
	for	To be included and voted on in <u>§ VI. Editorial Changes other than</u> those dealt with in Section V.								
	Change	Case 2: Voted in this section :								
	(check one)	X Original section number and at least one full sentence are required in "FROM" and "TO" fields.								
	FROM: Section/Paragraph 4.1.1 3Ds IC — Three-dimensional stacked integrated circuit									
1	TO: Section/Paragraph 4.1.1 3DS IC — Three-dimensional stacked integrated circuit									
	Justification (If necessary)									
	FROM: See	ction/Paragraph xxx								
2	TO: Sectio	n/Paragraph xxx								
	Justification (If necessary)									
otior	1	To approve above editorial change(s)								
otior	n by/2nd by	Haruo Shimamoto (AIST) / Nobuhiro Shinozuka (Shin-Etsu Polymer)								
iscus	sion	None								
ote		13-0; Motion passed.								
	Sec of t The *No 2	Section 4.1.1: of the technical The TC Chapter *No motion is reaction Already add Already add No further a Refer to the New Busine X Editorial Change (Check one) FROM: Section 4.1.1 3DS TO: Section Justification Justification otion by/2nd by iscussion								

Comment (Created by handling Negative) NC – 3

\square		/TC Chapter	to fill in									
Comment	the	ection 5.6.5: I would suggest the following wording: "Step 5 – After one week, measure ne adhesive strength using the second chip on each of the five trays using the procedure escribed in 5.3.2."										
Н	Th											
	The TC Chapter agreed to do one of the following actions. *No motion is required in this step.											
	Already addressed by Commenter #, Comment #											
Action	X		action was taken by the TC Chapter.									
'n		Refer to the TF for more consideration.										
		New Business										
		Editorial Ch	ange									
		Options	Case 1: No vote in this section :									
		for Editorial	To be included and voted on in <u>§ VI. Editorial Changes other than</u> those dealt with in Section 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										
Ē	1	TO: Section/Paragraph xxx										
Editorial		Justification (If necessary)										
Change		FROM: Se	ction/Paragraph xxx									
	2	TO: Sectio	on/Paragraph xxx									
		Justification (If necessary)										
M	otion	1	To approve above editorial change(s)									
M	otion	by/2nd by	Name (Company)/Name (Company)									
Di	iscus	sion	XXXX									
Vo	ote		XX-XX; Motion passed/failed.									

VI. Editorial Changes other than those dealt with in Section V.

There was no Editorial Changes other than those dealt with in Section V for Ballot 5835.

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)

See § 9.7.2 of the Regulations for further information

X

The Letter Ballot meets the Letter Ballot Approval Conditions for the global technical committee

The Letter Ballot the Letter Ballot Approval Conditions for the TC Chapter and a Ratification Ballot will be issued to verify Technical Changes

VIII. Safety Check 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> \P 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> \P 8.7.2)				
				necklist (<i>Regulations</i> ¶ 15.3) is complete and has been included with the Documer ut the balloting process. (<i>Regulations</i> ¶¶ 15.1.2)			
Ν	/loti	tion by/2nd by		Haruo Shimamoto (AIST) / Nobuhiro Shinozuka (Shin-Etsu Polymer)			
Discussion			ussion	None			
Vote			ote	12-0; Motion passed.			

IX. Intellectual Property (IP) Check

Note: This Letter Ballot may cover all or part of a Standard or Safety Guideline. This IP check applies to the entire Standard or Safety Guideline. See § 16 of the Regulations for further information.

The TC Chapter meeting chair asked those participating, if they were aware of any potentially material Х patented technology or copyrighted items* in the Standard or Guideline. (Regulations ¶ 8.8.1)

	X			naterial patented technology or reproduction of GO TO SECTION X				
		сору сору	righted iten right releas	erial patented technology or reproduction of ms are known, but a Letter of Assurance (LOA) or se letter for such items has been obtained or e TC Chapter.				
		use o	of such ma	ented technology or reproduction of copyright s technically justified by the TC Chapter, but a of the item(s) has NOT been obtained or pres	ter, but an LOA or copyright			
	MOTION		Ask ISC f	for special permission to publish.				
			Quit activ	t activity.				
	ž		Wait for L	OA for patented technology or release of copyrighted items.				
	Motion by/2 nd by			Name (Company)/Name (Company)				
	Di	scus	sion	XXXX				
		Vote)	XX-XX				
	Final Action				Motion Passed			
	FI	Final Action			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

Mo		This Document passed TC Chapter review as balloted and will be forwarded to the A&R S procedural review.					
	X	This Document passed TC Chapter review with editorial changes and will be forwarded A&R SC for procedural review.					
Motion		This Document passed TC Chapter review with Technical Changes and with or without edito changes and will be forwarded to the A&R SC for procedural review. A Ratification Ballot will issued to verify the Technical Changes.					
		This Document failed TC Chapter review and will be returned to the TF for rework.					
		This Document failed TC Chapter review and work will be discontinued.					
Moti		otion by/2nd by		Haruo Shimamoto (AIST) / Nobuhiro Shinozuka (Shin-Etsu Polymer)			
	Dis	iscussion		None			
		Vote		13-0			
	Fina	al Action	X Motion passed				
	1 1110			Motion failed			

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

		Approved for publication				
A&R		Approved pending for acceptance of the Ratification Ballot				
		Not approved				
	Reason:					