

Record of Letter Ballot Review by TC Chapter for Procedural Review

Region/Locale: Japan
 Global Technical Committee: PI&C
 TC Chapter Cochair: Tsuyoshi Nagashima/Miraial, Daisuke Sado/Daihen, Yasuhisa Ito/Murata
 machinery
 Standards Staff: Hirofumi Kanno

	Scheduled in Background Statement	Actual
Date	04/14/2021	04/14/2021
Location	SEMI Japan office, Tokyo	SEMI Japan office, Tokyo
Reason for Change of Date and/or Location (if changed)		

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

I. Document Number and Title

Document Number 6688	Document Title New Standard: Specification for 300mm Tape Frame FOUP Load Port
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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 (with example values):

Voting Interest:	Returned Votes	Distribution	Return Rate	
Letter Ballot	59	÷ 96	= 61.5%	≥60%
Intercommittee Ballot	41			
Voting Interest Reject(s)	3	Total Voters with Rejects		3
Voting Interest Accept(s)	40			

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

III. Rejects

Voting Interest Reject 1 (Voting Interest Name: TEL) Voter Reject 1 (Voter: Supika Mashiro/Tokyo Electron LTD.)

Negative 1

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary. Section 8, 9 and 10				
	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied. Do not use 'shall' to express requirement (conformance criteria). Such usage is seen in paragraphs 8.1, 8.5 and many others.				
TF input (optional)		It was confirmed by the voter that her intention was to point out use of "must" should be corrected.				
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	<input checked="" type="checkbox"/>	'Related' is mutually agreed upon. (Needs no motion.)		GO TO "Persuasive" subsection		
		Negative is not related. (Needs ≥2/3 votes to pass.)				
		Reason	XXXX			
	Motion by/ 2 nd by	Name (Company)/Name (Company)				
	Discussion					
	Result of Vote (check one)	XX Y-XX N; Motion passed/failed.				
<input type="checkbox"/>		[Negative is not related.] < 2/3	GO TO "Persuasive" subsection			
	<input type="checkbox"/>	2/3 ≤ [Negative is not related.]	GO TO "Final" subsection → (B)			
Persuasive	<input checked="" type="checkbox"/>	Negative is related and persuasive. (Needs >1/3 votes to pass.)				
		Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)				
		Reason	XXXX			
	Motion by/ 2 nd by	Naomune Taniguchi / TOKYO SEIMITSU CO., LTD. Taniguchi-san (Company)/ Tsukasa Fukunaga / Inficon Fukunaga-san(Company)				
	Discussion	None				
	Result of Vote (check one)	14 Y-00 N; Motion passed				
<input checked="" type="checkbox"/>		[Negative is related and persuasive.] > 1/3	Is a technical change recommended? (check one)	<input checked="" type="checkbox"/>	Y	GO TO "Address by Technical Change Option" subsection
<input type="checkbox"/>	[Negative is related and not persuasive.] < 2/3	<input type="checkbox"/>		N	GO TO "Final" subsection → (E)	

		2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO "Final" subsection → (C)
		90% ≤ [Negative is related and not persuasive.]	GO TO "Not Significant Finding Option" subsection
		Technical Change Recommendations Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.	
Address by Technical Change Option	1	FROM: Section/Paragraph Section 8	
		<p>8.1 <i>Load Height</i> — The nominal load height of any load port in a fab is defined by dimension <i>z101</i> and depicts the nominal distance from the horizontal plane to the floor. A set of load ports, but not necessarily each load port separately, must be adjustable at installation over the range associated with <i>z101</i> in Table 2. This adjustability requirement also applies for load ports according to Option C (raised load port).^u</p> <p>8.5 <i>Horizontal Clearance for Overhead Transport</i> — No part of the SME shall protrude towards the facial datum plane (FDP) beyond both the EB and upper equipment boundary (<i>EB_{UPPER}</i>) as defined by dimension <i>y100</i> and <i>y105</i>. The vertical 'chimney' between both of the equipment boundaries and the LFP above the HDP as defined by dimensions <i>y100</i>, <i>y101</i> and <i>x103</i> must not be occupied by the SME.^u</p> <p>8.6 <i>Radio Frequency Identification (RFID) Reader/Writer Placement Volume</i> — A load port must allow for installation of a unit that can read from or write to an RFID tag (as it may be installed in the corresponding placement volume on the rear of a 300 mm TAPE FRAME FOUNDRY within the limits of a volume defined by <i>x110</i>, <i>y110</i>, <i>y111</i>, <i>z110</i>, <i>z111</i>. Reading/writing is intended to take place with the TAPE FRAME FOUNDRY in a position as initially delivered to the load port (undocked position). If no reader/writer unit is installed, this placement volume may be covered.^u</p> <p>NOTE 4: As a consequence of the requirement defined above, any RFID reader/writer unit must fit in the placement volume defined above.^u</p> <p>NOTE 5: RFID reader/writer within this context is understood as those parts that must be located within this volume in order to be able to communicate with the tag on the TAPE FRAME FOUNDRY. Usually this is the antenna. Other components of an RFID reader/writer system are not necessarily required to be placed within this volume.^u</p> <p>8.8 <i>Spacing</i> — Load ports adjacent to each other on the SME must be located at a distance as defined by dimension <i>x100</i>.^u</p> <p>8.9 <i>Photo-Coupled I/O Device Placement Volume</i> — In the lower area of each load port there must be volume, defined by <i>x120</i>, <i>y120</i>, the LFP, <i>z121</i>, and <i>z122</i>, allowing for placement of a photo-coupled I/O device for communication to floor-based transport vehicles. This placement volume is centered on the bilateral datum plane (BDP).^u</p> <p>8.9.1 A photo-coupled I/O device may be installed anywhere within this placement volume upon the discretion and design requirements of the load port supplier. However, the center of its beam line must be within the vertical limits defined by dimension <i>z120</i>. In horizontal direction (perpendicular to the FDP) the beam line must also be centered to the BDP within the same limits as defined by the tolerance associated to <i>z120</i>.^u</p> <p>8.11 <i>Docking Interface Placement Volume</i> — A load port must provide clearance for installation of a docking interface within the limits of a volume defined by <i>y130</i> and <i>z130</i>. It extends over the full width of the SME. If no docking interface is installed, this placement volume may be covered by a panel.^u</p> <p>8.13 <i>Fork-Lift Exclusion Volume on Load Port Below TAPE FRAME FOUNDRY</i> — Two exclusion volumes on the left and right side of the load port must be kept clear so that fork-lifts or conveyors may be used to load/unload a TAPE FRAME FOUNDRY to/from a load port. These exclusion volumes are defined by <i>x140</i>, <i>x141</i>, <i>y140</i>, <i>y141</i>, and <i>z141</i>.^u</p> <p>8.16.1 In Option A, the load port must be at the nominal load height as specified by dimension <i>z101</i>, and it must be open from above to facilitate automatic TAPE FRAME FOUNDRY delivery from an overhead transport system. The volume left and right of the load port may be occupied by the SME, with a side clearance of <i>x144</i> between any part of the SME on the side of the load port above <i>z160</i>.^u</p> <p>8.16.4 In Option D the load port must be at the nominal load height as specified by dimension <i>z101</i>, is not open from above, and it must have a clearance around the TAPE FRAME FOUNDRY as specified by dimensions <i>z103</i> and <i>x103</i>.^u</p> <p>8.17 <i>Load Port Side Exclusion Volume for User Defined Objects</i> — An exclusion volume shall exist on the equipment if the equipment is wider than the load ports (e.g., equipment with two load ports wider than $x374 + x100 + x374 = 1110$ mm must incorporate a load port side exclusion volume). This exclusion volume shall exist on both sides of the outer most load ports and shall be bounded by <i>x143</i> and <i>x144</i> below <i>z161</i> and bounded by <i>x103</i> and <i>x144</i> above <i>z161</i>. The exclusion volume shall extend from the EB to the LFP. If <i>x144</i> extends past the edge of the SME, then <i>x144</i> will be reduced to the outermost edge of the SME (i.e., the load port side exclusion volume will not define or increase the width of the SME). The load port side exclusion volume shall remain clear of any obstruction on the SME (e.g., lights, buttons, GUI etc.), and must remain available for any user defined object. This volume will only exist on load port Options A and B.^u</p>	

TO: Section/Paragraph Section 8

8.1 *Load Height* — The nominal load height of any load port in a fab is defined by dimension *z101* and depicts the nominal distance from the horizontal plane to the floor. A set of load ports, but not necessarily each load port separately, **mustshall** be adjustable at installation over the range associated with *z101* in Table 2. This adjustability requirement also applies for load ports according to Option C (raised load port).^u

8.5 *Horizontal Clearance for Overhead Transport* — No part of the SME shall protrude towards the facial datum plane (FDP) beyond both the EB and upper equipment boundary (*EB_{UPPER}*) as defined by dimension *y100* and *y105*. The vertical 'chimney' between both of the equipment boundaries and the LFP above the HDP as defined by dimensions *y100*, *y101* and *x103* **mustshall** not be occupied by the SME.^u

8.6 *Radio Frequency Identification (RFID) Reader/Writer Placement Volume* — A load port **mustshall** allow for installation of a unit that can read from or write to an RFID tag (as it may be installed in the corresponding placement volume on the rear of a 300 mm TAPE FRAME FOUN within the limits of a volume defined by *x110*, *y110*, *y111*, *z110*, *z111*. Reading/writing is intended to take place with the TAPE FRAME FOUN in a position as initially delivered to the load port (undocked position). If no reader/writer unit is installed, this placement volume may be covered.^u

8.6 *Radio Frequency Identification (RFID) Reader/Writer Placement Volume* — A load port **mustshall** allow for installation of a unit that can read from or write to an RFID tag (as it may be installed in the corresponding placement volume on the rear of a 300 mm TAPE FRAME FOUN within the limits of a volume defined by *x110*, *y110*, *y111*, *z110*, *z111*. Reading/writing is intended to take place with the TAPE FRAME FOUN in a position as initially delivered to the load port (undocked position). If no reader/writer unit is installed, this placement volume may be covered.^u

NOTE 3-NOTE 4: As a consequence of the requirement defined above, any RFID reader/writer unit **mustshall** fit in the placement volume defined above.^u

NOTE 4-NOTE 5: RFID reader/writer within this context is understood as those parts that **mustshall** be located within this volume in order to be able to communicate with the tag on the TAPE FRAME FOUN. Usually this is the antenna. Other components of an RFID reader/writer system are not necessarily required to be placed within this volume.^u

8.8 *Spacing* — Load ports adjacent to each other on the SME **mustshall** be located at a distance as defined by dimension *x100*.^u

8.9 *Photo-Coupled I/O Device Placement Volume* — In the lower area of each load port there **mustshall** be volume, defined by *x120*, *y120*, the LFP, *z121*, and *z122*, allowing for placement of a photo-coupled I/O device for communication to floor-based transport vehicles. This placement volume is centered on the bilateral datum plane (BDP).^u

8.9.1 A photo-coupled I/O device may be installed anywhere within this placement volume upon the discretion and design requirements of the load port supplier. However, the center of its beam line **mustshall** be within the vertical limits defined by dimension *z120*. In horizontal direction (perpendicular to the FDP) the beam line **mustshall** also be centered to the BDP within the same limits as defined by the tolerance associated to *z120*.^u

8.11 *Docking Interface Placement Volume* — A load port **mustshall** provide clearance for installation of a docking interface within the limits of a volume defined by *y130* and *z130*. It extends over the full width of the SME. If no docking interface is installed, this placement volume may be covered by a panel.^u

8.13 *Fork-Lift Exclusion Volume on Load Port Below TAPE FRAME FOUN* — Two exclusion volumes on the left and right side of the load port **mustshall** be kept clear so that fork-lifts or conveyors may be used to load/unload a TAPE FRAME FOUN to/from a load port. These exclusion volumes are defined by *x140*, *x141*, *y140*, *y141*, and *z141*.^u

8.16.1 In Option A, the load port **must-beis** at the nominal load height as specified by dimension *z101*, and it **must-beis** open from above to facilitate automatic TAPE FRAME FOUN delivery from an overhead transport system. The volume left and right of the load port may be occupied by the SME, with a side clearance of *x144* between any part of the SME on the side of the load port above *z160*.^u

8.16.4 In Option D the load port **must-beis** at the nominal load height as specified by dimension *z101*, is not open from above, and it **must-have** a clearance around the TAPE FRAME FOUN as specified by dimensions *z103* and *x103*.^u

8.17 *Load Port Side Exclusion Volume for User Defined Objects* — An exclusion volume shall exist on the equipment if the equipment is wider than the load ports (e.g., equipment with two load ports wider than $x374 + x100 + x374 = 1110$ mm **mustshall** incorporate a load port side exclusion volume). This exclusion volume shall exist on both sides of the outer most load ports and shall be bounded by *x143* and *x144* below *z161* and bounded by *x103* and *x144* above *z161*. The exclusion volume shall extend from the EB to the LFP. If *x144* extends past the edge of the SME, then *x144* will be reduced to the outermost edge of the SME (i.e., the load port side exclusion volume will not define or increase the width of the SME). The load port side exclusion volume shall remain clear of any obstruction on the SME (e.g., lights, buttons, GUI etc.), and **mustshall** remain available for any user defined object. This volume will only exist on load port Options A and B.^u

Justification (if necessary)

FROM: Section/Paragraph Section 9

9.2 *Reserved Areas for Vacuum Application Features* — Two areas, located symmetrically to the vertical and horizontal center line of the load port door, defined by r_{238} , x_{231} and z_{231} , are reserved for placement of optional vacuum application features. If present, the vacuum application features on the load port door **must** be smaller than r_{238} in order to mate with flat surfaces defined on the TAPE FRAME FOUF door. ^u

9.3.1 Latching the TAPE FRAME FOUF door to the TAPE FRAME FOUF shell is intended by rotating the keys clockwise to vertical. The latch keys **must** not rotate beyond these limits of the rotation angle ψ . ^u

9.3.2 Convex features on the outer edges of the latch keys **must** have blend radii of r_{241} , r_{242} , and r_{243} to prevent small contact patches with large stresses that might cause wear and particles. Other convex features on the latch keys need only be de-burred and rounded off. The surface finish of the latch keys **must** have a roughness of R_a_{247} . ^u

9.6 *Registration Pins* — The two optional registration pins located on the load port door may be used to limit the maximum displacement of the TAPE FRAME FOUF door while on the load port door in case of a vacuum loss on a load port that is using optional vacuum features to hold the TAPE FRAME FOUF door in place. The two door pins are intended to mate with two holes required on the TAPE FRAME FOUF door. The surface finish of the door pins **must** have a roughness less than or equal to R_a_{247} . The load port shall have the ability to assist with FOUF door recovery when the system experiences utility loss. A method of doing this is to use the optional load port registration pins. ^u

9.8 *Door Return Repeatability* — The load port door **must** return to the closed position after opening with a repeatability given by the dimensions x_{237} and z_{237} . The repeatability of the door in the y axis is not specified and the load port is expected to move the door to a position in the y axis that allows for safe engagement of the FOUF door to the FOUF FRAME. ^u

9.9 *Retraction Force Applied by Latch Keys* — If the load port uses retracting latch keys, once the latch keys have been turned to the position that unlocks the TAPE FRAME FOUF door from the TAPE FRAME FOUF, the force (in a direction perpendicular to the facial plane) applied by each latch key to the TAPE FRAME FOUF door **must** be no greater than f_{235} . The load port shall support the FOUF door to minimize deflection when the keys are retracted. ^u

TO: Section/Paragraph Section 9

2 9.2 *Reserved Areas for Vacuum Application Features* — Two areas, located symmetrically to the vertical and horizontal center line of the load port door, defined by r_{238} , x_{231} and z_{231} , are reserved for placement of optional vacuum application features. If present, the vacuum application features on the load port door **mustshall** be smaller than r_{238} in order to mate with flat surfaces defined on the TAPE FRAME FOUF door. ^u

9.3.1 Latching the TAPE FRAME FOUF door to the TAPE FRAME FOUF shell is intended by rotating the keys clockwise to vertical. The latch keys **mustshall** not rotate beyond these limits of the rotation angle ψ . ^u

9.3.2 Convex features on the outer edges of the latch keys **mustshall** have blend radii of r_{241} , r_{242} , and r_{243} to prevent small contact patches with large stresses that might cause wear and particles. Other convex features on the latch keys need only be de-burred and rounded off. The surface finish of the latch keys **mustshall** have a roughness of R_a_{247} . ^u

9.6 *Registration Pins* — The two optional registration pins located on the load port door may be used to limit the maximum displacement of the TAPE FRAME FOUF door while on the load port door in case of a vacuum loss on a load port that is using optional vacuum features to hold the TAPE FRAME FOUF door in place. The two door pins are intended to mate with two holes required on the TAPE FRAME FOUF door. The surface finish of the door pins **mustshall** have a roughness less than or equal to R_a_{247} . The load port shall have the ability to assist with FOUF door recovery when the system experiences utility loss. A method of doing this is to use the optional load port registration pins. ^u

9.8 *Door Return Repeatability* — The load port door **mustshall** return to the closed position after opening with a repeatability given by the dimensions x_{237} and z_{237} . The repeatability of the door in the y axis is not specified and the load port is expected to move the door to a position in the y axis that allows for safe engagement of the FOUF door to the FOUF FRAME. ^u

9.9 *Retraction Force Applied by Latch Keys* — If the load port uses retracting latch keys, once the latch keys have been turned to the position that unlocks the TAPE FRAME FOUF door from the TAPE FRAME FOUF, the force (in a direction perpendicular to the facial plane) applied by each latch key to the TAPE FRAME FOUF door **mustshall** be no greater than f_{235} . The load port shall support the FOUF door to minimize deflection when the keys are retracted. ^u

Justification (if necessary)

3	FROM: Section/Paragraph Section 10 10.2 <i>BOLTS Seal Area</i> — On the BI surrounding the opening must be a flat area for sealing between the SME and the load port. The inner dimensions of this BOLTS seal area are the same as the BOLTS opening, and the outer dimensions of the seal area are defined by <i>x372</i> , <i>z372</i> , and <i>z377</i> . The flatness of the seal area must be within <i>y371</i> , and the perpendicularity of the seal area to the bilateral and horizontal planes must be within σ . 10.3 <i>Threaded Holes</i> — At six points on the BI, there must be threaded holes for bolting-on the load port. The opening of the threaded holes must be within the flatness of the seal area (<i>y371</i>), and must be at least <i>y373</i> deep. 10.3.1 The threads must conform to the ISO 68-1 specification which has a nominal diameter of 8 mm, a thread pitch of 1.25 mm, a normal length of engagement from 4 to 12 mm, and no allowance (variation from basic diameter). 10.3.3 Not <u>all</u> of these threaded holes need to be used by every load port, but all six threaded holes must be present. 10.7 <i>Repeatability of docked position</i> — The cycle-to-cycle repeatability of the docked position (when the TAPE FRAME FOUN is ready for opening) of a load port shuttle as determined by the position of the KC pins, must be within <i>y375</i> . TO: Section/Paragraph Section 10 10.2 <i>BOLTS Seal Area</i> — On the BI surrounding the opening mustshall be a flat area for sealing between the SME and the load port. The inner dimensions of this BOLTS seal area are the same as the BOLTS opening, and the outer dimensions of the seal area are defined by <i>x372</i> , <i>z372</i> , and <i>z377</i> . The flatness of the seal area mustshall be within <i>y371</i> , and the perpendicularity of the seal area to the bilateral and horizontal planes mustshall be within σ . 10.3 <i>Threaded Holes</i> — At six points on the BI, there mustshall be threaded holes for bolting-on the load port. The opening of the threaded holes mustshall be within the flatness of the seal area (<i>y371</i>), and mustshall be at least <i>y373</i> deep. 10.3.1 The threads mustshall conform to the ISO 68-1 specification which has a nominal diameter of 8 mm, a thread pitch of 1.25 mm, a normal length of engagement from 4 to 12 mm, and no allowance (variation from basic diameter). 10.3.3 Not <u>all</u> of these threaded holes need to be used by every load port, but all six threaded holes mustshall be present. 10.7 <i>Repeatability of docked position</i> — The cycle-to-cycle repeatability of the docked position (when the TAPE FRAME FOUN is ready for opening) of a load port shuttle as determined by the position of the KC pins, mustshall be within <i>y375</i> . Justification (if necessary)		
	Motion	Negative is addressed by the technical change(s).	
	Motion by/2 nd by	<u>Naomune Taniguchi / TOKYO SEIMITSU CO., LTD./ Tsukasa Fukunaga / Inficon Taniguchi (Company)/Fukunaga (Company)</u>	
	Discussion	<u>None</u>	
	Result of Vote (check one)	X 2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO "Incorporation of the Technical Change" subsection
		[Negative is not addressed by the technical change(s).] < 2/3	GO TO "Final" subsection → (E)
	Incorporation of the Technical Change	Motion	To incorporate the technical change(s).
		Motion by/2 nd by	<u>Naomune Taniguchi / TOKYO SEIMITSU CO., LTD. Taniguchi (Company)/ Atsushi Suzuki / SINFONIA TECHNOLOGY CO., LTD. Suzuki (Sinfonia)</u>
		Discussion	<u>None</u>
		15 Y-0 N; Motion passed/failed.	
	Result of Vote (check one)	X 90% ≤ [Agree to incorporate.]	GO TO "Final" subsection → (F)
		[Disagree to incorporate.] > 10%	GO TO "Final" subsection → (E)
	Not Sign	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 ¶ 9.6.1.4.5.2)	

	Use of "Not significant finding option" (check one)	<input type="checkbox"/>	It is mutually agreed upon to term the Negative "not significant".	GO TO "Final" subsection → (D)	
		<input type="checkbox"/>	It is mutually agreed upon to term the Negative "significant".	GO TO "Final" subsection → (C)	
		<input type="checkbox"/>	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	<input type="checkbox"/>	XX Y-XX N; Motion passed with simple majority	GO TO "Final" subsection → (D)	
		<input type="checkbox"/>	XX Y-XX N; Motion failed with simple majority	GO TO "Final" subsection → (C)	
Final	(check if applicable)	<input type="checkbox"/>	(A)	Withdrawn (counted under h in disposition)	
		<input type="checkbox"/>	(B)	Not related (counted under i in disposition)	
		<input type="checkbox"/>	(C)	Related and not persuasive (significant)	
		<input type="checkbox"/>	(D)	Not significant (counted under j in disposition)	
		<input type="checkbox"/>	(E)	Related and persuasive and not addressed by technical change	DOCUMENT FAILS
		<input checked="" 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.		

This table is needed for each Negative.

Negative 2

Negative 3

Negative 4

Voting Interest Reject 12- Voter Reject 21 (Voter: Larry Hartsough/UAA)

Negative 1

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary.			
		Section 8, 9 and 10			
	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied. Per Style Manual Table 4, 4-5(1), the word 'must' is used to state requirements in too many places in paragraphs 8 & 9 to list. Its use in Note 5 might be OK.			
	TF input (optional)				
Related	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)	
	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.)		
		<input type="checkbox"/>	Reason	XXXX	
	Motion by/ 2 nd by	Name (Company)/Name (Company)			

	Discussion						
	Result of Vote (check one)	XX Y-XX N; Motion passed/failed.					
		[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)	X Negative is related and persuasive. (Needs >1/3 votes to pass.)					
		Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)					
		Reason	XXXX				
	Motion by/ 2 nd by	Naomune Taniguchi / TOKYO SEIMITSU CO., LTD./ Atsushi Suzuki / SINFONIA TECHNOLOGY CO., LTD.Name (Company)/Name (Company)					
	Discussion						
	Result of Vote (check one)	15XX Y-XX0 N; Motion passed/failed.					
		X	[Negative is related and persuasive.] > 1/3	Is a technical change recommended? (check one)	X	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)		
			90% ≤ [Negative is related and not persuasive.]		GO TO "Not Significant Finding Option" subsection		
Address by Technical Change Option	Technical Change Recommendations Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields. Technical changes to address Voting Interest Reject 1 Voter Reject 1 Negative 1 are applicable to this negative and address the issues raised by this negative.						
	Technical Changes	1	FROM: Section/Paragraph Section 8				
			TO: Section/Paragraph Section 8				
			Justification (if necessary)				
		2	FROM: Section/Paragraph Section 9				
			TO: Section/Paragraph Section 9				
			Justification (if necessary)				
	Motion		Negative is addressed by the technical change(s).				
	Motion by/2 nd by		Naomune Taniguchi / TOKYO SEIMITSU CO., LTD./ Atsushi Suzuki / SINFONIA TECHNOLOGY CO., LTD.Name (Company)/Name (Company)				

書式を変更: フォント : 太字, フォントの色 : 青

Incorporation of the Technical Change	Discussion		None		
	Result of Vote (check one)	<input checked="" type="checkbox"/>	15XX Y-XX0 N; Motion passed/failed.		
		<input type="checkbox"/>	2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO "Incorporation of the Technical Change" subsection	
	<input type="checkbox"/>	[Negative is not addressed by the technical change(s).] < 2/3	GO TO "Final" subsection → (E)		
	Motion	To incorporate the technical change(s).			
	Motion by/2 nd by	Naomune Taniguchi / TOKYO SEIMITSU CO., LTD./ Atsushi Suzuki / SINFONIA TECHNOLOGY CO., LTD. Name (Company)/Name (Company)			
	Discussion				
	Result of Vote (check one)	<input checked="" type="checkbox"/>	XX-15 Y-XX-0 N; Motion passed/failed.		
		<input type="checkbox"/>	90% ≤ [Agree to incorporate.]	GO TO "Final" subsection → (F)	
	<input type="checkbox"/>	[Disagree to incorporate.] > 10%	GO TO "Final" subsection → (E)		
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 ¶ 9.6.1.4.5.2)				
	Use of "Not significant finding option" (check one)	<input type="checkbox"/>	It is mutually agreed upon to term the Negative "not significant".	GO TO "Final" subsection → (D)	
		<input type="checkbox"/>	It is mutually agreed upon to term the Negative "significant".	GO TO "Final" subsection → (C)	
	<input type="checkbox"/>	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	<input checked="" type="checkbox"/>	XX Y-XX N; Motion passed with simple majority	GO TO "Final" subsection → (D)		
	<input type="checkbox"/>	XX Y-XX N; Motion failed with simple majority	GO TO "Final" subsection → (C)		
Final	(check if applicable)	<input type="checkbox"/>	(A)	Withdrawn (counted under h in disposition)	
		<input type="checkbox"/>	(B)	Not related (counted under i in disposition)	
		<input type="checkbox"/>	(C)	Related and not persuasive (significant)	
		<input type="checkbox"/>	(D)	Not significant (counted under j in disposition)	
		<input type="checkbox"/>	(E)	Related and persuasive and not addressed by technical change	DOCUMENT FAILS
		<input checked="" 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.		

Negative 2

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary.
		4.1
	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.

		Paragraph 4.1 is not allowed per PM A3-5(8). Instead insert a Note, similar to that in 6689.				
TF input (optional)						
Withdrawal (check one)	X	No Negative withdrawal made by Voter.		GO TO "Related" subsection		
		Withdrawal document received by Standards staff on MM/DD/YYYY.		GO TO "Final" subsection → (A)		
Related	Motion and Reason (check one)	X	'Related' is mutually agreed upon. (Needs no motion.)		GO TO "Persuasive" subsection	
			Negative is not related. (Needs ≥2/3 votes to pass.)			
		Reason	XXXX			
	Motion by/ 2 nd by	Name (Company)/Name (Company)				
	Discussion					
Result of Vote (check one)	XX Y-XX N; Motion passed/failed.					
		[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)	X	Negative is related and persuasive. (Needs >1/3 votes to pass.)			
			Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)			
		Reason				
	Motion by/ 2 nd by	Naomune Taniguchi / TOKYO SEIMITSU CO., LTD./ Atsushi Suzuki / SINFONIA TECHNOLOGY CO., LTD. Name (Company)/Name (Company)				
	Discussion	None				
	Result of Vote (check one)	XX13 Y-XX0 N; Motion passed/failed.				
		X	[Negative is related and persuasive.] > 1/3	Is a technical change recommended? (check one)	X	Y
		[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)			
	90% ≤ [Negative is related and not persuasive.]	GO TO "Not Significant Finding Option" subsection				
Add ress	Technical Change Recommendations Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.					

Technical Changes	1	FROM: Section/Paragraph 4.1		
		4.1 SEMI Standards and Safety Guidelines		
		SEMI Draft Document 6689 — Specification for 300 mm TAPE FRAME FOUN		
		NOTE 1: Document 6689 is under development and is also being balloted at the same ballot cycle. If this ballot is approved, doc. 6689 will be replaced with a proper SEMI Designation. This NOTE is also to be removed at that time.		
		TO: Section/Paragraph 4.1		
	2	4.1 SEMI Standards and Safety Guidelines		
		SEMI Draft Document 6689 — Specification for 300 mm TAPE FRAME FOUN		
		None		
		NOTE 1: A Document covering specification of FOUN that is correspond to this Document is under development by the Physical Interfaces and Carriers Global Technical Committee. Document 6689 is under development and is also being balloted at the same ballot cycle. If this ballot is approved, doc. 6689 will be replaced with a proper SEMI Designation. This NOTE is also to be removed at that time.		
		Justification (If necessary)		
FROM: Section/Paragraph XXX				
TO: Section/Paragraph xxx				
Justification (If necessary)				
Motion		Negative is addressed by the technical change(s).		
Motion by/2 nd by		Naomune Taniguchi / TOKYO SEIMITSU CO., LTD./ Atsushi Suzuki / SINFONIA TECHNOLOGY CO., LTD.Name (Company)/Name (Company)		
Discussion		None		
Result of Vote (check one)	X	2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO “Incorporation of the Technical Change” subsection	
		[Negative is not addressed by the technical change(s).] < 2/3	GO TO “Final” subsection → (E)	
Incorporation of the Technical Change	Motion		To incorporate the technical change(s).	
	Motion by/2 nd by		Naomune Taniguchi / TOKYO SEIMITSU CO., LTD./ Atsushi Suzuki / SINFONIA TECHNOLOGY CO., LTD.Name (Company)/Name (Company)	
	Discussion		None	
	Result of Vote (check one)	X	90% ≤ [Agree to incorporate.]	GO TO “Final” subsection → (F)
			[Disagree to incorporate.]>10%	GO TO “Final” subsection → (E)

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 ¶ 9.6.1.4.5.2)			
	Use of "Not significant finding option" (check one)	<input type="checkbox"/>	It is mutually agreed upon to term the Negative "not significant".	GO TO "Final" subsection → (D)
		<input type="checkbox"/>	It is mutually agreed upon to term the Negative "significant".	GO TO "Final" subsection → (C)
		<input type="checkbox"/>	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	<input type="checkbox"/>	XX Y-XX N; Motion passed with simple majority	GO TO "Final" subsection → (D)
		<input type="checkbox"/>	XX Y-XX N; Motion failed with simple majority	GO TO "Final" subsection → (C)
Final	(check if applicable)	<input type="checkbox"/>	(A) Withdrawn (counted under h in disposition)	
		<input type="checkbox"/>	(B) Not related (counted under i in disposition)	
		<input type="checkbox"/>	(C) Related and not persuasive (significant)	
		<input type="checkbox"/>	(D) Not significant (counted under j in disposition)	
		<input type="checkbox"/>	(E) Related and persuasive and not addressed by technical change	DOCUMENT FAILS
		<input checked="" 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 2

Check only when the Document has not been failed.

2	Original number (#) of Negatives	(g)	
0	Number of Negatives withdrawn	(h)	
0	Number of Negatives found not related	(i)	
0	Number of Negatives found not significant	(j)	
2	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

This table is needed for each Voting Interest Reject.

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 3 (Voting Interest Name: RECIF)

Voter Reject 1 (Voter:Thomas Brillouet/RECIF Technologies)

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>LP dimensions and interfaces are quite far from the existing 300mm standards (Kinematic Couplings, FIMS, etc) especially the new BOLT interface which does not allow such a LP to be integrated in existing 300mm equipments.</p> <p>A previous study in a European collaborative program, where a Tape Frame FOUP and its LP were designed and prototyped, showed that compliance with existing 300mm standards was possible (especially E63-BOLT, with for instance a FOUP width of 419mm, and a FOUP's door width of 403mm).</p> <p>That would greatly ease adoption of such FOUP and LP by the industry, not requiring new equipments and giving the opportunity to handle both wafers and Tape Frames on existing 300mm equipments...</p>	
TF input (optional)			
Withdrawal (check one)	<input type="checkbox"/>	No Negative withdrawal made by Voter.	GO TO "Related" subsection
	<input checked="" type="checkbox"/>	Withdrawal document received by Standards staff on 03/20/2021.	GO TO "Final" subsection → (A)
Related	Motion and Reason (check one)	<input type="checkbox"/>	'Related' is mutually agreed upon. (Needs no motion.)
		<input type="checkbox"/>	Negative is not related. (Needs ≥2/3 votes to pass.)
		Reason	XXXX
	Motion by/ 2 nd by	Name (Company)/Name (Company)	
	Discussion		
	Result of Vote (check one)	XX Y-XX N; Motion passed/failed.	
<input type="checkbox"/>		[Negative is not related.] < 2/3	GO TO "Persuasive" subsection
	<input type="checkbox"/>	2/3 ≤ [Negative is not related.]	GO TO "Final" subsection → (B)
Persuasive	Motion and Reason (check one)	<input type="checkbox"/>	Negative is related and persuasive. (Needs >1/3 votes to pass.)
		<input type="checkbox"/>	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)
		Reason	XXXX
	Motion by/ 2 nd by	Name (Company)/Name (Company)	

Address by Technical Change Option	Discussion						
	Result of Vote (check one)	XX Y-XX N; Motion passed/failed.					
		<input type="checkbox"/>	[Negative is related and persuasive.] > 1/3	Is a technical change recommended? (check one)	<input type="checkbox"/>	Y	GO TO "Address by Technical Change Option" subsection
		<input type="checkbox"/>	[Negative is related and not persuasive.] < 2/3		N	GO TO "Final" subsection → (E)	
		<input type="checkbox"/>	2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO "Final" subsection → (C)			
	<input type="checkbox"/>	90% ≤ [Negative is related and not persuasive.]	GO TO "Not Significant Finding Option" subsection				
	Technical Change Recommendations Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.						
	Technical Changes	1	FROM: Section/Paragraph XXX				
			TO: Section/Paragraph xxx				
			Justification (If necessary)				
2		FROM: Section/Paragraph XXX					
		TO: Section/Paragraph xxx					
		Justification (If necessary)					
Motion		Negative is addressed by the technical change(s).					
Motion by/2 nd by		Name (Company)/Name (Company)					
Discussion							
Not Sign	Result of Vote (check one)	XX Y-XX N; Motion passed/failed.					
		<input type="checkbox"/>	2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO "Incorporation of the Technical Change" subsection			
		<input type="checkbox"/>	[Negative is not addressed by the technical change(s).] < 2/3	GO TO "Final" subsection → (E)			
	Incorporation of the Technical Change	Motion		To incorporate the technical change(s).			
		Motion by/2 nd by		Name (Company)/Name (Company)			
		Discussion					
		Result of Vote (check one)	XX Y-XX N; Motion passed/failed.				
			<input type="checkbox"/>	90% ≤ [Agree to incorporate.]	GO TO "Final" subsection → (F)		
			<input type="checkbox"/>	[Disagree to incorporate.] > 10%	GO TO "Final" subsection → (E)		
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 ¶ 9.6.1.4.5.2)							

	Use of "Not significant finding option" (check one)	<input type="checkbox"/>	It is mutually agreed upon to term the Negative "not significant".	GO TO "Final" subsection → (D)	
		<input type="checkbox"/>	It is mutually agreed upon to term the Negative "significant".	GO TO "Final" subsection → (C)	
		<input type="checkbox"/>	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	<input type="checkbox"/>	XX Y-XX N; Motion passed with simple majority	GO TO "Final" subsection → (D)	
		<input type="checkbox"/>	XX Y-XX N; Motion failed with simple majority	GO TO "Final" subsection → (C)	
Final	(check if applicable)	<input checked="" type="checkbox"/>	(A)	Withdrawn (counted under h in disposition)	
		<input type="checkbox"/>	(B)	Not related (counted under i in disposition)	
		<input type="checkbox"/>	(C)	Related and not persuasive (significant)	
		<input type="checkbox"/>	(D)	Not significant (counted under j in disposition)	
		<input type="checkbox"/>	(E)	Related and persuasive and not addressed by technical change	DOCUMENT FAILS
		<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.		

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)

Technical Issue	Origin	*TF/TC Chapter to choose Check by author after voting		
	Referenced Section/ Paragraph	*TF/TC Chapter to fill in including text in the ballot as appropriate. 5.2.10		
	Reason	*Original Comment text, if applicable, and problem statement, including justification and suggestion, should be copied. KC pin dimensions are changed from 450mm standard.		
Handle technical issue identified above as a Negative.				
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 and assigned to TF. (Needs ≥2/3 votes to pass.)	
		<input type="checkbox"/>	Negative is not related and placed on agenda of current TC Chapter meeting as new business. (Needs ≥2/3 votes to pass.)	
		<input type="checkbox"/>	Reason	XXXX

	Motion by/ 2nd by	Name (Company)/Name (Company)			
	Discussion				
	Result of Vote (check one)	XX Y-XX N; Motion passed/failed.			
		[Negative is not related.] <2/3			GO TO "Persuasive" subsection
	Result of Vote (check one)	2/3 ≤ [Negative is not related] and assigned to TF.			GO TO "Final" subsection → (B)
		2/3 ≤ [Negative is not related] and placed on agenda of current TC Chapter meeting as new business.			
		Motion and Reason (check one)	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.)			
Persuasive	Motion by/ 2nd by	Reason XXXX			
	Discussion	None			
	Result of Vote (check one)	15XX Y-XX0 N; Motion passed/failed.			
		X	[Negative is related and persuasive.] > 1/3	Is a technical change recommended? (check one)	X Y
		[Negative is related and not persuasive.] < 2/3		N	GO TO "Final" subsection → (E)
Address by Technical Change Option	Technical Changes	2/3 ≤ [Negative is related and not persuasive.] < 90% GO TO "Final" subsection → (C)			
		Technical Change Recommendations			
		Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.			
		FROM: Section/Paragraph 5.2.10 5.2.10 facial datum plane (FDP) — a vertical plane, defining y=0 of a system with three orthogonal planes (HDP, BDP, FDP), y92=120 ± 0 mm in front of the nominal location of the rear primary KCP.↵			
	Technical Changes	TO: Section/Paragraph 5.2.10 5.2.10 facial datum plane (FDP) — a vertical plane, defining y=0 of a system with three orthogonal planes (HDP, BDP, FDP), y92=120 ± 0 mm in front of the nominal location of the rear primary KCP.↵			
		Justification (If necessary)			
		FROM: Section/Paragraph XXX			
		TO: Section/Paragraph xxx			
	Technical Changes	Justification (If necessary)			
		Motion			
		Negative is addressed by the technical change(s).			
		Motion by/2nd by			
	Technical Changes	Naomune Taniguchi / TOKYO SEIMITSU CO., LTD. / Atsushi Suzuki / SINFONIA TECHNOLOGY CO., LTD. Name (Company)/Name (Company)			

書式を変更: フォントの色 : 青

Discussion		None	
Result of Vote (check one)		15XX Y-XX0 N; Motion passed/failed.	
		X 2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO "Incorporation of the Technical Change" subsection
		[Negative is not addressed by the technical change(s).] < 2/3	GO TO "Final" subsection → (E)
Incorporation of the Technical Change	Motion	To incorporate the technical change(s).	
	Motion by/2 nd by	Naomune Taniguchi / TOKYO SEIMITSU CO., LTD./ Atsushi Suzuki / SINFONIA TECHNOLOGY CO., LTD. Name (Company)/Name (Company)	
	Discussion	None	
	Result of Vote (check one)	XX14 Y-XX0 N; Motion passed/failed.	
X 90% ≤ [Agree to incorporate.]		GO TO "Final" subsection → (F)	
[Disagree to incorporate.] >10%		GO TO "Final" subsection → (E)	
Final	(check one)	(B)	Not related
		(C)	Related and not persuasive
		(E)	Related and persuasive and not addressed by technical change
		X (F)	Addressed by technical change
	(check if applicable)	Comment generated. See Section V-(ii) Comment # X.	

V. Comments

V- (i) Voters' Comments

Commenter 1 (Rafael Vargas-Bernal/ITSdl) - Comment 1

Commenter 2 (Larry Hartsough/UAA) - Comment 1

Comment	*TF/TC Chapter to fill in section/paragraph #, if necessary.	
	In subsection 1.1 'FEME' must be 'FRAME' (Commenter 1) In 1.1 correct spelling of FEME => FRAME (Commenter2)	
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 type="checkbox"/>	No further action was taken by the TC Chapter.
	<input type="checkbox"/>	Refer to the TF for more consideration.
	<input type="checkbox"/>	New Business
	X	Editorial Change
	Options for editorial change (check one)	X
Case 2: Voted in this section:		
Original section number and at least one full sentence are required in "FROM" and "TO" fields.		

Editorial Changes	1	FROM: Section/Paragraph 1.1 ▪ 1 Purpose ◦ 1.1 The purpose of this Document is to define the basic interface dimensions of a load port on the semiconductor manufacturing equipment (SME), where a 300 mm TAPE FRAME FOUN can be loaded and unloaded. The intention of this Document is to define a set of requirements and features to enable interoperability of load ports and TAPE FRAME FOUNs without limiting innovative solutions. ◦
		TO: Section/Paragraph 1.1 ▪ 1 Purpose ◦ 1.1 The purpose of this Document is to define the basic interface dimensions of a load port on the semiconductor manufacturing equipment (SME), where a 300 mm TAPE FRAME FOUN can be loaded and unloaded. The intention of this Document is to define a set of requirements and features to enable interoperability of load ports and TAPE FRAME FOUNs without limiting innovative solutions. ◦
		Justification (If necessary)
	2	FROM: Section/Paragraph xxx
		TO: Section/Paragraph xxx
		Justification (If necessary)
Motion		To approve above editorial change(s)
Motion by/2 nd by		Naomune Taniguchi / TOKYO SEIMITSU CO., LTD./ Atsushi Suzuki / SINFONIA TECHNOLOGY CO., LTD. Name (Company)/Name (Company)
Discussion		XXXXNone
Vote		XX-15 Y-XX-0 N; Motion passed/failed.—

This table is needed for each Comment accompanied a Vote

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.

書式変更: A&R Heading 1

	Origin of this editorial change (Check one)			Commenter(s) / Comment(s) #		
			X	Other [Confirmation after voting]		
1	FROM: Section/Paragraph Section7 Table 1					
	x18 °	2 °	143.00 ±0.05 mm °	BDP °	Location of front primary KCP °	
	x19 °	2 °	113.10 ±0.05 mm °	BDP °	Location of front secondary KCP °	
	y15 °	2 °	157.00 ±0.05 mm °	FDP °	Location of rear primary KCP °	
	y16 °	2 °	98.00 ±0.05 mm °	FDP °	Location of Front Primary KCP °	
	y17 °	2 °	77.50 ±0.05 mm °	FDP °	Location of front secondary KCP °	
	y18 °	2 °	121.00 ±0.05 mm °	FDP °	Location of rear secondary KCP °	

TO: Section/Paragraph Section7 Table 1

x18	2	143.00 ±0.05 mm	BDP	Location of front primary KCP
x19	2	113.10 ±0.05 mm	BDP	Location of front secondary KCP
y15	2	157.00 ±0.05 mm	FDP	Location of rear primary KCP
y16	2	98.00 ±0.05 mm	FDP	Location of front ^{secondary} primary KCP
y17	2	77.50 ±0.05 mm	FDP	Location of front secondary KCP
y18	2	121.00 ±0.05 mm	FDP	Location of rear secondary KCP
x18	2	143.00 ±0.05 mm	BDP	Location of front primary KCP
x19	2	113.10 ±0.05 mm	BDP	Location of front secondary KCP
y15	2	157.00 ±0.05 mm	FDP	Location of rear primary KCP
y16	2	98.00 ±0.05 mm	FDP	Location of front ^{secondary} primary KCP
y17	2	77.50 ±0.05 mm	FDP	Location of front secondary KCP
y18	2	121.00 ±0.05 mm	FDP	Location of rear secondary KCP

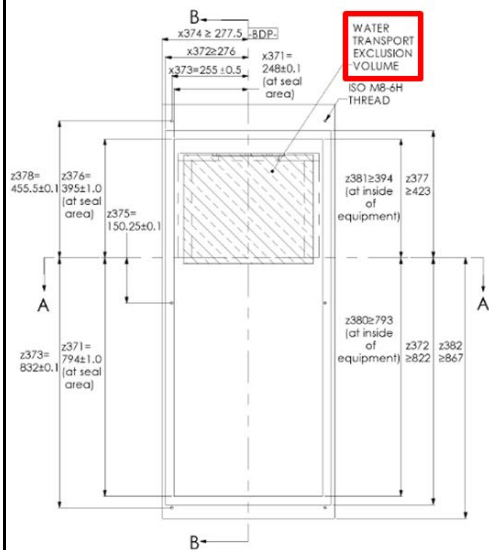
変更されたフィールド コード

Justification: (If necessary)

2	Origin of this editorial change (Check one)	<input type="checkbox"/>	Commenter(s) / Comment(s) #
		<input checked="" type="checkbox"/>	Other [Confirmation after voting]
FROM: Section/Paragraph 8.12 8.12 <i>Volume for Fork-Lift Truck</i> — The entire volume below a load port between the LFP and the BI shall be kept clear up to height above the floor defined by dimension z105 and x142 in order to allow for access by a fork-lift truck upon equipment move-in. The volume may be covered by a removable panel. See Figure 5 for a sketch of the volume.			
TO: Section/Paragraph 8.12 8.12 <i>Volume for Fork-Lift Truck</i> — The entire volume below a load port between the LFP and the BI shall be kept clear up to height above the floor defined by dimension z105 and x142 in order to allow for access by a fork-lift truck upon equipment move-in. The volume may be covered by a removable panel. See Figure 7 for a sketch of the volume.			
Justification: (If necessary)			
3	Origin of this editorial change (Check one)	<input type="checkbox"/>	Commenter(s) / Comment(s) #
		<input checked="" type="checkbox"/>	Other [Confirmation after voting]
FROM: Section/Paragraph 8.16.3 8.16.3 In Option C the distance from the HDP of the load port may be at any height above z101 that leaves the top of the TAPE FRAME FOUN under z100.			
TO: Section/Paragraph 8.16.3 8.16.3 In Option C the distance from the HDP of the load port may be at any height above z101 that leaves the top of the TAPE FRAME FOUN under z100.			
Justification: (If necessary)			
4	Origin of this editorial change (Check one)	<input type="checkbox"/>	Commenter(s) / Comment(s) #
		<input checked="" type="checkbox"/>	Other [Confirmation after voting]
FROM: Section/Paragraph 10.5 NOTE 13: It should be understood that the size of the opening on the load port towards the TAPE FRAME FOUN is smaller than the wafer transport exclusion volume. See § 8 for dimensions x234 and z234 (inside edges of load port FRAME).			
TO: Section/Paragraph 10.5 NOTE 13: It should be understood that the size of the opening on the load port towards the TAPE FRAME FOUN is smaller than the wafer transport exclusion volume. See § 9 for dimensions x234 and z234 (inside edges of load port FRAME).			
Justification: (If necessary)			
5	Origin of this editorial change (Check one)	<input type="checkbox"/>	Commenter(s) / Comment(s) #
		<input checked="" type="checkbox"/>	Other [Confirmation after voting]

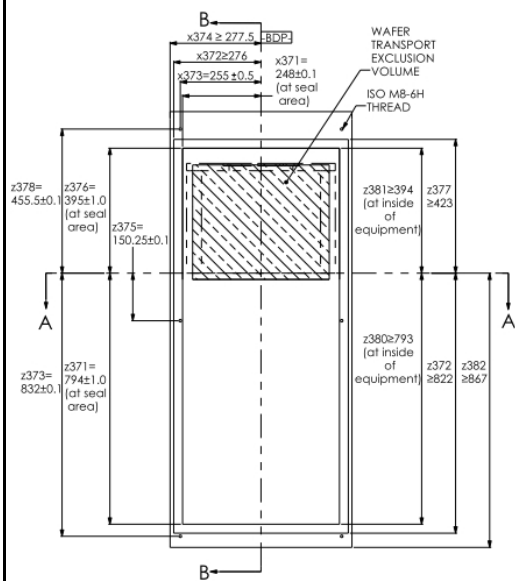
FROM: Section/Paragraph 5.2.10

WATER



TO: Section/Paragraph 5.2.10

WAFER



Justification: (If necessary)

Motion

To approve the above editorial change(s).

Motion by/ 2 nd by	Naomune Taniguchi / TOKYO SEIMITSU CO., LTD./ Atsushi Suzuki / SINFONIA TECHNOLOGY CO., LTD. Name (Company)/Name (Company)
Discussion	XXXXNone
Vote	13XX Y-XX0 N; Motion passed-(or failed)

書式変更: グリッドへ配置しない

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	=	40	/	40	=	100.0%		≥90%	

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

Note: See *Regulations* § 9.6.2 for further information.

☐

Globally Approved (No Ratification Ballot needed):
The Letter Ballot meets the Letter Ballot approval conditions for the global technical committee.

☒

Need a Ratification Ballot:
The Letter Ballot meets the Letter Ballot approval conditions for the TC Chapter and a Ratification Ballot will be issued to validate technical changes.

VIII. Safety Check

Note: See *Regulations* § 15 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)

	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/2 nd by	Tsukasa Fukunaga / Inficon Fukunaga-san (Company)/ Atsushi Suzuki / SINFONIA TECHNOLOGY CO., LTD. Taniguchi-san (Company)
Discussion	None
Vote	14 Y-0 N; Motion passed

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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 <i>Regulations ¶ 16.3.1.1</i>) to the Standard or Safety Guideline; or, any copyrighted items or trademarks that are used/reproduced (see <i>Regulations ¶ 16.4.1.2</i>) in the Standard or Safety Guideline. (Also see, <i>Regulations § 8.8</i>)			
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

IX(a) Patented Technologies subsection

IX(a1) Total numbers of Patented Technologies to be dealt with

# Fill number	(l) Known Patented Technology that might be relevant to the Standard/Safety Guideline	# Fill number	(m) Number of patented technologies first became known to the TC Chapter on or after the day of the issuance of this Letter Ballot	Postpone assessment of such patented technologies to be performed at the next scheduled TC Chapter meeting.
		# Fill number	(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 technology #1 (Brief description, e.g., patent title and number):		Date of Assessment (If different from the date of Letter Ballot adjudication) MM/DD/YYYY		
Is disclosed patented technology #1 found to be "might be material" to the Standard/Safety Guideline?	YES (It is a PMPT)	Is the use of this PMPT technically justified?	YES	PROCEED to assess NEXT one, or if this is the last one, GO TO IX(a3)
			NO	The Document is failed and returned to the TF
	NO	No further action is needed for patented 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						
Has an LOA for this patented technology been received from every owner ?		YES	PROCEED to check NEXT one, or if this is the last one, GO TO IX(b)			
		NO	MOTION		Ask ISC for special permission to publish.	
					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)
			Motion by/ 2 nd by		Name (Company)/Name (Company)	
			Discussion		XXXX	
			Vote		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 number	(o) Known copyrighted items that are used or reproduced to the Standard/Safety Guideline	o > 0 There is at least one known copy righted items that might be relevant to the Standard/Safety Guideline	GO TO IX (b2)
		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 item #1 used or reproduced in the Standard/Safety Guideline?		YES	Is the use/reproduction of this copyrighted item technically justified?	YES	PROCEED to assess NEXT one, or if this is the last one, GO TO IX(b3)
				NO	The Document is failed and returned to the TF
		NO	No further action is needed for copyrighted 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

Copyright release Status of copyrighted item #1					
Has the copyright release been received from its owner ?.		YES	PROCEED to assess NEXT one, or if this is the last one, GO TO IX(c)		
		NO	≤	Ask ISC for special permission to publish.	

				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)
			Motion by/ 2 nd by		Name (Company)/Name (Company)
			Discussion		XXXX
			Vote		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

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

Motion		This Document passed TC Chapter review as balloted and will be forwarded to the ISC A&R SC for procedural review.
		This Document passed TC Chapter review with editorial changes and will be forwarded to the ISC A&R SC for procedural review.
	X	This Document 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.
		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.
Motion by/ 2 nd by		Naomune Taniguchi / TOKYO SEIMITSU CO., LTD. Taniguchi-san (Company)/ Atsushi Suzuki / SINFONIA TECHNOLOGY CO., LTD. Suzuki-san (Company)
Discussion		None
Vote		XX-14 Y-XX-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.

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