

Ballot Results

MEMS/NEMS Cycle 04-2017

1. Doc. 5267, New Standard, Specification for Microfluidic Port and Pitch Dimensions

1	
As Cast Ballot Tally Summary For Document 5267	
Return Percentage: 60.61%	TC Voting Interest Returns: 20 TC Voting Interest Distribution: 33
Total Voting Interests/Votes Received: 47/49	
Number of Accepts: 19 Accept %: 95.00%	Number of Rejects: 1
Total Comments: 1	Total Rejects: 1
<i>Comment Issuer(s):</i> <i>Chen, Wendy (KYEC)</i>	<i>Reject Issuer(s):</i> <i>Allen, Rich (NIST)</i>

Reject Comments *Allen, Rich (NIST)*

- Title doesn't match the scope of the document, that is, the title is SPECIFICATION FOR MICROFLUIDIC PORT AND PITCH DIMENSIONS while the scope limits the standard to PITCH dimensions.
- Section 6.2.1: This is "Diameter must be less than 0.5 times nearest neighbor port-to-port (pitch) spacing." It implies that 0.5 times is not OK, but "0.5 times minus (anything)" is OK. I suggest this be re-worded as "Diameter must be less than or equal to 0.5 times nearest neighbor port-to-port (pitch) spacing." If 0.5 times is truly not to be allowed, then this number should be lower, e.g., "...less than or equal to 0.4 times..."
- The wording in A1-1.1 is "Figures in these examples exhibit 'loose tolerances' as specified by this Standard." I am assuming that this means that these are intended to follow 6.3.1, *Loose mechanical precision*, which specifies that the tolerances must be less 0.2 times the pitch. If so, the wording should be uniform between the two sections.
- Following on item 3, it isn't clear that there is the need to indicate which tolerances are met in the examples in the Appendix; further, given the tolerances specified for the pitches in the drawings, then examples 1 and 3 would meet the *Tight Mechanical Precision* specification of section 6.3.2, irrespective of origin chosen.
- Since 6.4 mandates a visual indicator for the port array origin, such indicator should be included in the drawings.

Accept Comments *Chen, Wendy (KYEC)*

Please explain How to generate the data on the Table 1 Allowed Pitch Values.

2. Doc. 6176, Reapproval of SEMI MS1-0307 (Reapproved 0812), Guide to Specifying Wafer-Wafer Bonding Alignment Target

2 As Cast Ballot Tally Summary For Document 6176	
Return Percentage: 60.61%	TC Voting Interest Returns: 20 TC Voting Interest Distribution: 33
Total Voting Interests/Votes Received: 47/49	
Number of Accepts: 20 Accept %: 100.00%	Number of Rejects: 0
Total Comments: 0	Total Rejects: 0
Comment Issuer(s):	Reject Issuer(s):

3. Doc. 6177, Reapproval of SEMI MS10-0912, Test Method to Measure Fluid Permeation Through MEMS Packaging Materials

3 As Cast Ballot Tally Summary For Document 6177	
Return Percentage: 60.61%	TC Voting Interest Returns: 20 TC Voting Interest Distribution: 33
Total Voting Interests/Votes Received: 47/49	
Number of Accepts: 20 Accept %: 100.00%	Number of Rejects: 0
Total Comments: 0	Total Rejects: 0
Comment Issuer(s):	Reject Issuer(s):