Ballot Review Summary

2014 Cycle 4

REGION: North America

COMMITTEE: 3DS-IC

EVENT: SEMICON West 2014

DATE OF MEETING: July 8, 2014

PLACE OF MEETING: San Francisco Marriott Marquis Hotel in San Francisco, California

COMMITTEE CO-CHAIRS: Rich Allen/NIST, Chris Moore/BayTech-Resor, Sesh Ramaswami/Applied Materials, Urmi Ray/Qualcomm

SEMI STAFF: Paul Trio

I. Document Number & Title

|  |  |
| --- | --- |
| **Document 5173E** | **New Standard: Guide for Describing Silicon Wafers for Use in a 300 mm 3DS-IC Wafer Stack** |

II. Tally (Staff to fill in)

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

A minimum of 60% of the voting interests that have voting members within the technical committee must return votes. (Regulations ¶ 9.6.1)

III. Rejects

Reject 1 (Tetsuya Nakai – SUMCO)

Negative 1 of Reject 1

|  |  |  |
| --- | --- | --- |
| **Negative** | **Referenced Section** | **\*TF/Committee to fill in if necessary** |
|  |
| **Reason** | **\*Original negative comment and justification should be included.** |
| Negative 1In Table 2, 2-6.13, Site Flatness for 16 nm technology node should be change from 16 nm to 20 nm.The new version of SEMI M1-0414 changed Site Flatness for 16 nm technology node from 16 nm to 20 nm in order to adjust adequate value for industry requiredSpecifications of starting wafers for 3DS-IC are same as SEMI M1 & M62 for CMOS logic or memories except for a few specific items such as thickness tolerance and warp.We recommend referring SEMI M1 & M62 except for a few specific items.If not, SEMI users will confuse which value is correct for site flatness of 16 nm technology node. This is one example case. In future, there are many discrepancies between SEMI M1/M62 and Doc.5173E (3DS-IC). |
| **Withdrawal** | x | No withdrawal made | **GO TO** “**Related” section** |
|  | Withdrawal document received by staff on XXXX | **GO TO “Final” 🡪 (A)** |
| **Related** | **Motion and Reason** | x | “Related” is mutually agreed upon. |
| **\*This motion can be appended to the motion for Persuasive (See Persuasive Section)** |
|  | Negative is related **(needs over 1/3 votes to pass)** |
|  | Negative is not related **(needs 2/3 or more votes to pass)** |
|  | Reason | XXXX |
| **Motion by/2nd by** | Name (Company)/Name (Company) |
| **Discussion** |  |
| **Result of Vote (check ONE)** | XX-XX |
|  | [Negative is related] > 1/3 | **GO TO “Persuasive”** |
|  | [Negative is not related] < 2/3 |
|  | 2/3=< [Negative is not related]  | **GO TO “Final”** 🡪 **(B)** |
|  |  |  |
| **Persuasive** | **Motion and Reason** | x | Negative is related and persuasive **(needs over 1/3 votes to pass)** |
|  | Negative is related and not persuasive **(needs 2/3 or more votes to pass)** |
|  | Reason | XXXX |
| **Motion by/2nd by** | Chris Moore (BayTech-Resor) / Win Baylies (BayTech-Resor) |
| **Discussion** | None |
| **Result of Vote (check ONE)** | 10-0 |
| x | [Negative is related and persuasive] > 1/3 | **GO TO “Final” 🡪 (E)** |
|  | [Negative is related and not persuasive] < 2/3 |
|  | 2/3=<[Negative is related and not persuasive] <90% | **GO TO “Final” 🡪 (C)** |
|  | 90% =< [Negative is related and not persuasive] | **GO TO** “**Not Significant Finding Option”** |
| **Not Significant Finding Option** | **This option can only be used “if the committee finds a negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action”. (Regulations ¶ 9.5.3.3.2)** |
|  |  | It is mutually agreed upon to term the negative “not significant” | **GO TO** 🡪 **(D)** |
|  |  | It is mutually agreed upon to term the negative “significant” | **GO TO 🡪 (C)** |
| **Motion** |  | The negative is “not significant”. |
| **Motion by/2nd by** | Name (Company)/Name (Company) |
| **Vote** |  | XX-XX Motion passed with simple majority | **GO TO 🡪 (D)** |
|  | XX-XX Motion failed with simple majority | **GO TO 🡪 (C)** |
| **Final** | Negative is: |
|  | **(A)** | withdrawn (counted under **h** in disposition) |
|  | **(B)** | not related (counted under **i** in disposition) |
|  | **(C)** | related and not persuasive (significant) |
|  | **(D)** | not significant (counted under **j** in disposition) |
| x | **(E)** | related and persuasive | **DOCUMENT FAILS** |
|  | Comment generated. See comment #x |

Reject votes were also received from the following voters:

* Masahiro Tsuriya (iNEMI)
* Naoki Kawai (University of Tokyo)
* Masanori Yoshise (consultant)

IV. Comments

Comments were received from the following voters:

* Naoki Kawai (University of Tokyo)
* Haruo Shimamoto (Renesas Electronics)

IX. Action for this document

|  |  |  |
| --- | --- | --- |
| **Motion**  |  | This document passed committee review as balloted and will be forwarded to the A&R for procedural review. |
|  | This document passed committee review with editorial changes and will be forwarded to the A&R for procedural review. |
| **x** | This document failed committee review and will be returned to the task force for rework. |
|  | This document failed committee review and work will be discontinued. |
| **Motion by/2nd by** | Chris Moore (BayTech-Resor) / Win Baylies (BayTech-Resor) |
| **Discussion** | Additional discussion will be needed on how to best structure the 5173F reballot since it will require SEMI M1 to implement. The intent is that requirements/values unique to Document 5173 will be provided; otherwise, users will be referred to M1. |
| **Vote** | 10-0 |
| **Final Action** | x | Motion passed |
|  | Motion failed  |