



3D Packaging and Integration Global Technical Committee

Japan TC Chapter

Meeting Summary and Minutes

Japan Standards Winter 2022 Meetings in conjunction with SEMICON Japan 2022

December 14, 2022, 10:00-12:00[JST]

Conference Tower, Tokyo Big sight, Tokyo, Japan/OVTCCM(Hybrid)

TC Chapter Announcements

Next TC Chapter Meeting

Wednesday, March 15, 2023, 13:30-15:30

OVTCCM

Table 1 Meeting Attendees

Italics indicate virtual participants

Co-Chairs: Kazunori Kato (AiT), Masahiro Tsuruya (iNEMI), Haruo Shimamoto (AIST)

SEMI Staff: Mami Nakajo

<i>Company</i>	<i>Last</i>	<i>First</i>	<i>Company</i>	<i>Last</i>	<i>First</i>
AIST	Shimamoto	Haruo	Namics Corporation	Okoshi	Kodai
AiT	Kato	Kazunori	Namics Corporation	Kamimura	Tsuyoshi
<i>iNEMI</i>	<i>Tsuruya</i>	<i>Masahiro</i>	<i>Hitachi Power Solutions Co.,Ltd.</i>	<i>Ohno</i>	<i>Shigeru</i>
<i>Nidec-Read Corp.</i>	<i>Miyasaka</i>	<i>Takashi</i>	retired	Takahashi	Mark
Towa Corporation	Onishi	Yohei	SEMI Japan	Nakajo	Mami

Table 2 Leadership Changes

<i>WG/TF/SC/TC Name</i>	<i>Previous Leader</i>	<i>New Leader</i>
None		

Table 3

<i>Previous WG/TF/SC Name</i>	<i>New WG/TF/SC Name or Status Change</i>
None	

Table 4

None

Table 5 Ballot Results

None

Table 6 Activities Approved by the GCS between meetings of the TC Chapter

#	Type	SC/TF/WG	Details
TBD	SNARF	3D Packaging & Integration 5-Year Review TF	Reapproval of G89-0211 (Reapproved 0318) Specification for Leadframe Strip Size
TBD	SNARF	3D Packaging & Integration 5-Year Review TF	Reapproval of SEMI G71-0996 (Reapproved 0318): Specification for Barcode Marking of Intermediate Containers for Packaging Materials
TBD	SNARF	3D Packaging & Integration 5-Year Review TF	Reapproval of SEMI G69-0996 (Reapproved 0318): Test Method for Measurement of Adhesive Strength Between Leadframes and Molding Compounds
TBD	SNARF	3D Packaging & Integration 5-Year Review TF	Reapproval of SEMI G90-0811 (Reapproved 0318): Specification for 300 mm Wafer Coin-Stack Type Shipping Container Used for Test and Packaging Processes
TBD	SNARF	3D Packaging & Integration 5-Year Review TF	Reapproval of SEMI G66-96 (Reapproved 0318): Test Method for the Measurement of Water Absorption Characteristics for Semiconductor Plastic
TBD	SNARF	3D Packaging & Integration 5-Year Review TF	Reapproval of SEMI G23-0996 (Reapproved 0318): Test Method of Inductance for Internal Traces of Semiconductor Packages

Table 7 Authorized Activities

#	When	SC/TF/WG	Details
TBD	Cycle 2-2023	3D Packaging & Integration 5-Year Review TF	Reapproval of G89-0211 (Reapproved 0318) Specification for Leadframe Strip Size
TBD	Cycle 2-2023	3D Packaging & Integration 5-Year Review TF	Reapproval of SEMI G71-0996 (Reapproved 0318): Specification for Barcode Marking of Intermediate Containers for Packaging Materials
TBD	Cycle 2-2023	3D Packaging & Integration 5-Year Review TF	Reapproval of SEMI G69-0996 (Reapproved 0318): Test Method for Measurement of Adhesive Strength Between Leadframes and Molding Compounds
TBD	Cycle 2-2023	3D Packaging & Integration 5-Year Review TF	Reapproval of SEMI G90-0811 (Reapproved 0318): Specification for 300 mm Wafer Coin-Stack Type Shipping Container Used for Test and Packaging Processes
TBD	Cycle 2-2023	3D Packaging & Integration 5-Year Review TF	Reapproval of SEMI G66-96 (Reapproved 0318): Test Method for the Measurement of Water Absorption Characteristics for Semiconductor Plastic
TBD	Cycle 2-2023	3D Packaging & Integration 5-Year Review TF	Reapproval of SEMI G23-0996 (Reapproved 0318): Test Method of Inductance for Internal Traces of Semiconductor Packages

Table 8 Authorized Ballots

#	When	TF	Details
None			

Table 9 SNARF(s) Granted a One-Year Extension

None

Table 10 SNARF(s) Abolished

None

Table 11 Standard(s) to receive Inactive Status

<i>Standard Designation</i>	<i>Title</i>
None	

Table 12 New Action Items

<i>Item #</i>	<i>Assigned to</i>	<i>Details</i>
20221214-01	3D Packaging & Integration 5 Year Review Task Force	To confirm documents and prepare SNARFs for these Reapproval Documents on the list by the next TC meeting.

Table 13 Previous Meeting Action Items

<i>Item #</i>	<i>Assigned to</i>	<i>Details</i>
20220516-01	3D Packaging & Integration 5 Year Review Task Force	To prepare SNARFs for these Reapproval Documents by the next TC meeting.>Done
20220516-02	3D Packaging & Integration Steering Group	to consider whether 3D Packaging & Integration Steering Group will be Inactive Status or discharged by the next TC meeting.>Open

1.Welcome, Reminders, and Introductions

Haruo Shimamoto (AIST) called the meeting to order at 10:00 a.m. The meeting reminders on antitrust issues, intellectual property issues and holding meetings with international attendance were reviewed. Attendees introduced themselves.

Attachment: 01-02_Required Element Nov 2022_E+J (new template)

2.Review of Previous Meeting Minutes

The TC Chapter reviewed the minutes of the previous meeting.

Motion:	Approve the previous meeting minutes of the I&C Japan TC Chapter on January 13, 2022.
By / 2nd:	Haruo Shimamoto (AIST) / Mark Takahashi (retired)
Discussion:	None
Vote:	7 in favor and 0 opposed. Motion passed.

Attachment: 02-01_20220516_3DPI-Japan_MeetingMinutes_approved

3.Technical Committee Awards

For the 7 new Standards were published on November 2022, the following member received the awards for contributions to the “Encapsulation Characteristics for WLP&PLP Taskforce activities

- Masahiro Tsuruya iNEMI



- Hidetoshi Arai APIC YAMADA CORPORATION
- Haruo Shimamoto The National Institute of Advanced Industrial Science and Technology
- Tsuyoshi Kamimura NAMICS Corporation
- Kodai Okoshi NAMICS Corporation
- Takashi Miyasaka NIDEC READ CORPORATION
- Takakage Matsumoto Panasonic Industry Co., Ltd.
- Hirofumi Kuroda Sumitomo Bakelite Co., Ltd.
- Yohei Oonishi TOWA CORPORATION
- Tetsuya Yamada TOWA CORPORATION

4.Liaison Reports

4.1 3D Packaging & Integration North America TC Chapter

Mami Nakajo (SEMI Japan) reported the 3D Packaging & Integration North America TC Chapter activity status based on the report as attached.

Attachment: 04-01_NA 3DP&I Liaison Report Nov2022 v1 ,

4.2 3D Packaging & Integration Taiwan TC Chapter

Mami Nakajo (SEMI Japan) reported the 3D Packaging & Integration Taiwan TC Chapter activity status based on the report as attached.

Attachment: 04-02_3D P&I TW Liaison Report_20220411_V1

4.3 SEMI Staff Report

Mami Nakajo (SEMI) explained the SEMI Staff Report based on the report as attached.

Attachment: 04-03_Staff Report 2022Dec,

5.Ballot Review

None

6.Subcommittee and Task Force Reports

6.1 GCS Report

No report

6.2 3D Packaging & Integration 5 Year Review Task Force

Masahiro Tsuruya (iNEMI) reported the 3D Packaging & Integration 5 Year Review Task Force status as attached.

Attachment: 06-02_TF Report 1.1 - 5yrs Review TF v2022_12



6.3 3DS IC Bonded Layer Inspection Metrology Task Force

Haruo Shimamoto (AIST) reported the status of 3DS IC Bonded Layer Inspection Metrology Task Force as attached. .

Attachment: 06-03_ActivitiesReport_3DSIC-InspectionTF_20221214_Submit

6.4 Encapsulation Characteristics for Wafer Level Package and Panel Level Packaging Task Force

Masahiro Tsuruya (iNEMI) reported the status of Encapsulation Characteristics for Wafer Level Package and Panel Level Packaging Task Force as attached.

Attachment: 06-04_TF Report 1.3 - PLP Encapsulation Characterisitic TF v2022_12

6.5 Panel Level Packaging (PLP) Glass Carrier Task Force

Mark Takahashi (retired) reported the status of Panel Level Packaging Glass Carrier Task Force as attached.

Attachment: 06-05_PLP Glass Carrier TF Status_20221214

6.6 3D Packaging & Integration Steering Group

Masahiro Tsuruya (iNEMI) proposed to decide the direction of future activities by the next committee meeting.

Action Item: 20220516-02 (3D Packaging & Integration Steering Group) To consider whether 3D Packaging & Integration Steering Group will be Inactive Status or discharged by the next TC meeting.>Open

7 Old Business

7.1 SNARF Project Period Check

There are no SNARFs to be reviewed.

7.2 5 Years Review Check

Action Item: 20221214-01 (3D Packaging & Integration 5 Year Review TF) To confirm documents and prepare SNARFs for these Reapproval Documents by the next TC meeting.

- SEMI G94-EN : SEMI G94-0113 (Reapproved 1118)-EN
- SEMI G64-EN : SEMI G64-1118-EN

8 New Business

8.1 Proposal of New Activity

8.1.1 SNARF Proposal for Reapproval of SEMI G89-0211 (Reapproved 0318) Specification for Leadframe Strip Size

Motion:	Approve the SNARF for Reapproval of SEMI G89-0211 (Reapproved 0318) Specification for Leadframe Strip Size
By / 2nd:	Kazunori Kato (Advanced Interface Technology Corp.) / Mark Takahashi (retired)
Discussion:	None
Vote:	7 in favor and 0 opposed. Motion Passed.

Attachment: SNARF_G89_Reapproval_r1

8.1.2 SNARF Proposal for Reapproval of SEMI G71-0996 (Reapproved 0318) Specification for Barcode Marking of Intermediate Containers for Packaging Materials

Motion:	Approve the SNARF for Reapproval of SEMI G71-0996 (Reapproved 0318) Specification for Barcode Marking of Intermediate Containers for Packaging Materials
By / 2nd:	Masahiro Tsuriya (iNemI) / Mark Takahashi (retired)
Discussion:	None
Vote:	7 in favor and 0 opposed. Motion Passed.

Attachment: SNARF_G71_Reapproval_r1

8.1.3 SNARF Proposal for Reapproval of SEMI G69-0996 (Reapproved 0318) Test Method for Measurement of Adhesive Strength Between Leadframes and Molding Compounds

Motion:	Approve the SNARF for Reapproval of SEMI G69-0996 (Reapproved 0318) Test Method for Measurement of Adhesive Strength Between Leadframes and Molding Compounds
By / 2nd:	Masahiro Tsuriya (iNemI) / Mark Takahashi (retired)
Discussion:	None
Vote:	7 in favor and 0 opposed. Motion Passed.

Attachment: SNARF_G69_Reapproval_r2

8.1.4 SNARF Proposal for Reapproval of SEMI G90-0811 (Reapproved 0318) Specification for 300 mm Wafer Coin-Stack Type Shipping Container Used for Test and Packaging Processes

Motion:	Approve the SNARF for Reapproval of SEMI G90-0811 (Reapproved 0318) Specification for 300 mm Wafer Coin-Stack Type Shipping Container Used for Test and Packaging Processes
By / 2nd:	Kazunori Kato (Advanced Interface Technology Corp.) / Mark Takahashi (retired)
Discussion:	None
Vote:	8 in favor and 0 opposed. Motion Passed.

Attachment: SNARF_G90_Reapproval_r1

8.1.5 SNARF Proposal for Reapproval of SEMI G66-96 (Reapproved 0318) Test Method for the Measurement of Water Absorption Characteristics for Semiconductor Plastic Molding Compounds

Motion:	Approve the SNARF for Reapproval of SEMI G66-96 (Reapproved 0318) Test Method for the Measurement of Water Absorption Characteristics for Semiconductor Plastic Molding Compounds
By / 2nd:	Masahiro Tsuriya (iNemI) / Mark Takahashi (retired)
Discussion:	None
Vote:	8 in favor and 0 opposed. Motion Passed.

Attachment: SNARF_G66_Reapproval_r2

8.1.6 SNARF Proposal for Reapproval of SEMI G23-0996 (Reapproved 0318) Test Method of Inductance for Internal Traces of Semiconductor Packages

Motion:	Approve the SNARF for Reapproval of SEMI G23-0996 (Reapproved 0318) Test Method of Inductance for Internal Traces of Semiconductor Packages
By / 2nd:	Kazunori Kato (Advanced Interface Technology Corp.) / Mark Takahashi (retired)
Discussion:	None
Vote:	8 in favor and 0 opposed. Motion Passed.

Attachment: SNARF_G23_Reapproval_r2

8.1.7 Approval request for ballot issuance of Reapproval of the following documents in Cycle 2/2023 by 3D Packaging & Integration 5 Year Review Task Force



SEMI G89-0211 (Reapproved 0318) Specification for Leadframe Strip Size

SEMI G71-0996 (Reapproved 0318) Specification for Barcode Marking of Intermediate Containers for Packaging Materials

SEMI G69-0996 (Reapproved 0318) Test Method for Measurement of Adhesive Strength Between Leadframes and Molding Compounds

SEMI G90-0811 (Reapproved 0318) Specification for 300 mm Wafer Coin-Stack Type Shipping Container Used for Test and Packaging Processes

SEMI G66-96 (Reapproved 0318) Test Method for the Measurement of Water Absorption Characteristics for Semiconductor Plastic Molding Compounds

SEMI G23-0996 (Reapproved 0318) Test Method of Inductance for Internal Traces of Semiconductor Packages

Motion:	<p>Authorize the following Documents for Letter Ballots in Cycle2/2023 by 3D Packaging & Integration 5 Year Review Task Force</p> <p>SEMI G89-0211 (Reapproved 0318) Specification for Leadframe Strip Size SEMI G71-0996 (Reapproved 0318) Specification for Barcode Marking of Intermediate Containers for Packaging Materials SEMI G69-0996 (Reapproved 0318) Test Method for Measurement of Adhesive Strength Between Leadframes and Molding Compounds SEMI G90-0811 (Reapproved 0318) Specification for 300 mm Wafer Coin-Stack Type Shipping Container Used for Test and Packaging Processes SEMI G66-96 (Reapproved 0318) Test Method for the Measurement of Water Absorption Characteristics for Semiconductor Plastic Molding Compounds SEMI G23-0996 (Reapproved 0318) Test Method of Inductance for Internal Traces of Semiconductor Packages</p>
By / 2nd:	Masahiro Tsuruya (iNemI) /Kazunori Kato (Advanced Interface Technology Corp.)
Discussion:	None
Vote:	8 in favor and 0 opposed. Motion Passed.

9 Action Item Review

9.1 Open Action Items

<i>Item #</i>	<i>Assigned to</i>	<i>Details</i>
20220516-01	3D Packaging & Integration 5 Year Review Task Force	To prepare SNARFs for these Reapproval Documents by the next TC meeting.>Done
20220516-02	3D Packaging & Integration Steering Group	to consider whether 3D Packaging & Integration Steering Group will be Inactive Status or discharged by the next TC meeting.>Open

9.2 New Action Items

The TC Chapter reviewed the following new action item.

<i>Item #</i>	<i>Assigned to</i>	<i>Details</i>
20221214-01	3D Packaging & Integration 5 Year Review Task Force	To confirm documents and prepare SNARFs for these Reapproval Documents on the list by the next TC meeting.



Next Meeting and Adjournment

The next meeting is scheduled for Wednesday, March 15, 2023, 13:30-15:30 [JST] OVTCCM

See <http://www.semi.org/standards-events> for the current list of events.

Having no further business, a motion was made to adjourn. Adjournment was at 12:30.

Respectfully submitted by:

Mami Nakajo

Coordinator

SEMI Japan

Phone: +81.3.3222.5949

Email: mnakajo@semi.org

Minutes tentatively approved by:

Kazunori Kato (AiT), Co-chair	December 19, 2022
Masahiro Tsuruya (iNEMI), Co-chair	December 20, 2022
Haruo Shimamoto (ASIT), Co-chair	December 19, 2022

Table 14 Index of Available Attachments^{#1}

<i>Title</i>	<i>Title</i>
01-02_Required Element Nov 2022_E+J (new template)	SNARF_G89_Reapproval_r1
02-01_20220516_3DPI-Japan_MeetingMinutes_approved	SNARF_G71_Reapproval_r1
04-01_NA 3DP&I Liaison Report Nov2022 v1 ,	SNARF_G69_Reapproval_r2
04-02_3D P&I TW Liaison Report_20220411_V1	SNARF_G90_Reapproval_r1
04-03_Staff Report 2022Dec,	SNARF_G66_Reapproval_r2
06-02_TF Report 1.1 - 5yrs Review TF v2022_12	SNARF_G23_Reapproval_r2
06-03_ActivitiesReport_3DSIC- InspectionTF_20221214_Submit	
06-04_TF Report 1.3 - PLP Encapsulation Characteristic TF v2022_12	
06-05_PLP Glass Carrier TF Status_20221214	

#1 Due to file size and delivery issues, attachments must be downloaded separately. A .zip file containing all attachments for these minutes is available at www.semi.org. For additional information or to obtain individual attachments, please contact [SEMI Staff Name] at the contact information above.