



FPD Materials & Components and FPD Metrology Japan Joint TC Chapter

Meeting Summary and Minutes

SEMI Standards Japan Summer Meetings

Friday, June 2, 2023

SEMI Japan Office/ Official Virtual TC Chapter Meeting (Hybrid)

14:30-17:00 [JST]

TC Chapter Announcements

Next TC Chapter Meeting:

- FPD Materials & Components Japan TC Chapter meeting will be held on October 13 Friday, 2023 9:00-15:00, Innovation Center for Organic Electronics , Yamagata University, Yamagata, Japan
- FPD Metrology Japan TC Chapter: TBD

Table 1 Meeting Attendees

Italics indicate virtual participants

FPD Materials & Components TC Co-Chairs: Tadahiro Furukawa – Yamagata University, Ryoichi Watanabe – Japan Display, Toshimasa Eguchi – Sumitomo Bakelite

FPD Metrology TC Co-Chairs: Ryoichi Watanabe – Japan Display, Akira Kawaguchi – Otsuka Electronics

SEMI Staff: Hirofumi Kanno

| <i>Company</i> | <i>Last</i> | <i>First</i> | <i>Company</i> | <i>Last</i> | <i>First</i> |
|------------------|-------------|--------------|-----------------------|-------------|--------------|
| SK-Electronics | Miyazaki | Shohei | Sumitomo Bakelite | Eguchi | Toshimasa |
| FUJIFILM | Ishizuka | Hiroshi | Yamagata University | Furukawa | Tadahiro |
| MORESCO | Uehigashi | Atsushi | Otsuka Electronics | Kawaguchi | Akira |
| HOYA Corporation | Kondo | Keitaro | Corning International | Okamura | Haruo |
| Japan Display | Ryoichi | Watanabe | SEMI Japan | Kanno | Hirofumi |

Table 2 Leadership Changes

| <i>WG/TF/SC/TC Name</i> | <i>Previous Leader</i> | <i>New Leader</i> |
|--|--|--|
| <i>FPD Materials & Components Japan TC</i> | | |
| None | | |
| <i>FPD Metrology Japan TC</i> | | |
| FPD Metrology Japan TC | Ryoichi Watanabe – Japan Display, Akira Kawaguchi – Otsuka Electronics Satoshi Tomioka - Sony | Ryoichi Watanabe – Japan Display, Akira Kawaguchi – Otsuka Electronics |

Table 3 Committee Structure Changes

| <i>Previous WG/TF/SC Name</i> | <i>New WG/TF/SC Name or Status Change</i> |
|--|---|
| <i>FPD Materials & Components Japan TC</i> | |
| None | |
| <i>FPD Metrology Japan TC</i> | |
| None | |

Table 4 Ballot Results

| Document # | Document Title | Committee Action |
|--|---|-------------------------------|
| <i>FPD Materials & Components Japan TC</i> | | |
| 6977 | Line Item Revision to SEMI D34-0710 (Reapproved), Test Method for FPD Polarizing Films | |
| Line Item 1 | Reformat sections to meet the requirement which is specified in section 3.2 of Procedure Manual | Passed with editorial changes |
| Line Item 2 | Update several references | Passed with editorial changes |
| <i>FPD Metrology Japan TC</i> | | |
| None | | |

#1 **Passed** ballots and line items will be submitted to the ISC Audit & Review Subcommittee for procedural review.

#2 **Failed** ballots and line items were returned to the originating task forces for re-work and re-balloting or abandoning.

Table 5 Activities Approved by the GCS between meetings of the TC Chapter

| # | Type | SC/TF/WG | Details |
|--|------|----------|---------|
| <i>FPD Materials & Components Japan TC</i> | | | |
| None | | | |
| <i>FPD Metrology Japan TC</i> | | | |
| None | | | |

Table 6 Authorized Activities

Listing of all revised or new SNARF(s) approved by the Originating TC Chapter.

| # | Type | SC/TF/WG | Details |
|--|-------|---|---|
| <i>FPD Materials & Components Japan TC</i> | | | |
| TBA | SNARF | FPD Materials & Components Maintenance Task Force | Reapproval of SEMI D60-0818: TESR METHOD OF SURFACE SCRATCH RESISTANCE FOR FPD POLARIZING FILM AND COVER PLASTICS FOR MOBILE DISPLAYS |
| TBA | SNARF | FPD Materials & Components Maintenance Task Force | Reapproval of SEMI D77-0618: Test Method for Measurements of Dimension of Films for FPD – Contour Matching Method |
| TBA | SNARF | FPD Materials & Components Maintenance Task Force | REAPPROVAL TO SEMI D63-0818: TEST METHOD FOR DEPOLARIZATION EFFECT OF FPD COLOR FILTER |
| <i>FPD Metrology Japan TC</i> | | | |
| None | | | |

#1 SNARFs and TFOFs are available for review on the SEMI Web site at:

<http://downloads.semi.org/web/wstdsbal.nsf/TFOFSNARF>

Table 7 Authorized Ballots

| # | When | TF | Details |
|--|--------------------|---|---|
| <i>FPD Materials & Components Japan TC</i> | | | |
| TBA | Cycle 6 and beyond | FPD Materials & Components Maintenance Task Force | Reapproval of SEMI D60-0818: TESR METHOD OF SURFACE SCRATCH RESISTANCE FOR FPD POLARIZING FILM AND COVER PLASTICS FOR MOBILE DISPLAYS |
| TBA | Cycle 6 and beyond | FPD Materials & Components Maintenance Task Force | Reapproval of SEMI D77-0618: Test Method for Measurements of Dimension of Films for FPD – Contour Matching Method |
| TBA | Cycle 6 and beyond | FPD Materials & Components Maintenance Task Force | REAPPROVAL TO SEMI D63-0818: TEST METHOD FOR DEPOLARIZATION EFFECT OF FPD COLOR FILTER |
| <i>FPD Metrology Japan TC</i> | | | |
| None | | | |

Table 8 SNARF(s) Granted a One-Year Extension

| # | TF | Title | Expiration Date |
|--|----|-------|-----------------|
| <i>FPD Materials & Components Japan TC</i> | | | |
| None | | | |
| <i>FPD Metrology Japan TC</i> | | | |
| None | | | |

Table 9 SNARF(s) Abolished

| # | TF | Title |
|--|----|-------|
| <i>FPD Materials & Components Japan TC</i> | | |
| None | | |
| <i>FPD Metrology Japan TC</i> | | |
| None | | |

Table 10 Standard(s) to receive Inactive Status

| Standard Designation | Title |
|--|-------|
| <i>FPD Materials & Components Japan TC</i> | |
| None | |
| <i>FPD Metrology Japan TC</i> | |
| None | |

Table 11 New Action Items

| Item # | Assigned to | Details |
|------------|------------------|---|
| 06022023-1 | Ryoichi Watanabe | The direction of the 5-year review of SEMI D31-0318 “Guide for Definition of Measurement Index (DSemu) for Luminance Mura in FPD Image Quality Inspection will be decided by the next committee meeting in October (Mr. Watanabe) |
| | | |

Table 12 Previous Meeting Action Items

| <i>Item #</i> | <i>Assigned to</i> | <i>Details</i> |
|---------------|--|---|
| 20230125-01 | Tadahiro Furukawa | To review SEMI D63-0818-EN for 5year review by next TC – Done |
| 20230125-02 | FPD Materials & Components Flexible Display Task Force | To review the documents according to the 5year review list |
| | | |

1 Welcome, Reminders, and Introductions

Tadahiro Furukawa called the meeting to order at 14:30. The meeting reminders on antitrust issues, intellectual property issues and holding meetings with international attendance were reviewed. Attendees introduced themselves.

Attachment: 01, RequiredElementNov2020Rev1-E&J-r1

2 Review of Previous Meeting Minutes

The FPD Materials & Components Japan TC Chapter reviewed the minutes of the previous meeting.

Motion: Approve the minutes of Previous FPD M&C Committee as written

By / 2nd: By: Ryoichi Watanabe / Japan Display Inc.
Second: Keitaro Kondo / HOYA Electronics Singapore Pte Ltd

Discussion: None

Vote: Result: 8-Y 0-N Voting Result: Pass

Attachment: 02, 20230125_FPD-MC_Japan_MeetingMinutes

The FPD Metrology Japan TC Chapter reviewed the minutes of the previous meeting.

Motion: Approve the minutes of Previous FPD Metrology Committee as written

By / 2nd: By: Akira Kawaguchi / Otsuka Electronics Co., Ltd.
Second: Tadahiro Furukawa / Yamagata University

Discussion: None

Vote: Result: 8-Y 0-N Voting Result: Pass

Attachment: 03, 20230125_FPD-MC_Japan_MeetingMinutes

3 Liaison Reports

3.1 FPD Metrology Korea TC Chapter

Hirofumi Kanno (SEMI Japan) reported for the FPD Metrology Korea TC Chapter

Attachment: 4_Liaison report_FPDM_KR_June2023

3.2 FPD Metrology Taiwan TC Chapter

Hirofumi Kanno (SEMI) reported for the FPD Metrology Taiwan TC Chapter.

Attachment: 05, 5_FPD-M TW Liaison Report_2023may

3.3 SEMI Staff Report

Hirofumi Kanno (SEMI) gave the SEMI Staff Report.

Attachment: 6_Staff Report March 2023 v3

4 Ballot Review

NOTE 1: TC Chapter adjudication on ballots reviewed is detailed in the Audits & Review (A&R) Subcommittee Forms for procedural review. The A&R forms are available as attachments to these minutes. The attachment number for each balloted document is provided under each ballot review section below.

4.1 FPD Materials & Components

4.1.1 Document #6977, Line Item Revision to SEMI D34-0710 (Reapproved), Test Method For FPD Polarizing Films

4.1.1.1 Line Item 1: Reformat sections to meet the requirement which is specified in section 3.2 of Procedure Manual

Passed with editorial changes

4.1.1.2 Line Item 2: Update several references

Passed with editorial changes

Attachment: 7_Cycle 3-23_Tally_FPD M&C_Final

Attachment: 8_Ballot report Doc. 6977 (Line Item revision 1-2)20230531Final

5 Subcommittee and Task Force Reports

5.1 FPD Materials & Components

5.1.1 Flexible Display TF

Mr. Eguchi reviewed the following SNARF proposal: approval of the SNARF and approval of the issuance of ballots after Cycle 6 will be done through the GCS approval process after a 2-week review by TC members.

5.1.2 FPD Mask TF

Mr. Kondo reported for the Task Force in accordance with the attached file.

Attachment: 9, 230525Minutes FPD_Mask_TF

5.1.3 FPD Materials & Components Maintenance TF

Mr. Furukawa and Mr. Ishizuka requested approval of the following three SNARF proposals.

Motion: Approval of SNARF For Reapproval of SEMI D60-0818: TESR METHOD OF SURFACE SCRATCH RESISTANCE FOR FPD POLARIZING FILM AND COVER PLASTICS FOR MOBILE DISPLAYS

By / 2nd: By: Hiroshi Ishizuka / FUJIFILM Corporation
Second: Ryoichi Watanabe / Japan Display Inc.

Discussion: None

Vote: Result: 7-Y 0-N Voting Result: Pass

Motion: Approval of the ballot issuance of Document: Reapproval of SEMI D60-0818: TESR METHOD OF SURFACE SCRATCH RESISTANCE FOR FPD POLARIZING FILM AND COVER PLASTICS FOR MOBILE DISPLAYS in Cycle 6 and beyond.

By / 2nd: By: Hiroshi Ishizuka / FUJIFILM Corporation
Second: Ryoichi Watanabe / Japan Display Inc.



Discussion: None
Vote: Result: 7-Y 0-N Voting Result: Pass

Attachment: 10 SNARF_Reapproval to SEMI D60-0818_20230531r

Motion: Approval of SNARF For Reapproval of SEMI D77-0618: Test Method for Measurements of Dimension of Films for FPD – Contour Matching Method

By / 2nd: By: Hiroshi Ishizuka / FUJIFILM Corporation
Second: Ryoichi Watanabe / Japan Display Inc.

Discussion: None
Vote: Result: 7-Y 0-N Voting Result: Pass

Motion: Approval of the ballot issuance of Document: Reapproval of SEMI D77-0618: Test Method for Measurements of Dimension of Films for FPD – Contour Matching Method in Cycle 6 and beyond.

By / 2nd: By: Hiroshi Ishizuka / FUJIFILM Corporation
Second: Ryoichi Watanabe / Japan Display Inc.

Discussion: None
Vote: Result: 7-Y 0-N Voting Result: Pass

Attachment: 11 SNARF_Reapproval to SEMI D77-0618_20230531r

Motion: Approval of SNARF For Reapproval of REAPPROVAL TO SEMI D63-0818: TEST METHOD FOR DEPOLARIZATION EFFECT OF FPD COLOR FILTER

By / 2nd: By: Hiroshi Ishizuka / FUJIFILM Corporation
Second: Ryoichi Watanabe / Japan Display Inc.

Discussion: None
Vote: Result: 7-Y 0-N Voting Result: Pass

Motion: Approval of the ballot issuance of Document: REAPPROVAL TO SEMI D63-0818: TEST METHOD FOR DEPOLARIZATION EFFECT OF FPD COLOR FILTER in Cycle 6 beyond.

By / 2nd: By: Hiroshi Ishizuka / FUJIFILM Corporation
Second: Ryoichi Watanabe / Japan Display Inc.

Discussion: None
Vote: Result: 7-Y 0-N Voting Result: Pass

Attachment: 12_D63_SNARF_Nov2021 (1)_R1

5.2 FPD Metrology

There is no TF activity under the committee

6 Old Business

6.1 FPD Materials & Components

6.1.1 Project Period Review

None

6.1.2 5-year Review

None

6.2 FPD Metrology

6.2.1 Project Period Review

None

6.2.2 5-Year Reviews

| <i>Item #</i> | <i>Assigned to</i> | <i>Details</i> |
|---------------|--------------------|---|
| 06022023-1 | Ryoichi Watanabe | The direction of the 5-year review of SEMI D31-0318 “Guide for Definition of Measurement Index (DSemu) for Luminance Mura in FPD Image Quality Inspection will be decided by the next committee meeting in October (Mr. Watanabe) |

7 New Business

7.1 FPD Materials & Components

7.1.1 Project Period Review

None

7.1.2 5-year Review

None

7.2 FPD Metrology

Mr. Watanabe reported that Mr. Tomioka of Sony resigned as chair of the committee.

8 Next Meeting and Adjournment

- FPD Materials & Components Japan TC Chapter meeting will be held on October 13 Friday, 2023 9:00-15:00, Innovation Center for Organic Electronics, Yamagata University, Yamagata, Japan
- FPD Metrology Japan TC Chapter: TBD

Respectfully submitted by:

Hirofumi Kanno

Senior Manager

SEMI Japan

Phone: 81.3222.5760

Email: hkanno@semi.org



Minutes tentatively approved by:

| | |
|--|-----------------|
| : Tadahiro Furukawa – Yamagata University, Japan Chapter of FPD Materials & Components Global Technical Committee Co-chair | <Date approved> |
| Ryoichi Watanabe – Japan Display, Japan Chapter of FPD Materials & Components Global Technical Committee Co-chair | <Date approved> |
| Toshimasa Eguchi – Sumitomo Bakelite, Japan Chapter of FPD Materials & Components Global Technical Committee Co-chair | <Date approved> |
| Ryoichi Watanabe – Japan Display, Japan Chapter of FPD Metrology Global Technical Committee Co-chair | <Date approved> |
| Akira Kawaguchi – Otsuka Electronics, Japan Chapter of FPD Metrology Global Technical Committee Co-chair | <Date approved> |

Table 13 Index of Available Attachments^{#1}

| <i>Title</i> | <i>Title</i> |
|--|---|
| 1_RequiredElementNov2020Rev1-E&J-r1 | 02, 20230125_FPD-MC_Japan_MeetingMinutes |
| 3_20220610_FPD-M&C_Japan_MeetingMinutes | 4_Liaison report_FPDM_KR_June2023 |
| 5_FPD-M TW Liaison Report_2023may | 6_Staff Report March 2023 v3 |
| 7_Cycle 3-23_Tally_FPD M&C_Final | 8_Ballot report Doc. 6977 (Line Item revision 1-2)20230531Final |
| 9, 230525Minutes FPD_Mask_TF | 10 SNARF_Reapproval to SEMI D60-0818_20230531r |
| 11 SNARF_Reapproval to SEMI D77-0618_20230531r | 12_D63_SNARF_Nov2021 (1)_R1 |

#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.