



FPD Metrology Taiwan TC Chapter

Meeting Summary and Minutes

Taiwan Spring Standards Meeting 2024

Friday, February 23, 2024. 14:00–16:00

Room 223, Bldg 16, No.321, Section 2, Guang-fu Road, East District, Hsinchu City,
OVTCCM

TC Chapter Announcements

Next TC Chapter Meeting

Friday, Oct. 4, 2024, 14:00 – 16:00

Hybrid Meeting, Hsinchu, Taiwan

Table 1 Meeting Attendees

Italics indicate virtual participants

Co-Chairs: Jen-Chieh Wang (ITRI)/ Jia-Ming Liu (ITRI)

SEMI Staff: *Cher Wu/ Cheryl Chuang*

| <i>Company</i> | <i>Last</i> | <i>First</i> | <i>Company</i> | <i>Last</i> | <i>First</i> |
|----------------|-------------|--------------|----------------|-------------|--------------|
| AUO | Kevin | Chen | NTUST | Pei-Li | Sun |
| I-Boson | Kerson | Wang | INNOLUX | Chien-Chih | Huang |
| OMVOTECH | Chao-Hua | Wen | PlayNitride | PEI-TING | Chou |
| ITRI | Bao-Jen | Pong | PlayNitride | HONG-LIN | Li |
| E Ink | KUN-XIAN | Li | Lextar | JING-YI | Chen |

Table 2 Leadership Changes

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

Table 3 Committee Structure Changes

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

Table 4 Ballot Results

| <i>Document #</i> | <i>Document Title</i> | <i>Committee Action</i> |
|-------------------|--|-------------------------|
| 6632C | New Standard: Test Method of Flicker Nuisance for Wide Visual Field Displays | Passed |
| 6201B | New Standard: Guide for Tone Reproduction Curves for Transparent Displays | Passed |

#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 |
|------|------|----------|---------|
| None | | | |

Table 6 Authorized Activities

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

| # | Type | SC/TF/WG | Details |
|------|-------|--------------------------------|--|
| 7220 | SNARF | Transparent Display Task Force | Reapproval of SEMI D59-0519, Terminology for 3D Display |
| 7221 | SNARF | Flexible Display Task Force | Reapproval of SEMI D62-0619, Test Method for Measurement of LED Light Bar for Liquid Crystal Displays. |

#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 |
|------|------------------------|--------------------------------|--|
| 7220 | cycle 3、4 or 5 of 2024 | Transparent Display Task Force | Reapproval of SEMI D59-0519, Terminology for 3D Display |
| 7221 | cycle 3、4 or 5 of 2024 | Flexible Displays Task Force | Reapproval of SEMI D62-0619, Test Method for Measurement of LED Light Bar for Liquid Crystal Displays. |

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

| # | TF | Title | Expiration Date |
|------|----|-------|-----------------|
| None | | | |

Table 9 SNARF(s) Abolished

| # | TF | Title |
|------|----|-------|
| None | | |

Table 10 Standard(s) to receive Inactive Status

| Standard Designation | Title |
|----------------------|-------|
| None | |

Table 11 New Action Items

| Item # | Assigned to | Details |
|--------|-------------|---------|
| None | | |

Table 12 Previous Meeting Action Items

| <i>Item #</i> | <i>Assigned to</i> | <i>Details</i> |
|---------------|--------------------|----------------|
| None | | |

1 Welcome, Reminders, and Introductions

Committee Co-Chairs Jen-Chieh Wang (ITRI) called the meeting to order at 14:10. The meeting reminders on antitrust issues, intellectual property issues and holding meetings with international attendance were reviewed. Attendees introduced themselves.

Attachment: Required Element Nov 2020

2 Review of Previous Meeting Minutes

The TC Chapter reviewed the minutes of the previous meeting.

Motion: Approve previous meeting minute.

By / 2nd: Chao-Hua Wen(OMVO Technology)/ Kerson Wang(I-Boson)

Discussion: None

Vote: 8-0 in favor. Motion passed

Attachment: FPD Meeting Minutes 20230804 V6

3 Liaison Reports

3.1 FPD-Metrology Japan TC Chapter

-- Cher Wu reported for the FPD Metrology Japan TC Chapter. Of note:

Attachment: 202308 JA FPD Metrology Liaison Report R0

3.2 FPD-Metrology Korea TC Chapter

-- Cher Wu reported for the FPD Metrology Korea TC Chapter. Of note:

Attachment: Liaison report FPDM KR Dec2023

3.3 SEMI Staff Report

--Cher Wu (SEMI) gave the SEMI Staff Report. Of note:

Action Item: SEMI Global 2023 Calendar of Events

2023 Critical Dates for SEMI Standards Ballots

Attachment: FPD TC Staff Report 20240223

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 Document # 6632C, New Standard: Test Method of Flicker Nuisance for Wide-Visual-Field Displays

Motion: Approve this Document to be submitted to the ISC Audit & Review Subcommittee for procedural review

By / 2nd: By: Pei-Li Sun (NTUST)/ Kevin Chen (AUO)

Discussion: None

Vote: 7-Y 0-N. Motion passed.

4.2 Document # 6201B, Guide for Tone Reproduction Curves for Transparent Displays

Motion: Approve this Document to be submitted to the ISC Audit & Review Subcommittee for procedural review

By / 2nd: By: Chao-Hua Wen (OMVOTECH)/ Bao-Jen Pong (ITRI)

Discussion: None

Vote: 7-Y 0-N. Motion passed.

5 Subcommittee and Task Force Reports

5.1 Flexible Display Task Force

- 6632C is submitted to 2023 cycle 7 voting, review voting results, no reject (2023/11/13).
 - Approve in TC meeting (2024/02/23) to be submitted to Headquarter A&R review

SEMI D62 - Test Method for Measurement of LED Light Bar for Liquid Crystal Displays

- Document # 7221, SEMI D62-0619 is due for Five Year Review. During its TC Standards Spring Meeting in 2024, the TC Chapter agreed to issue a reapproval ballot for SEMI D62-0619.
 - Approve in TC meeting (2024/02/23) to be submitted SNARF Document # 7221 for Cycle 3/4/5

5.2 Transparent Display Task Force

- 6201B is submitted to 2023 cycle 7 voting, review voting results, no reject (2023/11/13).
 - Approve in TC meeting (2024/02/23) to be submitted to Headquarter A&R review.

SEMI D59-0519, Terminology for 3D Display

- Document # 7220, SEMI D59-0519 is due for Five Year Review. During its TC Standards Spring Meeting in 2024, the TC Chapter agreed to issue a reapproval ballot for SEMI D59-0519.
 - Approve in TC meeting (2024/02/23) to be submitted SNARF Document # 7221 for Cycle 3/4/5 of 2024
- Document # 6737, New Standard: Test Method of Binocular Image Fusion for Augmented Reality Transparent Displays
 - No further progress, and committee members agree to start draft after the completion of 6201 task on 4/7 and 6/2 meetings .

5.3 Maintenance Task Force

SEMI D57 – Definition of Measurement Index (VCT) for Mura in FPD Image Quality



Inspection: D6960(TW)

- D6960(TW) : Revision to SEMI D57-0310, Definition of Measurement Index (VCT) for MURA in FPD Image Quality Inspection, pass 2022 voting, will proceed A&R on 2/10/2023 TF meeting
 - Under Headquarter A&R review

SEMI D58 - Terminology and Test Pattern for the Color Breakup of Field Sequential Color Display: D6961(TW)

- D6961(TW) : Line Item Revision to SEMI D58 Terminology and Test Pattern for the Color Breakup of Field Sequential Color, pass 2022 voting, will proceed A&R on 2/10/2023 TF meeting
- 2023/7/22 SEMI TW staff past Headquarter's comments, content of 5.2.1, 5.2.4 (see, seen should be clarified)
- Completed in A&R process, done

6 Old Business

None

7 New Business

7.1 Flexible Displays Task Force

7.1.1 SEMI D62-0619 is due for Five Year Review. During its TC Standards Spring Meeting in 2024, the TC Chapter agreed to issue a reapproval ballot for SEMI D62-0619.

Doc # 7221, Test Method for Measurement of LED Light Bar for Liquid Crystal Displays

Motion: Ask TC to approve to issue a reapproval ballot for SEMI D62-0619 for Cycle 3/4/5.

By / 2nd: Pei-Li Sun (NTUST)/ Kerson Wang(I-Boson)

Discussion: All agreed to TF's plan.

Vote: 8 in Favor – 0 reject, motion passed.



Action Item: Submit SNARF Doc. # 7221 Test Method for Measurement of LED Light Bar for Liquid Crystal Displays
Attachment: None.

7.1.2 6632C is submitted to 2023 cycle 7 voting, review voting results, no reject (2023/11/13).

Doc 6632C, New Standard: Test Method of Flicker Nuisance for Wide-Visual-Field Displays

Motion: Ask TC to approve Doc. 6632C for Headquarter A&R review

By / 2nd: Kerson Wang(I-Boson)/Pei-Li Sun(NTUST)

Discussion: All agreed to TF's plan.

Vote: 7 in Favor – 0 reject, motion passed.

Action Item: Submit Doc. 6632C New Standards: Test Method of Flicker Nuisance for Wide-Visual-Field Displays for Headquarter A&R review.

Attachment: None.

7.2 Transparent Display Task Force

7.2.1 6201B is submitted to 2023 cycle 7 voting, review voting results, no reject (2023/11/13).

Motion: Ask TC to approve submit Doc. 6201B for Headquarter A&R review.

By / 2nd: Chao-Hua Wen(OMVOTECH)/ Bao-Jen Pon(ITRI)

Discussion: All agreed to TF's plan.

Vote: 7 in Favor – 0 reject, motion passed.

7.2.2 SEMI D59-0519 is due for Five Year Review. During its TC Standards Spring Meeting in 2024, the TC Chapter agreed to issue a reapproval ballot for SEMI D59-0519.

Doc # 7220, Terminology for 3D Display

Motion: Ask TC to approve to issue a reapproval ballot for SEMI D59-0519 for Cycle 3/4/5.

By / 2nd: Bao-Jen Pon(ITRI) / Pei-Li Sun(NTUST)

Discussion: All agreed to TF's plan.

Vote: 8 in Favor – 0 reject, motion passed.

Action Item: Submit SNARF Doc. # 7220, Terminology for 3D Display

Attachment: None.

7.3 SEMI

7.3.1 FPD Seminar

Topics : Sharing Development of FPD related to industry.

Date is under discussed, TC would like to hold during SEMICON Taiwan

Action Item: SEMI will have internal discuss and reply to TC via email.

8 Next Meeting and Adjournment

The next meeting is scheduled to be held on Oct. 04, 2024.

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

Adjournment: 15:55

Respectfully submitted by:

Cheryl Chuang



Standards Coordinator

SEMI Taiwan

Phone: 886-3-560-1777 #510, 886-910-419-832

Email: cchuang@semi.org

Minutes tentatively approved by:

| | |
|-----------------------|---------------|
| Co-chair | Date Approved |
| Jen-Chieh Wang (ITRI) | Mar. 08, 2024 |
| Jia-Ming Liu (ITRI) | Mar. 08, 2024 |

Table 13 Index of Available Attachments#1

| <i>Title</i> | <i>Title</i> |
|---|--|
| 1_ <u>Required Element Nov 2020</u> | 4_ <u>Liaison report FPDM KR Dec2023</u> |
| 2_ <u>FPD Meeting Minutes 20230804 V6</u> | 5_ <u>FPD TC Staff Report 20240223</u> |
| 3_ <u>202308 JA FPD Metrology Liaison Report R0</u> | |

#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.