FPD Materials & Components and FPD Metrology Japan Joint TC Chapter Meeting Summary and Minutes

Japan Standards Summer Meetings 2025

Friday, July 18, 2025, 3:30PM – 5:00PM JST

SEMI Japan, Tokyo, Japan / Official Virtual TC Chapter Meeting (Hybrid)

TC Chapter Announcements

Next TC Chapter Meeting

FPD Materials & Components Japan TC Chapter and FPD Metrology Japan TC Chapter joint meeting will be held on Wednesday, October 15, 2025 3:00PM - 5:00PM JST via OVTCCM and at SEMI Japan, Tokyo, Japan.

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: Nahoko Koga (SEMI Japan)

Company	*Last*	*First*	*Company*	*Last*	*First*
SK-Electronics	*Miyazaki*	*Shohei*	*Sumitomo Bakelite*	*Eguchi*	*Toshimasa*
FUJIFILM	*Ishizuka*	*Hiroshi*	*Kei techno research*	*Ochi*	*Keizo*
SK-Electronics	*Yagi*	*Toshifumi*	*Taiwan Flat Panel Display Materials & Devices Association*	*Liu*	*Jia-Ming*
Yamagata University	Furukawa	Tadahiro	*Nikon*	*Miyazaki*	*Takuya*
Japan Display	Watanabe	Ryoichi	SEMI Japan	Yoshida	Akiko
Otsuka Electronics	*Kawaguchi*	*Akira*	SEMI Japan	Koga	Nahoko
Hoya Corporation	*Kondo*	*Keitaro*			

Table 2 Leadership Changes

WG/TF/SC/TC Name	*Previous Leader*	*New Leader*
FPD Materials & Components Japan TC Chapter		
None		
FPD Metrology Japan TC Chapter		
None		

Table 3 TC Chapter Structure Changes

Previous WG/TF/SC Name	*New WG/TF/SC Name or Status Change*
FPD Materials & Components Japan TC Chapter	
None	
FPD Metrology Japan TC Chapter	
None	

Table 4 Ballot Results

Document #	*Document Title*	*Committee Action*
FPD Materials & Components Japan TC Chapter		
None		
FPD Metrology Japan TC Chapter		
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 Ratification Ballot Results

Document #	*Document Title*	*ISC A&R Action*	*A&R Forms*
FPD Materials & Components Japan TC Chapter			
None			
FPD Metrology Japan TC Chapter			
None			

Note 1: **Passed** Ratification ballots will be submitted to SEMI publication for final processing.

Note 2: **Failed** Ratification ballots were returned to the originating task forces for re-work and re-balloting or abandoning.

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

#	*Type*	*SC/TF/WG*	*Details*
FPD Materials & Components Japan TC Chapter			
None			
FPD Metrology Japan TC Chapter			
None			

Table 7 Authorized Activities

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

#	*Type*	*SC/TF/WG*	*Details*
FPD Materials & Components Japan TC Chapter			
7383	SNARF	FPD Mask Task Force	Reapproval of SEMI D20-0706, Terminology for FPD Mask Defect
7384	SNARF	FPD Mask Task Force	Reapproval of SEMI D21-0706, Terminology for FPD Mask Pattern Accuracy
FPD Metrology Japan TC Chapter			
None			

#1 SNARFs and TFOFs are available for review on the SEMI Web site at:
https://downloads.semi.org/web/wstdsbal.nsf/TFOFSNARF

Table 8 Authorized Ballots

#	*When*	*TF*	*Details*
FPD Materials & Components Japan TC Chapter			
None			

Table 8 Authorized Ballots

#	*When*	*TF*	*Details*
FPD Metrology Japan TC Chapter			
None			

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

#	*TF*	*Title*	*Expiration Date*
FPD Materials & Components Japan TC Chapter			
None			
FPD Metrology Japan TC Chapter			
None			

Table 10 SNARF(s) Cancelled

#	*TF*	*Title*
FPD Materials & Components Japan TC Chapter		
None		
FPD Metrology Japan TC Chapter		
None		

Table 11 Standard(s) to receive Inactive Status

Standard Designation	*Title*
FPD Materials & Components Japan TC Chapter	
None	
FPD Metrology Japan TC Chapter	
None	

Table 12 New Action Items

Item #	*Assigned to*	*Details*
FPD Materials & Components Japan TC Chapter		
FPDM&C_20250718_01	Flexible Display Task Force	To propose SNARF for Major Revision to SEMI D80-0421.
FPDM&C_20250718_02	FPD Materials & Components Maintenance Task Force	To propose SNARF for Line Item Revision to SEMI D9-0303.
FPDM&C_20250718_03	FPD Mask Task Force	To propose SNARFs for Line Item Revision to SEMI D42-0421 and SEMI D53-0421.
FPDM&C_20250718_04	SEMI Staff	To prepare Reapproval Ballots for SEMI D20-0706 and SEMI D21-0706.
FPD Metrology Japan TC Chapter		
None		

Table 13 Previous Meeting Action Items

Item #	*Assigned to*	*Details*
FPD Materials & Components Japan TC Chapter		
None		
FPD Metrology Japan TC Chapter		
FPDMet_20250207-01	SEMI Staff	To forward the ballot adjudication result of Doc. #7259A to A&R Subcommittee for procedural review.→Closed

1 Welcome, Reminders, and Introductions

Tadahiro Furukawa (Yamagata University) called the meeting to order at 3:30PM. The meeting reminders on antitrust issues, intellectual property issues and holding meetings with international attendance were reviewed. Attendees introduced themselves.

Attachment: 01_Required Meeting Elements March 2024_J

2 Review of Previous Meeting Minutes

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

Motion: Approve the minutes as written.
By / 2nd: By: Ryoichi Watanabe / Japan Display Inc.
Second By: Hiroshi Ishizuka / FUJIFILM Corporation
Discussion: None.
Vote: 8-Y 0-N Motion Passed.

Attachment: 02_FPD M&C+FPD Met_JA _Mins_20250207_v1.0

3 Liaison Reports

3.1 *Japan Regional Standards Committee (JRSC)*

Nahoko Koga (SEMI Japan) reported for the JRSC that the meeting was held on Thursday, April 17, 2025. Topics included:

- Daisuke Sado (Eagle industry) was appointed by the ISC as a co-chair of JRSC. With this, Tadahiro Furukawa (Yamagata University) stepped down from co-chair position.
- The Planning Meeting will be held on Thursday, August 28, 2025 inviting all the TF leaders as well as TC co-chairs to deepen knowledge or insights regarding standardization. The theme this year would be "Transparency in the Supply Chain and SEMI Standards." More details will be announced as soon as they are finalized.

3.2 *Global Coordinating Subcommittee (GCS)*

Nahoko Koga (SEMI Japan) reported for GCS that there had been no updates from the previous meeting.

3.3 *FPD Metrology Korea TC Chapter*

Nahoko Koga (SEMI Japan) reported for the FPD Metrology Korea TC Chapter. Of note:

- Last meeting was held on March 20, 2025 (Hybrid) and the next meeting will be held on August 28, 2025 (Hybrid).

- Doc.#7154A, New Standard: Test Method for Flicker of Flat Panel Displays was authorized for Cycle 5.
- Picture Quality Evaluation Task Force submitted the SNARF for Reapproval of D76-0318, Test Method for Viewing Angle Characteristic Using Reference Color on Visual Display, to GCS in April and was approved.

Attachment: 03_Liaison report_FPDM_KR_April 2025_J

3.4 *FPD Metrology Taiwan TC Chapter*

Nahoko Koga (SEMI Japan) reported for the FPD Metrology Taiwan TC Chapter. Of note:

- Last meeting was held on April 11, 2025 (Hybrid) and the next meeting will be held on October 3, 2025.
- The following two documents passed the Ballot Review, and was forwarded to the ISC A&R for procedural review.
  - Doc.#7294, Reapproval of SEMI D65-0719, Test Method for Measurement for the Color Breakup of Field Sequential Color Display.
  - Doc.#7295, Reapproval of SEMI D68-0719, Test Method for Optical Properties of Electronic Paper Displays.
- New SNARF #7352, Revision to SEMI D56-0519, Test Method for Measurement for Ambient Contrast of Flat Panel Displays, was approved by the TC Chapter.

Attachment: 04_FPD Taiwan Liaison Report_20250411_v1_J

4 SEMI Staff Report

Nahoko Koga (SEMI Japan) gave the SEMI Staff Report. Of note:

- SEMICON West 2025 is scheduled to take place in Phoenix, Arizona for the first time and will be held at the Phoenix Convention Center, with Standards meetings planned for the North Hall. SEMICON West is scheduled to alternate each October between Phoenix and San Francisco on an annual basis moving forward.
- The second Global Standards Summit (GSS) is planned for SEMICON West to identify standards-critical areas and work towards an industry standardization strategy for the next 3- and 7-year time horizons. Continued discussions on the important standardization topics discussed at GSS 2024 is expected, in addition to identify new areas where standardization is needed.
- SEMI Standards Procedure Manual was revised on July 7, 2025. The main points of this revision concern the major revision to multiple Standards, the ballot checklist requirements for revision to Primary Standard, and the ballot structure for major revision.
- SEMI University Japan Store launched in June 2024, which provides SEMI Japan original e-learning courses with Japanese audio or subtitles including SEMI Standards tutorials.

Attachment: 05_Staff_HQ Report June 2025 v6

5 Ballot Review

None

6 Subcommittee and Task Force Reports

6.1 *FPD Materials & Components Japan TC Chapter*

6.1.1 *Flexible Display Task Force*

Tadahiro Furukawa (Yamagata University) reported that the Flexible Display Task Force met on July 18, 2025, prior to the TC Chapter meeting, to review document D80-0421 for its 5-year Review.

6.1.2 *FPD Mask Task Force*

Shohei Miyazaki (SK Electronics) reported for the FPD Mask Task Force. OF note:

- The Task Force met on April 25 and examined candidate materials for plate holder in blanks/mask case. The Task Force also examined commonization with tube type plate holder which currently used for "mask case".
- The Task Force also met on June 26 to discuss the selection of candidate materials for plate holder in blanks/mask case, based on investigated characteristics of those materials.

Attachment: 06_250425 Minutes FPD_Mask_TF
07_250626 Minutes FPD_Mask_TF

6.1.3 *FPD Materials & Components Maintenance Task Force*

Tadahiro Furukawa (Yamagata University) reported that the FPD Materials & Components Maintenance Task Force met on July 18, 2025, prior to the TC Chapter meeting, to review document D9-0303, for its 5 year-Review.

6.2 *FPD Metrology Japan TC Chapter*

6.2.1 *FPD Metrology Maintenance Task Force*

Ryoichi Watanabe (Japan Display) reported that the FPD Metrology Maintenance Task Force met on June 9, 2025, to discuss on the following two ballot documents.

- Doc.#7154A, New Standard: Test Method for Flicker of Flat Panel Displays
- Doc.#7358, Reapproval of SEMI D76-0318, Test Method for Viewing Angle Characteristic Using Reference Color on Visual Display

7 Old Business

7.1 *FPD Materials & Components Japan TC Chapter*

7.1.1 Project Period Review

No SNARF will be expiring soon.

7.1.2 5-year Review

The following six documents will be due for 5-year Review.

- SEMI D80-0421, Test Method for Measurement of Water Vapor Transmission Rate for High Gas Barrier Plastic Film in a Short Time
- SEMI D53-0421, Specification for Flat Panel Display (FPD) Pellicles
- SEMI D42-0421, Specification for Ultra Large Size Mask Substrate Case
- SEMI D9-0303 (Reapproved 0321), Terminology for FPD Substrates
- SEMI D21-0706 (Reapproved 0221), Terminology for FPD Mask Pattern Accuracy
- SEMI D20-0706 (Reapproved 0221), Terminology for FPD Mask Defect

The FPD Materials & Components Japan TC Chapter reviewed SNARFs for Reapproval of D20-0706 and D21-0706. The Reapproval SNARFs were proposed by the responsible Task Force.

- SEMI D20-0706, Terminology for FPD Mask Defect

Motion:	Approve the SNARF for Reapproval of SEMI D20-0706 (Reapproved 0221), Terminology for FPD Mask Defect.
By / 2nd:	By: Shohei Miyazaki / SK-Electronics CO.,LTD Second By: Keitaro Kondo / HOYA Corporation
Discussion:	None.
Vote:	8-Y 0-N Motion Passed.

- SEMI D21-0706, Terminology for FPD Mask Pattern

Motion:	Approve the SNARF for Reapproval of SEMI D21-0706 (Reapproved 0221), Terminology for FPD Mask Pattern Accuracy.
By / 2nd:	By: Shohei Miyazaki / SK-Electronics CO.,LTD Second By: Keitaro Kondo / HOYA Corporation
Discussion:	None.
Vote:	8-Y 0-N Motion Passed.

Tadahiro Furukawa (Yamagata University) suggested that all six documents should be submitted to the same Ballot cycle. That would be discussed in the next FPD Materials & Components Japan TC Chapter meeting.

Attachment: 08_SNARF_Reapproval to SEMI D20-0706
09_SNARF_Reapproval to SEMI D21-0706

7.2 *FPD Metrology Japan TC Chapter*

7.2.1 Project Period Review

No SNARF will be expiring soon.

7.2.2 5-year Review

No document is subject to 5-year Review within this year.

8 New Business

8.1 *FPD Materials & Components Japan TC Chapter*

None.

8.2 *FPD Metrology Japan TC Chapter*

None.

9 Action Item Review

9.1 *Open Action Items*

Item #	*Assigned to*	*Details*
FPD Materials & Components Japan TC Chapter		
None		
FPD Metrology Japan TC Chapter		
FPDMet_20250207-01	SEMI Staff	To forward the ballot adjudication result of Doc. #7259A to the ISC A&R Subcommittee for procedural review.→Closed

9.2 *New Action Items*

Item #	*Assigned to*	*Details*
FPD Materials & Components Japan TC Chapter		
FPDM&C_20250718_01	Flexible Display Task Force	To propose SNARF for Major Revision to SEMI D80-0421.
FPDM&C_20250718_02	FPD Materials & Components Maintenance Task Force	To propose SNARF for Line Item Revision to SEMI D9-0303.
FPDM&C_20250718_03	FPD Mask Task Force	To propose SNARFs for Line Item Revision to SEMI D42-0421 and SEMI D53-0421.
FPDM&C_20250718_04	SEMI Staff	To prepare Reapproval Ballots for SEMI D20-0706 and SEMI D21-0706.
FPD Metrology Japan TC Chapter		
None		

10 Next Meeting and Adjournment

The next FPD Materials & Components Japan TC Chapter and FPD Metrology Japan TC Chapter joint meeting is scheduled for Wednesday, October 15, 2025, 3:00PM – 5:00PM JST via OVTCCM and at SEMI Japan, Tokyo, Japan. See https://www.semi.org/en/expositions-events/calendar for the current list of events.

Adjournment: [5:00 PM JST]>.

Respectfully submitted by:

Nahoko Koga

Standards & EHS

SEMI Japan

Phone: +81-3-3222-6018

Email: nkoga@semi.org

Minutes tentatively approved by:

FPD Materials & Components Japan TC Chapter	
Tadahiro Furukawa (Yamagata University), Co-chair	August 18, 2025.
Ryoichi Watanabe (Japan Display), Co-chair	August 20, 2025.
Toshimasa Eguchi (Sumitomo Bakelite), Co-chair	August 20, 2025.
FPD Metrology Japan TC Chapter	
Ryoichi Watanabe (Japan Display), Co-chair	August 20, 2025.
Akira Kawaguchi (Otsuka Electronics), Co-chair	August 18, 2025.

Table 14 Index of Available Attachments[#1]

Title	*Title*
01_Required Meeting Elements March 2024_J	06_250425 Minutes FPD_Mask_TF
02_FPD M&C+FPD Met_JA _Mins_20250207_v1.0	07_250626 Minutes FPD_Mask_TF
03_Liaison report_FPDM_KR_April 2025_J	08_SNARF_Reapproval to SEMI D20-0706
04_FPD Taiwan Liaison Report_20250411_v1_J	09_SNARF_Reapproval to SEMI D21-0706
05_Staff_HQ Report June 2025 v6	

#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 Nahoko Koga at the contact information above.