



# Japan FPD Materials & Components Committee and Japan FPD Metrology Committee Joint Meeting Meeting Summary and Minutes

SEMI Japan Standards Spring 2013 Meetings October 24, 2013, 15:00-17:00 Room 509, Campus Innovation Center Tokyo, Tokyo, Japan

Next Committee Meeting FPD M&C Committee: SEMI Japan Standards Winter 2014 Meetings Friday, February 14, 2014, 15:00-17:00 SEMI Japan, Tokyo, Japan

FPD Metrology Committee: SEMI Japan Standards Spring 2014 Meetings Friday, April 18, 2014, 14:00-17:00 SEMI Japan, Tokyo, Japan

#### **Table 1 Meeting Attendees**

Co-Chairs of FPD M&C Committee: Hisashi Aruga (Seiko Epson), Tadahiro Furukawa (Yamagata University), Yoshi Shibahara (Fujifilm)

Co-Chairs of FPD Metrology Committee: Ryoichi Watanabe (Japan Display), Akira Kawaguchi (Otsuka Electronics)

SEMI Staff: Naoko Tejima (SEMI Japan)

Company	Last	First	Company	Last	First
Yamagata University	Furukawa	Tadahiro	Konica Minolta	Ochi	Keizo
Teijin	Itoh	Haruhiko	Japan Display	Watanabe	Ryoichi
Sumitomo Chemical	Kuroda	Toshiya	ITRI	Wen	Bor-Jiunn
HOYA	Nitobe	Kaname	SEMI Japan	Tejima	Naoko

<sup>\*</sup> alphabetical order by last name

# **Table 2 Leadership Changes**

Group	Previous Leader	New Leader
FPD M&C Committee	Yuzo Akada (Nitto Denko)	Shigeo Kobayashi (Nitto Denko)
Polarizing Film Task Force		

#### **Table 3 Ballot Results**

None





# **Table 4 Authorized Ballots**

#	When	SC/TF/WG	Details
5685	, ,	D31 Revision Task Force	Line Item Revision to SEMI D31-0213, with title change from "Definition of Measurement Index (DSEMU) for Luminance Mura in FPD Image Quality Inspection" to "Guide for Definition of Measurement Index (DSEMU) for Luminance Mura in FPD Image Quality Inspection"

# **Table 5 Authorized Activities**

#	Туре	SC/TF/WG	Details
5550			New Standard: Guide for Dimensional Measurement of Plastic Films
	(Blue) Ballot	Flexible Display TF	
5685	SNARF	FPD Metrology Committee	Line Item Revision to SEMI D31-0213, with title change from
		D31 Revision Task Force	"Definition of Measurement Index (DSEMU) for Luminance Mura in
			FPD Image Quality Inspection" to "Guide for Definition of
			Measurement Index (DSEMU) for Luminance Mura in FPD Image
			Quality Inspection"

# **Table 6 New Action Items**

Item #	Assigned to	Details
FPD M&C131024-01	SEMI Staff	To correct "touch panel screens (7.1)" to "touch screen panels" of the previous meeting minutes.
FPD M&C131024-02	Flexible Display Task Force	To make the document for the information ballot by the end of November.
FPD MET 131024-01	D31 Revision Task Force	To submit Doc.#5685 for Cycle 1, 2014.
FPD MET 131024-02	Co-chairs	To decide how D41 should be handled (inactive? or revised?)

# [Common Part 1]

# 1 Welcome, Reminders, and Introductions

Tadahiro Furukawa, committee co-chair, called the meeting to order at 15:00. Self-introductions were made followed by the agenda review.

# 2 Required Meeting Elements

The meeting reminders on antitrust issues, intellectual property issues and holding meetings with international attendance were reviewed by SEMI staff, Naoko Tejima.





#### 3 SEMI Staff Report

Naoko Tejima gave the SEMI staff report. This report included SEMI Global 2013 Calendar of Events, Global Standards Meeting Schedule, SEMICON Europa Standard Meeting Schedule, NA Standards Fall 2013 Meetings, 2013 Critical Dates for SEMI Standards Ballots, SEMI Standards Publication, Information of SEMICON Japan 2013, The programs during SEMICON Japan 2013 and Contact Information.

Attachment: 01\_SEMI\_Staff\_Report\_131024

# 4 Liaison Reports

#### 4.1 Korea FPD Committee Report

Naoko Tejima reported for the Korea FPD Metrology Committee. This report included Leadership, Organization Chart, Meeting Information, Major Updates and Contact Information.

**Attachment:** 02\_KR\_FPD\_Liaison\_Report\_131024

#### 4.2 Taiwan FPD Committee Report

Naoko Tejima reported for the Taiwan FPD Committee. This report included Leadership, Organization Chart, Meeting Information, Upcoming Ballots in 2013, Ballot Reports and Contact Information.

**Attachment:** 03\_TW\_FPD\_Liaison Report\_131024

#### [Japan FPD Materials & Components Committee Part]

#### 5 Review of Previous Meeting Minutes

The committee reviewed the minutes of the previous meeting held on July 5, 2013.

It was pointed that "touch panel screens (7.1)" should be changed to "touch screen panels".

**Motion:** To approve the minutes of the previous meeting as written after the above point is corrected.

By / 2<sup>nd</sup>: Ryoichi Watanabe (Japan Display) / Keizo Ochi (Konica Minolta)

**Discussion:** None

**Vote:** 5 in favor and 0 opposed. **Motion passed.** 

**Action Item:** SEMI staff to correct "touch panel screens (7.1)" to "touch screen panels" of the previous meeting minutes.

**Attachment**: 04\_JA\_FPD\_M&C\_Previous\_Mtg\_Minutes\_131024

#### 6 Task Force Reports

#### 6.1 Polarizing Film Task Force

Ryoichi Watanabe reported for the Polarizing Film Task Force. Of note:

• The co-leader's position has been opened since Yuzo Akada (Nitto Denko) stepped down as a co-leader of the Polarizing Film TF and Shigeo Kobayashi (Nitto Denko) was appointed as a new co-leader.

Motion: To approve Shigeo Kobayashi (Nitto Denko) to take up the TF co-leader.

By / 2<sup>nd</sup>: Ryoichi Watanabe (Japan Display) / Keizo Ochi (Konica Minolta)

Discussion: None

Vote: 5 in favor and 0 opposed. Motion passed.





#### 6.2 Backlight Task Force

No report was provided by the Task Force.

#### 6.3 Flexible Display Task Force

Tadahiro Furukawa reported on progress for the Flexible Display Task Force. The Task Force met earlier in the day.

- 6.3.1 Discussion about the Bending Test Proposal for Flexible Displays
  - The draft document about the test method with the mechanical stress which is developing by the Taiwan Flexible Display Task Force under the Taiwan FPD Committee was presented by Bor-Jiunn Wen, and was discussed.

**Attachment**: 05\_Bending\_Test\_Proposal\_for\_Flexible\_Displays\_131024

- 6.3.2 Doc. #5550, New Standard: Guide for Dimensional Measurement of Plastic Films
  - Discussed about distance and curl/twist of the Film Substrate. The document has been almost finished.
  - Its Information Ballot should be distributed before the Letter Ballot.

**Motion:** To approve to distribute the Information (blue) ballot Doc 5550 By / 2<sup>nd</sup>: Haruhiko Ito (Teijin) / Toshiya Kuroda (Sumitomo Chemical)

**Discussion:** None

**Vote:** 5 in favor and 0 opposed. **Motion passed.** 

**Action Item:** Flexible Display TF to make the document for the information ballot by the end of November.

- 6.3.3 Doc. #5551, Measurement Method of Water Vapor Transmission Rate for Plastic Films and Sheets with High Barrier Properties for Electronic Devices
  - SEMI staff consulted with the member of Regulation SC about the subcategory of the title of the document. As the result, the document should be classified to the one of the followings.

Classification, Guide, Practice, Specification, Terminology or Test Method

- "New Standard: <u>Test Method for Measurement</u> of Water Vapor Transmission Rate for Plastic Films and Sheets with High Barrier Properties for Electronic Devices" seems to be appropriate for this document.
- Upon receiving the suggestion by the regulation subcommittee, TF has decided the title of the document will be changed as the above.

#### 6.4 Color Filter Task Force

Tadahiro Furukawa reported for the Color Filter Task Force that there were no particular things should be reported.





#### 7 Old Business

7.1 Previous Meeting Action Items

Naoko Tejima reviewed the previous meeting action items.

# **Table 7 Previous Meeting Actions Items**

Item #	Assigned to	Details
FPD M&C 130705-01	SEMI Staff	To report that it has been resolved that the handling of SEMI D41 will be relegated to the JA FPD Metrology Committee at the JA FPD M&C Committee Close
FPD M&C 130705-02	SEMI Staff	To get GCS approval to adopt Measurement Method as subtypeClose
FPD M&C 130705-03	SEMI Staff	To check the procedure to add "Measurement Method" as subtype in the SEMI Standards Regulations Close
FPD M&C 130705-04	SEMI Staff	To forward adjudication result of Doc.5552 to the ISC A&R Subcommittee for procedural review Close
FPD M&C 130705-05	SEMI Staff	To forward adjudication result of Doc.5553 to the ISC A&R Subcommittee for procedural review Close
FPD M&C 130705-06	SEMI Staff	To forward adjudication result of Doc.5554 to the ISC A&R Subcommittee for procedural review Close

#### 8 New Business

None

# [Japan FPD Metrology Committee Part]

# 9 Review of Previous Meeting Minutes

The committee reviewed the minutes of the previous meeting held on April 12, 2013.

It was pointed that Action Item of Polarizing Film Task Force about translation of SEMI D46 should be moved under "6.1"

**Motion:** To approve the minutes of the previous meeting as written.

By / 2<sup>nd</sup>: Keizo Ochi (Konica Minolta) / Tadahiro Furukawa (Yamagata University)

**Discussion:** None

**Vote:** 5 in favor and 0 opposed. **Motion passed.** 

**Attachment**: 06\_JA\_FPD\_Metrology\_Previous\_Mtg\_Minutes\_131024





### 10 Task Force Reports

10.1 D31 Revision Task Force

Keizo Ochi reported on progress for the D31 Revision Task Force.

- SEMI staff consulted with the member of Regulation SC about the subcategory of the title of the document. He suggested "Guide for the Calculation of Measurement Index ...", instead of "Definition of Measurement Index ...". However, this document shows the amount of the human senses rather than definition of the calculation method. Therefore, TF decided that the title was changed to "Guide for Definition of Measurement Index ..." finally.
- A new SNARF "Line Item Revision to SEMI D31-0213, with title change from "Definition of Measurement Index (DSEMU) for Luminance Mura in FPD Image Quality Inspection" to "Guide for Definition of Measurement Index (DSEMU) for Luminance Mura in FPD Image Quality Inspection" was presented to the committee for approval. (Numbered Doc. 5685)

Motion: To approve a new SNARF for Line Item Revision to SEMI D31-0213, with title change from "Definition of

Measurement Index (DSEMU) for Luminance Mura in FPD Image Quality Inspection" to "Guide for Definition

of Measurement Index (DSEMU) for Luminance Mura in FPD Image Quality Inspection"

By / 2<sup>nd</sup>: Keizo Ochi (Konica Minolta) / Toshiya Kuroda (Sumitomo Chemical)

**Discussion:** None

**Vote:** 5 in favor and 0 opposed. **Motion passed.** 

**Attachment:** 07\_D31\_Revised\_SNARF\_131024

TF is drafting the document of Doc.#5685, Line Item Revision to SEMI D31-0213, with title change from "Definition of Measurement Index (DSEMU) for Luminance Mura in FPD Image Quality Inspection" to "Guide for Definition of Measurement Index (DSEMU) for Luminance Mura in FPD Image Quality Inspection" and it will be submitted for Cycle 1, 2014. It was presented to the committee for approval.

**Motion:** To submit Doc.#5685 for Cycle 1, 2014.

By / 2<sup>nd</sup>: Keizo Ochi (Konica Minolta) / Tadahiro Furukawa (Yamagata University)

**Discussion:** None.

**Vote:** 5 in favor and 0 opposed. **Motion passed.** 

**Action Item:** D31 Revision Task Force to submit Doc.#5685 for Cycle 1, 2014.

### 11 Old Business

11.1 Previous Meeting Action Items

Naoko Tejima reviewed the previous meeting action items.

# **Table 8 Previous Meeting Actions Items**

Item #	Assigned to	Details
FPD MET 130412-01	SEMI Staff	To ask the TF leaders to translate D31 into Japanese, providing the difference file Close





#### 12 New Business

12.1 Handling of D41 "Measurement Method of SEMI MURA in FPD Image Quality Inspection"

This document was originally developed by JA FPD Factory Automation Committee. The contents of this document relate rather to FPD Metrology Committee. Therefore JA FPD Materials and Components Committee requested to handle this document by JA FPD Metrology Committee.

Motion: To accept the request from JA FPD Materials & Components that D41 will be handled by JA FPD Metrology

Committee.

By / 2<sup>nd</sup>: Keizo Ochi (Konica Minolta) / Tadahiro Furukawa (Yamagata University)

Discussion: None.

**Vote:** 5 in favor and 0 opposed. **Motion passed.** 

**Action Item:** Co-chairs to decide how D41 should be handled (inactive? or revised?)

# [FPD Coordination Group Part]

### 13 Future Plan of FPD Committees

Naoko Tejima reported the content of the discussion about the future of Global FPD Committee at JRSC. The following things were approved and will be presented at the next ISC, during SEMICON Japan 2013.

- Global FPD Mask Technical Committee will be disbanded together with JA FPD Mask TC Chapter, and the documents which were developed by this TC Chapter will be given over to JA FPD M&C TC Chapter.
- Global FPD FA Technical Committee will be disbanded together with JA FPD FA TC Chapter, and the documents which were developed by this TC Chapter will be inactive.

**Attachment**: 08\_JRSC\_FPD\_Restructure\_131024

# [Common Part 2]

#### 14 Action Item Review

14.1 New Action Items

Naoko Tejima reviewed the new action items. These can be found in the New Action Items table at the beginning of these minutes.

#### 15 Next Meeting and Adjournment

The next meeting of the Japan FPD Materials & Components Committee is scheduled for Friday, February 14, 2014, 15:00-17:00, SEMI Japan, Tokyo, Japan

The next meeting of the Japan FPD Metrology Committee is scheduled for Friday, April 18, 2014, 15:00-17:00, SEMI Japan, Tokyo, Japan.





Respectfully submitted by: Naoko Tejima Manager, Standards SEMI Japan

Phone: +81.3.3222.5804 Email: ntejima@semi.org

### Minutes approved by:

Tadahiro Furukawa (Yamagata University), Co-chair of JA FPD M&C Committee	Nov **, 2013
Ryoichi Watanabe (Japan Display), Co-chair of JA FPD Metrology Committee	Nov. 28, 2013

# Table 9 Index of Available Attachments #1

#	Title		
1	SEMI_Staff_Report_131024		
2	KR_FPD_Liaison_Report_131024		
3	TW_FPD_Liaison_Report_131024		
4	JA_FPD_M&C_Previous _Mtg_Minutes_131024		
5	Bending_Test_Proposal_for_Flexible_Displays_131024		
6	JA_FPD_Metrology_Previous_Mtg_Minutes_131024		
7	D31_Revised_SNARF_131024		
8	JRSC_FPD_Restructure_131024		

<sup>#1</sup> 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 Naoko Tejima at the contact information above.