



# FHE Japan TC Chapter Meeting Summary and Minutes

Japan Standards Spring Meetings 2026

Friday, March 13, 2026, 3:00 PM - 5:00 PM JST

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

## TC Chapter Announcements

*Next TC Chapter Meeting*

Friday, July 10, 2026, 3:00PM - 5:00PM JST at SEMI Japan, Tokyo, Japan and via OVTCCM (Hybrid)

## Table 1 Meeting Attendees

*Italics indicate virtual participants*

**FHE TC Co-Chairs:** Tadahiro Furukawa (Yamagata University), Ryoichi Watanabe (Self), Satoshi Maeda (Hiroshima City University)

**SEMI Staff:** Nahoko Koga (SEMI Japan)

<i>Company</i>	<i>Last</i>	<i>First</i>	<i>Company</i>	<i>Last</i>	<i>First</i>
<i>Mega Stream Technology Co., Ltd.</i>	<i>Huang</i>	<i>Steve</i>	<i>Kobe University</i>	<i>Inoue</i>	<i>Mari</i>
TOPPAN Holdings Inc.	Ito	Manabu	<i>Cymmetrik</i>	<i>Kuo</i>	<i>Simon</i>
Self	Watanabe	Ryoichi	<i>ITRI</i>	<i>Pong</i>	<i>Bao-Jen</i>
Innolux Japan Co., Ltd.	Nakagawa	Takanobu	<i>SEMI Japan</i>	<i>Yoshida</i>	<i>Akiko</i>
Yamagata University	Furukawa	Tadahiro	SEMI Japan	Hirabara	Takeaki
Fujikura Kase Co., Ltd.	Wakabayashi	Katsutomo	SEMI Japan	Koga	Nahoko

## Table 2 Leadership Changes

<i>WG/TF/SC/TC Name</i>	<i>Previous Leader</i>	<i>New Leader</i>
Flexible Hybrid Electronics Japan TC Chapter	Ryoichi Watanabe (Self)	Manabu Ito (TOPPAN Holdings Inc.)

Staff Note: The committee agreed to recommend a new leader for the Flexible Hybrid Electronics Japan TC Chapter for appointment by the JRSC, in accordance with Regulations § 5.7.5.

## Table 3 TC Chapter 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>
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**

<i>Document #</i>	<i>Document Title</i>	<i>ISC A&amp;R Action</i>	<i>A&amp;R Forms</i>
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**

<i>#</i>	<i>Type</i>	<i>SC/TF/WG</i>	<i>Details</i>
None			

**Table 7 Authorized Activities**

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

<i>#</i>	<i>Type</i>	<i>SC/TF/WG</i>	<i>Details</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 8 Authorized Ballots**

<i>#</i>	<i>When</i>	<i>TF</i>	<i>Details</i>
None			

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

<i>#</i>	<i>TF</i>	<i>Title</i>	<i>Expiration Date</i>
None			

**Table 10 SNARF(s) Cancelled**

<i>#</i>	<i>TF</i>	<i>Title</i>
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>
None		

**Table 13 Previous Meeting Action Items**

<i>Item #</i>	<i>Assigned to</i>	<i>Details</i>
FHE_20251017_01	SEMI Staff	To forward ballot review results of Doc.#6906A to the ISC A&R for procedural review.



## 1 Welcome, Reminders, and Introductions

Tadahiro Furukawa (Yamagata University) called the meeting to order at 3:00 PM. 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 TC Chapter reviewed the minutes of the previous meeting.

**Motion:** Approve the minutes as written  
**By / 2<sup>nd</sup>:** By: Manabu Ito / TOPPAN Holdings Inc.  
Second: Takanobu Nakagawa / Innolux Japan Co., Ltd.  
**Discussion:** None  
**Vote:** 5-Y 0-N Motion Passed

**Attachment:** 02\_20251017\_FHE Japan TC\_Minutes\_v1

## 3 Technical Committee Award

The Technical Committee Award recognizes leadership in document development, committee management, task force coordination, and Standards dissemination. Tadahiro Furukawa (Yamagata University) presented the awards to the recipients. The awardees were:

- Hideki Ikeda (KOMORI CORPORATION)
- Manabu Ito (TOPPAN Holdings Inc.)
- Takanobu Nakagawa (Innolux Japan Co., Ltd.)
- Katsutomo Wakabayashi (Fujikura Kase Co., Ltd.)

## 4 Liaison Reports

### 4.1 Japan Regional Standards Committee (JRSC)

Nahoko Koga (SEMI Japan) reported that SEMI Japan honors outstanding SEMI Standards members, as determined by the JRSC. At SEMICON Japan 2025, awards were presented at the SEMI Standards Friendship Party & Awards Ceremony to individuals who made significant contributions to the SEMI Standards Program. The recipients included:

- SEMI Japan International Collaboration Award: Hirokazu Tsunobuchi (GENETEC CORPORATION) and Haruna Hayashi (Tokyo Electron Ltd.)
- SEMI Japan Honor Award: Tetsuya Nakai (SUMCO CORPORATION)
- SEMI Japan Special Award: Masanori Yoshise (Self)

**Attachment:** 03\_JRSC Report\_March 2026\_R0

#### 4.2 Global Coordinating Subcommittee (GCS)

Nahoko Koga (SEMI Japan) reported for the GCS of the global Flexible Hybrid Electronics TC that SNARF for 7193B, New Standard: Guide for Substrate Design of Flexible Hybrid Electronics Based on Additive Printing Methods, under the FHE NA TC Chapter was approved and authorized to be submitted for Cycle 1-2026.

#### 4.3 Flexible Hybrid Electronics (FHE) North America TC Chapter

Nahoko Koga (SEMI Japan) reported for the FHE North America TC Chapter. Of notes:

- Last meeting was held on February 24, in conjunction with Flex Technology Summit 2026.
- Doc.#7193B, New Standard, Guide for Substrate Design of Flexible Hybrid Electronics Based on Additive Printing Methods passed ballot review with technical changes and editorial changes; Ratification Ballot to be issued.
- Doc.#7242, New Standard: Guide for Reliability of Flexible Hybrid Electronics is awaiting publication.
- Doc.#7212, Guide for Inks Characterization for Flexible Hybrid Electronics is under development.

**Attachment:** 04\_NA FHE Liaison Report Feb2026 v1

#### 4.4 Flexible Hybrid Electronics (FHE) Taiwan TC Chapter

Nahoko Koga (SEMI Japan) reported for the FHE Taiwan TC Chapter. Of notes:

- The last meeting was held on March 26, 2025.
- New SNARF, New Standard: Guide for Local Area Sensing Network(LASN)-Architecture and Address for FHE System was approved by the GCS of the global Flexible Hybrid Electronics TC.

**Attachment:** 05\_FHE Taiwan Liaison Report\_20250326\_R2

### 5 SEMI Staff Report

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

- In 2025, 14 new SEMI Standards were released, including D88, M95, and T27, which were developed by Japan TC Chapters.
- The SEMI HQ IT Team has rebuilt SVM to address login access issues. Following internal testing, the beta version was launched in February. Updates have been made to improve performance based on user feedback. All enhancements are expected to be completed shortly.

**Attachment:** 06\_Staff\_HQ Report Feb 2026\_JA\_R1

### 6 Subcommittee and Task Force Reports

#### 6.1 FHE Terminology TF

Tadahiro Furukawa (Yamagata University) reported for the FHE Terminology Task Force. There were no activities since the last meeting. This Task Force will be disbanded after the publication of Doc.#6906A.

#### 6.2 Tactile Texture Characteristics for FHE TF

Tadahiro Furukawa (Yamagata University) reported for the Tactile Texture Characteristics for FHE Task Force. There are no activities to be reported.

### 6.3 FHE Maintenance TF

Tadahiro Furukawa (Yamagata University) reported for the FHE Maintenance Task Force. The Task Force met before the TC Chapter meeting, and held a discussion on Doc.#7193B, New Standard: Guide for Substrate Design of Flexible Hybrid Electronics Based on Additive Printing Methods. Also, there was a discussion on development of a new standard.

## 7 Old Business

### 7.1 Project Period Review

There are no SNARFs that need extension.

### 7.2 5-Year Review

There are no documents that need 5-year review.

## 8 New Business

### 8.1 Leadership Change

After many years of committed service, Ryoichi Watanabe (Self) has stepped down from his position as TC co-chair. The current co-chairs have recommended Manabu Ito (TOPPAN Holdings Inc.) as the successor for the TC co-chair role.

**Motion:** Approve Manabu Ito/ TOPPAN Holdings Inc. to be the new Co-chair

**By / 2<sup>nd</sup>:** By: Ryoichi Watanabe / Self  
Second: Takanobu Nakagawa / Innolux Japan Co., Ltd.

**Discussion:** None

**Vote:** 7-Y 0-N Motion Passed

Staff Note: The committee agreed to recommend a new leader for the Flexible Hybrid Electronics Japan TC Chapter for appointment by the JRSC, in accordance with Regulations § 5.7.5.

## 9 Action Item Review

### 9.1 Open Action Items

<i>Item #</i>	<i>Assigned to</i>	<i>Details</i>
FHE_20251017_01	SEMI Staff	To forward ballot review results of Doc.#6906A to the ISC A&R for procedural review.→Closed

### 9.2 New Action Items

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

## 10 Next Meeting and Adjournment

The next meeting is scheduled for Friday, July 10, 2026, 3:00PM – 5:00PM JST at SEMI Japan, Tokyo, Japan and via Official Virtual TC Chapter Meeting.

Staff Note: The date for the next meeting was determined via email following the TC Chapter Meeting.



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:

Tadahiro Furukawa (Yamagata University), Co-chair	April 21, 2026
Ryoichi Watanabe (Self), Co-chair	N/A
Satoshi Maeda (Hiroshima City University), Co-chair	N/A

**Table 14 Index of Available Attachments<sup>#1</sup>**

<i>Title</i>	<i>Title</i>
01_Required Meeting Elements March 2024_J	04_NA FHE Liaison Report Feb2026 v1
02_20251017_FHE Japan TC_Minutes_v1	05_FHE Taiwan Liaison Report_20250326_R2
03_JRSC Report_March 2026_R0	06_Staff_HQ Report Feb 2026_JA_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](http://www.semi.org). For additional information or to obtain individual attachments, please contact Nahoko Koga at the contact information above.