



## FHE Japan TC Chapter Meeting Summary and Minutes

Japan Standards Autumn Meetings 2025

Friday, October 17, 2025, 3:30 PM – 5:30 PM JST

KOMORI CORPORATION, Tsukuba Plant, Ibaraki, Japan / Official Virtual TC Chapter Meeting (Hybrid)

### TC Chapter Announcements

*Next TC Chapter Meeting*

Friday, March 13, 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>
TOPPAN	Ito	Manabu	ITRI	Pong	Bao-Jen
KOMORI CORPORATION	Ikeda	Hideki	<i>Hiroshima City University</i>	<i>Maeda</i>	<i>Satoshi</i>
<i>Innolux Japan</i>	<i>Nakagawa</i>	<i>Takanobu</i>	<i>SEMI Japan</i>	<i>Yoshida</i>	<i>Akiko</i>
Self	Watanabe	Ryoichi	<i>SEMI Japan</i>	<i>Hirabara</i>	<i>Takeaki</i>
Yamagata University	Furukawa	Tadahiro	SEMI Japan	Koga	Nahoko

### Table 2 Leadership Changes

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

### 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>
6906A	New Standard: Terminology for Flexible Hybrid Electronics (FHE)	<b>Passed</b> with Editorial Changes

#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>
FHE_20251017_01	SEMI Staff	To forward ballot review results of Doc.#6906A to the ISC A&R for procedural review.

**Table 13 Previous Meeting Action Items**

<i>Item #</i>	<i>Assigned to</i>	<i>Details</i>
FHE_20250530_01	FHE Terminology Task Force Leader	To submit Doc.# 6906A, New Standard, Terminology for Flexible Hybrid Electronics (FHE) for Cycle 7, 2025 to SEMI Staff.→Closed

## 1 Welcome, Reminders, and Introductions

Tadahiro Furukawa (Yamagata University) called the meeting to order at 3:30 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: Ryoichi Watanabe / Self  
 Second: Satoshi Maeda / Hiroshima City University  
**Discussion:** None  
**Vote:** 5-Y 0-N Motion Passed

**Attachment:** 02\_FHE Japan TC\_Minutes\_20250530\_v2.0

## 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, August 28, 2025. Topics included:

- SEMI Standards Award Selection Committee for 2025 has been launched, and preparations are now underway for the Award Ceremony scheduled to take place at the Friendship Party during SEMICON Japan.
- The Planning Meeting was held on Thursday, August 28, 2025 inviting all the TF leaders as well as TC co-chairs to deepen knowledge related to standardization. The theme this year was “Gaps in Supply Chain Transparency and SEMI Standards.”

**Attachment:** 03\_JRSC Liaison Report\_202510v2

### 3.2 Global Coordinating Subcommittee (GCS)

Nahoko Koga (SEMI Japan) reported for the GCS of the global Flexible Hybrid Electronics TC that ballot 7242, New Standard: Guide for Reliability of Flexible Hybrid Electronics, under the FHE NA TC Chapter was approved to be submitted for Cycle 7-2025.

### 3.3 FHE NA TC Chapter

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

- Last meeting was held on October 9, 2025 (Hybrid) in conjunction with SEMICON West (Hybrid).
- Doc.#7193A, New Standard, Guide for Substrate Design of Flexible Hybrid Electronics Based on Additive Printing Methods failed ballot review.

- Doc.#7242, New Standard: Guide for Reliability of Flexible Hybrid Electronics passed with editorial changes.

**Attachment:** 04\_NA FHE Liaison Report Oct2025 v1\_20251017JA

### 3.4 FHE Taiwan TC Chapter

Bao-Jen Pong (ITRI) reported for the FHE Taiwan TC Chapter. Of note:

- The last meeting was held on March 26, 2025.
- New SNARF under the Local Area Sensing Network for FHE System Task Force has been approved by the GCS of the global Flexible Hybrid Electronics TC on May 7, 2025.

**Attachment:** 05\_FHE Taiwan Liaison Report\_20250326\_R2\_20251017JA

## 4 SEMI Staff Report

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

- SEMICON West 2025 was held in Phoenix, Arizona for the first time. From now on, SEMICON West will alternate each October between Phoenix and San Francisco.
- The second Global Standards Summit (GSS) took place at SEMICON West. GSS aims to identify areas relevant to standards and develop strategies for industry standardization over the next 3- and 7-year periods. This year's event continued discussions from previous meetings and included new topics such as supply chain traceability.
- The locations and dates for the NA Winter Meeting and NA Spring Meeting are under discussion. Once they are finalized, further information will be provided.
- SEMICON Japan is scheduled for December 17-19 at Tokyo Big Site. Due to renovation work at Tokyo Big Sight, Standards Meetings will take place in the TFT Building.

**Attachment:** 06\_Staff Report Oct 2025 v4\_202510

## 5 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.

### 5.1 Document #6906A, New Standard: Terminology for Flexible Hybrid Electronics (FHE)

- **Passed** TC Chapter review with Editorial Changes.

**Attachment:** 07\_6906A\_Ballot\_Review

## 6 Subcommittee and Task Force Reports

### 6.1 FHE Terminology TF

Tadahiro Furukawa (Yamagata University) reported for the FHE Terminology Task Force. The Task Force held a meeting in July to review ballot document #6906A, New Standard: Terminology for Flexible Hybrid Electronics (FHE), in preparation for submission to Cycle 7-2025. Another meeting was conducted on October 17, 2025, prior to the TC Chapter Meeting, to review the voting results.

### 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 on September 4, 2025, and held a discussion on Doc.#7193A, New Standard: Guide for Substrate Design of Flexible Hybrid Electronics Based on Additive Printing Methods, and on Doc.#7242, New Standard: Guide for Reliability of Flexible Hybrid Electronics.

**Attachment:** 08\_TF Highlights\_Oct2025

## 7 Old Business

### 7.1 Project Period Review

No SNARF will be expiring soon.

### 7.2 5-Year Review

No document is subject for 5-year review within this year.

## 8 New Business

None

## 9 Action Item Review

### 9.1 Open Action Items

<i>Item #</i>	<i>Assigned to</i>	<i>Details</i>
FHE_20250530_01	FHE Terminology Task Force Leader	To submit Doc.# 6906A, New Standard, Terminology for Flexible Hybrid Electronics (FHE) for Cycle 7, 2025 to SEMI Staff.→Closed

### 9.2 New 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.

## 10 Next Meeting and Adjournment

The next meeting is scheduled for Friday, March 13, 2026, 3:00PM – 5:00PM JST at SEMI Japan, Tokyo, Japan and via Official Virtual TC Chapter Meeting.

Adjournment: [5:30 PM JST]

Respectfully submitted by:

Nahoko Koga

Standards & EHS

SEMI Japan



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Minutes tentatively approved by:

Tadahiro Furukawa (Yamagata University), Co-chair	October 27, 2025
Ryoichi Watanabe (Self), Co-chair	October 25, 2025
Satoshi Maeda (Hiroshima City University), Co-chair	October 27, 2025

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

<i>Title</i>	<i>Title</i>
01_ Required Meeting Elements March 2024 _J	05_ FHE Taiwan Liaison Report _20250326_R2_20251017JA
02_ FHE Japan TC _Minutes_20250530_v2.0	06_ Staff Report Oct 2025 v4_202510
03_ JRSC Liaison Report_202510v2	07_ 6906A _Ballot _Review
04_ NA FHE Liaison Report Oct2025 v1_20251017JA	08_ TF Highlights _Oct2025

<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](http://www.semi.org). For additional information or to obtain individual attachments, please contact Nahoko Koga at the contact information above.