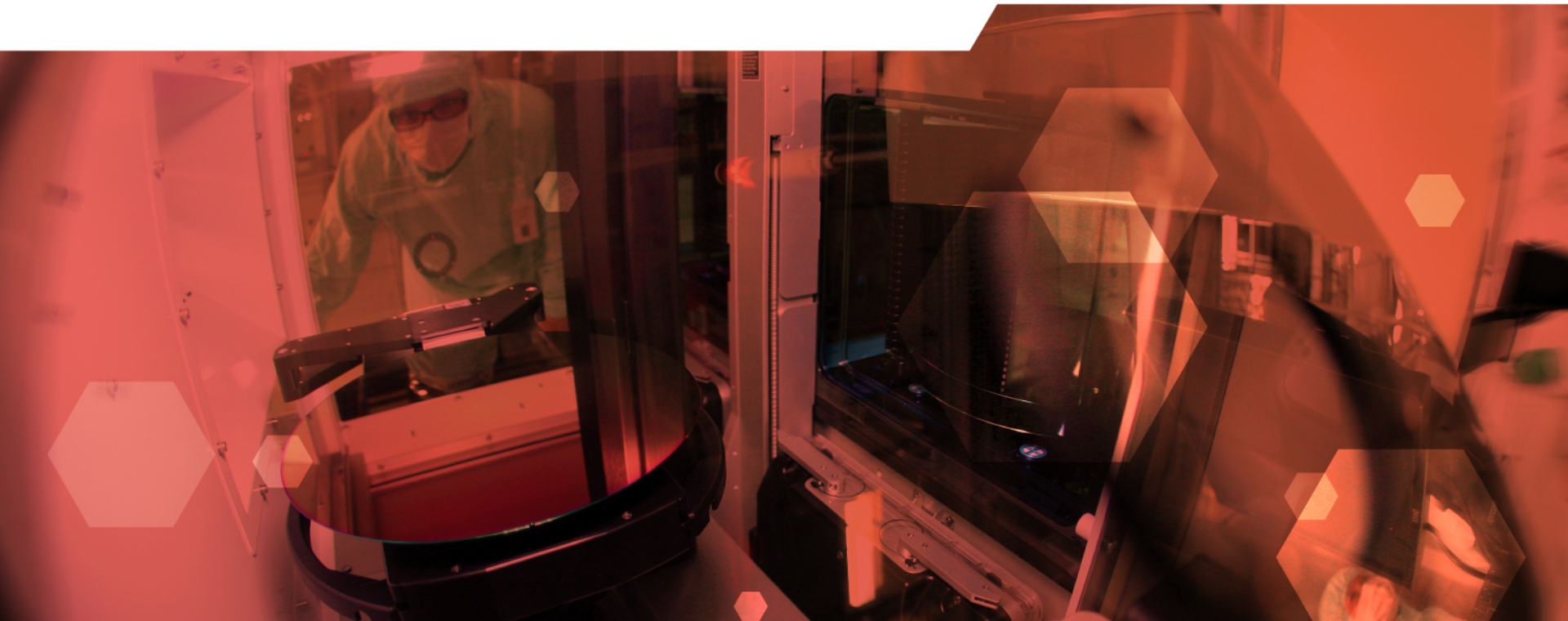


Panel Level Packaging Panel FOUP TF Report

September 20, 2019



TF Leader & Sub-team activity

- TF co-leader
 - John Rudolph(Intel)
 - Shoji Komatsu (Acteon NEXT)
- FOUP Team
 - Leader : Tsukasa Fukunaga(SEP)
 - Make a proposal for discussion based on SEMI E158.
- Loadport/EFEM Team
 - Leader : Kiyoshi Kanashiro(TDK)
 - Make a proposal for discussion based on SEMI E154.

TF meeting schedule

- 1st TF meeting May 17, 2018
@SEMI Japan
- 2nd TF meeting June 19, 2018
@SEMI Japan
- 3rd TF meeting July 20, 2018
@SEMI Japan
- 4th TF meeting Aug 20, 2018
@Daihen Kobe
- 5th TF meeting Sep 21, 2018
@SEMI Japan
- 6th TF meeting Sep 24, 2018
@SEMI Taiwan
- 7th TF meeting Oct 25, 2018
@Screen Kyoto
- 8th TF meeting Nov 5, 2018
@SEMI HQ(US)
- 9th TF meeting Nov 27, 2018
@SEMI Japan
- 10th TF meeting Dec 12, 2018
@SEMICON Japan
- 11th TF meeting Jan 24, 2019
@ASE Kaohsiung
- 12th TF meeting Feb 14, 2019
@SEMI Japan
- 13th TF meeting Mar 7, 2019
@Intel Chandler
- 14th TF meeting Mar 20, 2019
@SEMI Japan
- 15th TF meeting Apr 2, 2019
@SEMI HQ(US)
- 16th TF meeting Apr 18, 2019
@SEMI Japan
- 17th TF meeting May 10, 2019
@SEMI Japan
- 18th TF meeting May 24, 2019
@CKplas Taiwan
- 19th TF meeting Jun 7, 2019
@SEMI Japan
- 20th TF meeting Jun 21, 2019
@Acteon Fujisawa
- 21th TF meeting Jul 9, 2019
@SEMICON WEST
- 22th TF meeting Aug 14, 2019
@Web-Meeting
- 23th TF meeting Aug 30, 2019
@Acteon Fujisawa
- 24th TF meeting Sep 20, 2019
@SEMI JAPAN

TF participating companies

- **Users**
 - ASE
 - AT&S
 - ESWIN Chengdu SiP
 - Intel
 - PTI
 - STATS ChipPAC
 - Unimicron(During registration)
 - Amkor (Join soon)
- **Equipment suppliers**
 - Athlete FA
 - Canon
 - Canon ANELVA
 - Ebara
 - evatec
 - DISCO
 - Energetiq
 - Hitachi Chemical
 - Hitachi Power Solutions
 - Lintec
 - SCREEN Semiconductor
 - Tango Systems
 - TEL
 - TOWA
- **FOUP Suppliers**
 - CKplas
 - Entegris
 - GOLD INDUSTRIES
 - Gudeng
 - Miraial
 - Shinetsu Polymer
 - Yodogawa Hu-tech
- **LP/EFEM Suppliers**
 - Brooks automation
 - Daihen
 - Hirata
 - Nidec Sankyo
 - Shinfonia
 - TDK
 - Rorze
- **AMHS Suppliers**
 - Contrel
 - Daifuku
 - Middlesex
 - MIRLE
 - Muratec
- **Others**
 - Acteon NEXT
 - Alan Crockett
 - EVER TECH
 - KENSHO
 - Keyence
 - SUMCO
 - UA Associates

Document development status

- FOUN

- Panel FOUN Ballot 6485 will fail due to the return rate did not reach 60%.
- As a negative comment in the voting, there was an important indication that SNARF should be reviewed.
 - There is a possibility of changing to the standard using subordinate.
- The re-ballot time is expected to be slightly delayed.

- Loadport

- LP/EFEM Ballot 6486 is currently under development.
 - Also, There is a possibility of changing to the standard using subordinate.
- The ballot time is expected to be slightly delayed.