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FRANCE SECTION



MiNaPAD Forum 2023

10th Micro/Nano-Electronics
Packaging and Assembly,
Design and Manufacturing Forum

WTC
GRENOBLE
France

June 7th - 8th

EXHIBITION & CONFERENCES

WORLD TRADE CENTER
CHAMBRE DE COMMERCE & D'INDUSTRIE DE GRENOBLE



Organized by

IMAPS - International Microelectronics Assembly and Packaging Society

17 rue de l'Amiral Hamelin - 75016 Paris - France

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Wednesday June 7th

8h45 Welcome to MiNaPAD

9h00 Opening by Jean-Marc YANNOU (Auditorium)

9h30 Keynote: Laurent HERARD (ST Microelectronics – BEMT R&D Manager)
Packaging innovation – A key enabler for future mobility

10h15 – 10h40 Exhibition Opening (Exhibition Hall) / Coffee break sponsored by



SESSION A: Wafer Level Packaging & Flip Chip (Auditorium)

10h45 Advanced vertical interconnections for fan-out wafer level packaging applications
(Aurelia Plihon / CEA-Leti - France)

11h15 Advanced Package Platform VIPACK : FOSiP
(Chin-Cheng Kuo / ASE group - Taiwan)

11h45 Packaging of a 25 flip chips module on large dimension AlN ceramic substrate keeping low dead areas and tight planarity
(Sarah Renault / CEA-Leti – France)

12h15 Fabrication and characterization of a 2 layers face-to-back test vehicle with high density TSV
(Jerzy-Javier Suarez-Berru / CEA-Leti - France)

SESSION B: Characterization & Reliability (Mont Blanc)

Comparative study on electrical performance of wire-bonded BGA packages using non-plating line vs etch-back technology
(Damian Halicki / ST Microelectronics - Italy)

Comparative study of thermal fatigue life of polymer core solder balls (PCSB) and SAC solder balls in BGA interconnections
(I. Malkorra / ESME - France)

Thermal characteristic study of epoxy molding compound with different filler composition
(Bo Yu Huang / ASE group - Taiwan)

Finite elements analysis of solder joints during thermal shock tests correlation with dye penetration
(Khalil Maarouf / VALEO - France)

12h45 – 13h35 Lunch (Exhibition Hall) sponsored by



SESSION C: Interconnections (Auditorium)

13h40 The study of pure Cu and Pd coated Cu wire-bonding on nano-twinned Cu pad/finger
(Erh-Ju Lin / ASE group - Taiwan)

14h10 Cu second bond response on thin silver pre-plated leadframe packages
(Mirko Alesi / ST Microelectronics - Italy)

14h40 Next generation lead-free solder paste for advanced packages
(B. Senthil Kumar / HERAEUS - Germany)

15h10 Multiphase full wave system
(Jean-Christophe Riou / SAFRAN - France)

SESSION D: MEMs & Optical Packages (Mont Blanc)

Test on package: design and manufacturing of package aimed to electromechanical characterization of MEMS structures
(Marco Del Sarto / ST Microelectronics – Italy)

3D silicon photonic interposer process integration for chiplet based 3D systems
(Damien Saint-Patrice / CEA-Leti - France)

Wafer level optical package for ambient light sensor for mobile and wearable applications with integrated multi-lens array
(Niek van Haare / BESI - Netherlands)

3D heterogeneous integration of meta surface lens in an optical package
(Patrick Laurent / ST Microelectronics - France)

15h40 – 16h00 Exhibition / Coffee break sponsored by  l'life augmented

**SESSION E: Panel Session
(Auditorium)**

16h05 Writing Invention Disclosures to Optimize Patent Value in Europe and the U.S
(Richard P. Gilly / Archer & Greiner P.C. - USA)

16h30 Advanced packaging technology & market trends
(Bilal Hachemi / YOLE Developments - France)

16h55 **Round Table: The Reindustrialization of Semiconductor Packaging in Europe in the context of the EU Chips Act**

Moderator: BOULAY Sanae (NXP) and De LANGLADE Renaud (EPOSS)

Speakers: (NXP), (STM), YANNOU Jean-Marc (ASE Europe), David HEIN (EGIDE), (European Commission)

18h00

18h30 **Social Event : Château de la Commanderie**

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18h30-19h00: Transportation by FAURE Bus from WTC conference

19h00-20h00: Appetizers & Music by Alpes concerts

20h00: Dinner

22h30: Return to WTC conference by FAURE Bus



Overview Château de la Commanderie (38320 EYBENS)



Thursday June 8th

8h30 - Opening exhibition and conferences

Session F: Encapsulation (Auditorium)

- 08h45** The phenomenon of creep and overflow in gel dispense process
(Shih Kun Lo / ASE group - Taiwan)
- 09h15** Enabling semiconductor packaging materials for advanced flip-chip and heterogeneous integration
(Ruud de Wit / HENKEL - Netherland)

Session G: BGA manufacturing (Mont Blanc)

- Advanced IC substrates - challenges in manufacturing and supply chain
(Daniel Schulze / DYCONEX - Switzerland)
- Fabrication and characterization of soft polymer core solder balls (PCSB) for BGA interconnections
(I. Malkorra / ESME - France)

9h50 Keynote: Pascal OBERNDORFF (NXP – Head of Package Core Technology) Title



10h30 – 10h50 Exhibition & Coffee break (Exhibition Hall) sponsored by ASE GROUP

Session H: Manufacturing - Plasma (Auditorium)

- 10h55** Panasonic plasma cleaning technology and predictive maintenance by using plasma monitor function
(James Weber / PANASONIC - Germany)
- 11h25** Cleaning of silicone and hydrocarbon contact residue using atmospheric plasma
(Daniel Pascual / ONTOS Equipment Systems – USA)
- 11h55** Improving CCP chamber-plasma-cleaning performance using plasma light emission (OES) analysis data
(Jong Won Oh / VISION Semicon – Republic of Korea)

Session I: Manufacturing - Equipment's (Mont Blanc)

- Advanced laser grooving and dicing to enable high quality separation of next generation thin semiconductor devices
(Gerald Klug / DISCO – Germany)
- Direct writing technologies for interconnection in electronic packaging
(Elodie Pereira / CTTC - France)
- An innovative contactless technology for high resolution, high speed, conductive & dielectric materials deposition
(Stéphane Etienne / I-O-TECH, Israel)



12h25 – 13h30 Lunch & Exhibition (Exhibition Hall) sponsored by ASE GROUP

Session J: Advanced Interconnections (Auditorium)

- 13h35** Development of stretchable and removable electrical interconnection solution for ultra-thin electronic components
(Auriane Despax-Ferreres / CEA-LITEN - France)
- 14h05** High density interconnect above active CMOS structures utilizing optimized klett welding of nanowires
(Andreas Kramer / TU Darmstadt - Germany)
- 14h35** The failure mechanism of μ -CuP employed in sensor packages
(Erh-Juh Lin / ASE group - Taiwan)
- 15h05** Hybrid in-mold electronics process towards novel 3d packaging of components and systems
(Philippe Lombard / University of Lyon - France)

15h35 Closing by Jean-Marc YANNOU (Auditorium)



15h40 -16h00 Exhibition /Coffee Break ASE GROUP

16h00 End of MiNaPAD 2023 conference

List of Exhibitors

13/04/2023

Booth number	Company
1	ASE
2	
3	
4	
5	FINETECH - Option
6	INTRASPEC - Option
7	PROTAVIC
8	MST
9	ELEMCA
10	METRONELEC
11	
12	SET
13	KYOCERA
14	NITERRA / NTK
15	ACCELONIX
16	AEMTEC
17	EGIDE
18	DISCO
19	
20	ISP SYSTEM
21	BT ELECTRONICS POLY DISPENSING SYSTEMS
22	TELEDYNE E2V
23	HYBRID
24	MICROTEST ONTOS
25	NANOTEC - Option
26	SERMA
27	MICRONOR
28	CEA
29	
30	JCET Group Co., Ltd



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By Internet: <https://event.imaps.france.org>

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Speakers:

180 € VAT excl.

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Chairs, Technical Committee:

320 € VAT excl.

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IMAPS Member IMAPS 2023 and IEEE 2023 Membership

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Purchase order (PO)

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