MiNaPAD Forum 2024

11th Micro/Nano-Electronics Packaging and Assembly, Design and Manufacturing Forum

EXHIBITION & CONFERENCES

June 19th-20th

GRENOBLE France

Organized by
IMAPS - International Microelectronics Assembly and Packaging Society
17 rue de l’Amiral Hamelin - 75016 Paris - France
Tel: +33 (0) 7 88 75 59 86
imaps.france@orange.fr - www.france.imapseurope.org

Media Sponsor: YOLE Group
### Welcome to MiNaPAD – Coffee & Soft drink sponsored by

**Wednesday June 19th**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tr>
<td>8h15</td>
<td>Welcome to MiNaPAD – Coffee &amp; Soft drink sponsored by</td>
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<tr>
<td>9h00</td>
<td>Opening by Jean-Marc YANNOU (Auditorium)</td>
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### 9h10 Keynote: Mudasir AHMAD (IEEE – EPS Distinguished lecturer)

*Advanced Packaging for Artificial Intelligence Applications*

<table>
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<tr>
<th>Time</th>
<th>Session A: AI Applications</th>
<th>Session B: Attachment materials</th>
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<tr>
<td>9h45</td>
<td>Detection and measurement of solder voids in X ray of led assembly with YOLO v8 <em>(Yasser ALMEHIO, VALEO - France)</em></td>
<td>The Application of Low Temperature Self-Assembly Sn Based Glue <em>(Glenn LIN, ASE group - Taiwan)</em></td>
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<td>10h15</td>
<td>Solder paste development using AI <em>(Melanie MATHON, INVENTEC - France)</em></td>
<td>New Bare Copper Compatible Die Attach Developments Improving Reliability and Thermal at Lower Cost <em>(Ruud De WIT, HENKEL – The Netherlands)</em></td>
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### 10h45–11h15 Exhibition Opening (Exhibition Hall) / Coffee break sponsored by

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<th>Time</th>
<th>Session C: Interconnections</th>
<th>Session D: PCB Substrates</th>
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<tr>
<td>11h15</td>
<td>Integration of III-V GaN amplifiers of an antenna in package receiver in PCB-based embedding technology <em>(Tekfouy LIM, FRAUNHOFER IZM - Germany)</em></td>
<td>Advanced IC substrates – Challenges in the manufacturing and supply chain <em>(Roland STEIM, DYCONEX - Switzerland)</em></td>
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<td>11h45</td>
<td>Alternative approach to Die-to-Wafer bonding utilizing atmospheric plasma cleaning <em>(Daniel PASCUAL, ONTOS - USA)</em></td>
<td>Next Generation Packaging Materials for Challenging AI and Power Electronics Applications <em>(Helmut KRONER, RESONAC - Germany)</em></td>
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<td>12h15</td>
<td>Clips bonding using re-metallization techniques <em>(Wilfrid AKLAMAVO, SERMA Microelectronics - France)</em></td>
<td>High Density Organic Substrates for Chiplet and High Frequency Application <em>(Lars BOTTCHER, FRAUNHOFER IZM - Germany)</em></td>
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### 12h45–13h45 Lunch (Exhibition Hall) sponsored by

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<th>Time</th>
<th>Session E: Process Optimization 1</th>
<th>Session F: Reliability 1</th>
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<td>13h45</td>
<td>An innovative deposition technology for conductive &amp; dielectric materials ; Multimaterials, Multilayers, Contactless High-Resolution High-Speed Deposition <em>(Stéphane ETIENNE, I-O-TECH, Israel)</em></td>
<td>Robustness and environmental impact of under bump metallization for wafer level balling <em>(Arnaud GARNIER, CEA LETI - France)</em></td>
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<td>14h15</td>
<td>SWEET (Side Wall ExquisiteEnvelope Technology) to protect WLSCP <em>(Shih Chieh TANG, ASE group)</em></td>
<td>SACN doped Mn solder balls oxidation study for BGA’s reliability performance <em>(Stelliane GROLIER LEE, STMicroelectronics - France)</em></td>
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<td>14h45</td>
<td>Post plasma dicing clean in Batch spray equipment with sulfuric ozone mixtures <em>(Moritz MITTERMAYR, SICONNEX - Austria)</em></td>
<td>Experimental study of interfacial adhesion of passivation/resin with shear test: first learnings <em>(Marie DUGOR DENTONE, STMicroelectronics - France)</em></td>
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15h15 – 15h45 Exhibition / Coffee break sponsored by

SESSION G: Dicing / Picking
(Auditorium)

15h45 Plasma Singulation of Single Power Diodes Bonded by Intermetallic Eutectic Technique
(Sabrina ROZA-ORTIZ, PLASMATHERM - USA)

SESSION H: Flip Chip Process
(Mont Blanc)

16h15 Development of a dipping process for silver sintered flip chip interconnexion
(Céline FEAUTRIER, CEA LETI - France)

16h45 Latest approaches of dicing and grinding for semiconductor device manufacturing
(Benjamin BERNARD, DISCO - Germany)

16h45 Industrial Approach for Plasma Dicing: Advances and Challenges
(Lucile BROUSSOUS, STMicroelectronics – France)

17h15 Precision plasma dicing of wafers
(Leslie LEA, PLASMATHERM - USA)

17h45 – 18h30 Exhibition Hall

20h00: Dinner – Grenoble downtown

(15 minutes by walk from WTC – 1.4 kms)

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ASE

STI

TELEDYNE E2V Semiconductors

The New Value Frontier

KYOCERA
Thursday June 20th

8h30 - Opening exhibition and conferences

9h10 Keynote: Thomas ROMONT (Senior PCB Expert, IFTEC - France)
IPC Designers Council France - What are our common Challenges for Future?

Session J: Power Management (Auditorium)
09h45 Understanding Criticality of Thermal Performance in Thermal Interface Material for Automotive Applications
(Rodrigo AGUILAR, HENKEL – The Netherlands)

Session K: Characterization (Mont Blanc)
09h45 Dual blocks QFN warpage characterization
(Federico LEONE, STMicroelectronics - Italy)

10h15 Packaging and reliability challenges for Innovative Automotive Grade current sensors
(Alastair ATTARD, UTAC - Switzerland)

10h15 Die bending methodology to explore Deep Trench Isolation crack initiation risk in Backside Imager Sensors
(Caroline MOUTIN, STMicroelectronics - France)

10h45 – 11h15 Exhibition & Coffee break (Exhibition Hall) sponsored by capLiNQ

Session L: Process Optimization 2 (Auditorium)
11h15 In Situ characterization of plasma species for process optimization and improvement
(Djamila CHOU, STMicroelectronics - France)

11h45 Direct silicon wafer bonding outside cleanroom conditions
(Tobias BUCHMANN, DTU Electro - Denmark)

12h15 Two steps collective bonding, from dicing-tape to device over 10000 UPH
(Aurélien GRIFFART, SET - France)

Session M: Sustainability (Mont Blanc)
11h45 Fabrication of low density3D PCB using piezo-ink jet and 6 axis robots
(Davide BENNEVENTI, INPG - France)

12h15 High Precision Capillary Printing (HPCAP) and its sustainable value in electronics
(Julien VITIELLO, HUMMINH - France)

12h15 – 13h15 Lunch & Exhibition (Exhibition Hall) sponsored by KYOCERA

Session N: Molding process (Auditorium)
13h45 Environment-friendly Epoxy Molding Compounds for Semiconductors and Automotive
(Takahiro WATANABE, Sumitomo Bakelite Co. Ltd - Japan)

14h15 Advanced Mold Design Solutions to Counteract Surface Discoloration in Flip Chip Encapsulation
(Shih Kun LO, ASE group - Taiwan)

13h45 Enhanced Board Level Reliability Method for High Performance Automotive BGA Packages
(Nohora CAICEDO, STMicroelectronics - France)

14h15 The Effects of Voids on Solder Joint Reliability in First Level Interconnect
(Sze Pei LIM, INDIUM – United Kingdom)
Session P: Interposer 2.5D TSV 3D
(Auditorium)

14h55  Design and verification of a 2.5 Heterogeneous Integration Platform
       (Jeroen SCHELKENS & Dimitrios TSIAKOS, IMEC - Belgium)

15h25  Unlocking the Trends and Challenges in Advanced 3D Heterogeneous Integration
       Manufacturing
       (Rayane MAZARI, YOLE Group - France)

15h50  Hermetically sealed glass interposer platform for photonics integrated circuits
       (Kevin KROEHNERT, FRAUNHOFER IZM - Germany)

16h15  Si Based integrated passive devices for Sub 6G SiP
       (Mark AZZOPARDI, JCET group - Switzerland)

16h45  Closing MiNaPAD 2024 Conference by Jean-Marc YANNOU (Auditorium)
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REGISTRATION FORM

Mrs, M.

Name: ...........................................Firstname: ...........................................

Company:
Job Title:
Zip: City Country

Email:

Individual registration:
By email: imaps.france@orange.fr
By Post: IMAPS, 17 rue de l’Amiral Hamelin, 75016 Paris
By Internet: https://event.imaps.france.org

FEES:

Students and Teachers (University and Laboratories), retiree: 00 Euro conferences attendance, proceedings, without social event – Registration is mandatory with justification.

Speakers:
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