

# From Nano to Micro Power Electronics And Packaging Workshop October the 11<sup>th</sup> and 12<sup>th</sup>, 2017 Tours, France



# PRELIMINARY PROGRAMME

Technical Committee: Stéphane BELLENGER, éolane, France – General Chairman

Daniel ALQUIER, Greman Laboratory, France - Chairman Christophe SERRE, ST Microelectronics, France - Chairman

Nicolas VIVET, ST Microelectronics, France - SMA3 Programme coordinator

Lars BOETTCHER, Fraunhofer Institute IZM, Germany

Cyril BUTTAY, Ampère Laboratory, France

Jean-Luc Diot, Minapack, France Guo-Quan LU, Virginia Tech, USA

Jürgen SCHUDERER, ABB Corporate Research, Switzerland

Sébastien JACQUES, Greman Laboratory, France

### FIRST DAY PRELIMINARY CONFERENCE PROGRAMME (October the 11th, 2017)

9 h 00 Workshop package and badge distribution

9 h 30 Welcome: workshop programme presentation

**9 h 50 SAM3 conference introduction:** About the new assembly and packaging, by Klauss Pressel from Infineon and SAM3 project leader

10 h 40 Coffee break / Table Top Exhibition

11 h 10 Failure Analysis Session

11 h 10 Short description of the SAM3 project for IMAPS partners, by Klauss Pressel (SAM3 Project Leader), ST Microelectronics and Greman Institute "Make the link between these new technologies & the corresponding analytical challenges"

11 h 40 Non-destructive analysis method and Predictive images

12 h 10 Table Top Exhibition visit

12 h 30 Lunch (Buffet)

13 h 30 Failure Analysis Session (Con't)

13 h 30 Defect localization in 3D System-in-Packages based on Lock-in-Thermography and GHz- Scanning Acoustic Microscopy" by Frank Altmann and Sebastian Brand from Fraunhofer Institute for Microstructure of Materials and Systems IMWS, Center for Applied Microstructural Diagnostics CAM, Halle Germany

14 h 00 Case study including defect localization method (Sector technology)

14 h 30 Sample preparation – laser (3D Micromac)

15 h 00 Coffee break / Table Top Exhibition

15 h 15 Failure Analysis Session (Con't)

15 h 15 Latest development for failure analysis – "When ions meet chemistry" by Gregory Goupil from Tescan / Orsay Physics

15 h 45 Presentation on failure analysis, from Bosh

16 h 15 End of session

## SECOND DAY PRELIMINARY CONFERENCE PROGRAMME (October the 12th, 2017)

- 8 h 30 Workshop package and badge distribution
- 9 h 00 Welcome: Second day workshop programme presentation
- 9 h 20 Keynotes : Additive Manufacturing of Power Electronics Magnetics, by Guo-Quan Lu from VirginiaTech, USA
- 10 h 05 Coffee break / Table Top Exhibition
- 10 h 30 Session 1
- 10 h 30 Investigation on Cu-Sn inter-diffusion for power semi-conductor packaging by Yousra Bettahi from ST Microelectronics Tours, France
- 10 h 55 Hybrid silver sintering die-attach paste for multi-die packaging of mid-power solutions by Alexandre Val from ASE Europe, Bruxelles, Belgium
- 11 h 20 Reliability analysis of Cu-Sn intermetallic joints elaborated at low temperature by transient Liquid Phase Bonding Process, by Jean-Luc Diot, Minapack, Grenoble, France
- 11 h 45 Paper N°5 under definition
- 12 h 10 Table Top Exhibition visit
- 12 h 35 Lunch (Buffet)
- 13 h 45 Keynotes: Panel Level Packaging for Power Applications, by Rolf Aschenbrenner from IZM Fraunhofer Institute, Berlin, Germany
- 14 h 30 Session 2
- 14 h 30 Fine Pitch Solder Bumping by Printing through Dry Film Photo Resist by Gabriel Parès from the CEA-Leti, Grenoble, France
- 14 h 55 Paper N°8 under definition
- 15 h 20 Paper N°9 under definition
- 15 h 45 Coffee break / Table Top Exhibition
- 16 h 05 Session 2 (con't)
- **16 h 05** Processes and Packaging dedicated to Power Module for automotive application by Nicolas Meillerais from éolane Angers, France
- 16 h 30 Paper N°10 under definition
- 16 h 55 End of session

Next to the first workshop sessions of 11<sup>th</sup> of October, an exceptional event will be organized for which you need to register if you wish to attend:

- On Wednesday, October the 11<sup>th</sup> from 16:30 a visit of famous castle near Tours town will be organized. Departure from Greman's institute at 16h30
- On Wednesday, October the 11<sup>th</sup> at 19h30 a dinner in a gastronomic restaurant is proposed as well

**Sponsors:** 





# Registration Form Final registration October the 2<sup>nd</sup>, 2017

COMPANY:		
NAME:	FIRSTNAME:	
ADDRESS:		
TEL:	E-MAIL:	
→Send back to Florence Vireton Fax : +33 (0)1 39 02 71 93		
E-mail: imaps.france@imapsfrance.org		
FEES (include lunch, breaks & 2-days events)  Conferences on free access on website www.imapsfrance.org after the event.  □ IMAPS MEMBER 220 € HT excluding - 263.12 € TTC		
□ Non IMAPS MEMBER 250 € HT - 299.00 € TT	С	
□ SPEAKERS/CHAIRS 180 € HT - 215.28 € TTC		
□ Table Top 300 € HT - 358, 80 € TTC (1 table, chairs, panel, conferences attendance, coffee		
breaks, lunch). For foreign companies, VAT is	s excluded	
Do not forget to tick boxes if you want to p - Visit of a typical Touraine castle (Wed		□ yes □ no
- Dinner after the visit (Wednesday ever	ning)	□ yes □ no
□ On line Payment and Registration available on www.france.imapseurope.org		

# TRAINING AGREEMENT

INTERCONEX is recognized as approved training centre (Training agreement number 11780608378). If you would like a training agreement, check the following box □. A certificate of attendance will be given during training

# **PAYMENT AND INTERCONEX BANK REFERENCES**

Credit card accepted, as well as payment by cheque, cash or wire transfer. BNP PARIBAS VERSAILLES ETATS GENERAUX, 36 rue des Etats Généraux 78002 Versailles. Bank code 30004 Account number n°00010022786 Key Rib 63, Agency 00859 IBAN FR 76 3000 4008 5900 0100 2278663 BIC BNPAFRPPVRS.

# Quartier des Deux Lions GREMAN matinux microfischronique countique narotechnologies Le Cher Le Cher Lande de Sourcollete Ligner 1-54 Annie Birchologie Le Le Ce la Bergeonnerie Alles Ferdinant Arett Desault Arett Desault Arett Desault Ligner 1-54 Arett Desault Ligne