



ADVANCE PROGRAMME AND REGISTRATION FORM

5th European Advanced Technology Workshop on Micropackaging and Thermal Management

February 3 & 4, 2010

MERCURE VIEUX PORT SUD Hotel

Quai Louis Prunier 17000 La Rochelle France
Tel : 33 (0) 5 46 50 61 50/Fax : 33 (0) 5 46 41 24 31
Email : H0569@accor.com.

**Hotel booking is done by the
organization**

**Reduced train ticket available only on French
network**

**Workshop arrival day:
Tuesday February 2, evening**



WORKSHOP COMMITTEE :

Conference chairman :

France : Jean-Claude RAMES (MBDA France)

Technical Programme Committee :

France : Sandrine LELONG, (SCHLUMBERGER),
Pierre LEWANDOWSKI (CONTINENTAL AUTOMOTIVE),
Michel MASSIOT (EGIDE),
Michel MERMET-GUYENNET (ALSTOM TRANSPORTS),
Gilles POUPON (CEA -LETI),
Claude SARNO (THALES AVIONICS),
Jean-Marc YANNOU (YOLE DEVELOPPEMENT),
Spain : Javier COLETO (TECNALIA AEROSPACE),
United Kingdom : Nick CHANDLER (BAE SYSTEMS),
USA : Dave SAUMS (DS&A LLC),

The workshop will be dedicated thermal management of integrated circuits and particularly to adequate cooling solutions for high integration level of devices and equipments. Rising speed of the components leads to increase power losses whereas miniaturization and low cost technologies do not facilitate the mastering of the thermal impedances.

In such conditions, the thermal management, as a part of packaging solutions, is and will continue to be one of the main priorities driving the technology evolution of electronic components.

A CD Rom including the presentations will be distributed to the attendees only.

- Early Registration ends January 15, 2010
- Final Registration ends on January 25, 2010
- « Formulaire de Convention de formation sur demande »

Organized by:

International Microelectronics And Packaging Society France
49 rue Lamartine 78035 Versailles

Tel : + 33 (0) 1 39 67 17 73/ Fax : + 33 (0) 1 39 02 71 93 E-mail : imaps.france@imapsfrance.org

PROGRAMME (Provisional Programme on November 21, 2009)

FEBRUARY 3rd, 2010 (Wednesday)

- 09.00-10.00 am **Tutorial**
Thermo-Mechanical Design Challenges for Silicon Validation
R. Mohammed, A. Kabadi- INTEL CORPORATION – United States
- 10.00 am Opening address : **B. Braux**, ASTRIUM, IMAPS France President,
- 10.15 am **SESSION 1 A APPLICATIONS**
Chairs : **G. De Mey** Ghent University / **P.Lewandowski**, Continental Automotive
- New Avionics Technologies and Concepts**
V. Rebeyrotte, P. Pons AIRBUS - France
- FP7 Project Advanced GaN Packaging “AGAPAC”-progress to date**
R. Seddon, J. Barcena, Inasmet-Tecnalia - Spain,
O.Vendier, S. Rochette, Thales Alenia Space ,J.M.Desmarres, F.Courtade, CNES, - France
M. Massiot, Egide, -France, S.Knippscheer, T. Mrotzek, Plansee, - Austria
M. Buchta, K. Beilenhoff, - UMS GmbH – Germany, M. Kuball, M. Faqir, University of Bristol
- United Kingdom
- Thermal studies on Light Emitting Diodes Chip On Board modules based on analytical/
FEM modelling and IR thermography**
A. Corfa, A.Gasse, S. Bernabé, H. Ribot, CEA -LETI Optronics Department Grenoble– France
- Power Modules with bumps for Aeronautic Application**
G. Banckaert, M. Mermet - Guyennet PRIMES- ALSTOM Transport - France
- 12.15 am– 1.45 pm **Lunch**
- 01.45 pm **SESSION 2 A MATERIALS**
Chairs : **J.M. Yannou**, Yole Développement / **D. Saums**, DS&A LLC
- High Performance Pyrolytic Graphite Heat Spreaders**
R. Moskaitis, R.J. Lemark, MINTEQ International Inc
D. Pickrell, OMEGA PIEZO Technologies Inc, - United States
- Diamond reinforced aluminium and copper alloyed composites : elaboration,
physical properties and applications**
C. Vincent, H. Kwon, J.M. Heintz, J.F. Silvain IMCB, CNRS Pessac- France
- New Developments for a No Pump-Out High Performance Grease**
P. Hough, S. Paisner, LORD Corporation, - Germany
- Presentation and status of the NANOPACK Project**
S. Demoustier, A. Ziaei, THALES Research and Technology, - France
- Advances in the development of natural graphite composites for thermal management
applications**
C. Stirling, Morganite Electrical Carbon, - United Kingdom
- 04.00 – 04.30 pm **Coffee Break**
- 04.30 pm **SESSION 3 A SIMULATION, MODELING, TEST**
Chairs: **J. Coletto**, INASMET-Tecnalia / **M. Mermet**- Guyennet, ALSTOM Transport
- Application of Pulse Thermography and Thermal Impedance to Heat Dissipation
Measurements in High Power Optoelectronic Devices**
B. Wiecek , T.Swiatczak, R.Olbrycht, J. Apolinarzak, Technical University of Lodz - Poland,
G. De Mey, University of Ghent -Belgium
- Finite Element Assisted Thermally Induced Strain and Stress Analysis**
M. Fakhri, A.K Geinzer, R.Heiderhoff, L. J.Balk, University of Wuppertal - Germany
- 05.30 pm **End of session**
- 06.00 pm **Departure to The New World Museum (liable of modifications)**
- 08.00 pm **Dinner**

FEBRUARY 4th, 2010 (Thursday)

08.30 am

SESSION 4 COOLING SYSTEMS Chairs : P. Pons, AIRBUS / N. CHANDLER, BAE Systems

Influence of a chimney on natural convection cooling of electronic components
G.de Mey, M. Wojcik, J. Pilarski, M. Lasota, J. Banaszczyk, B. Vermeersch, A.Napieralski,
M.de Paepe, University of Ghent - Belgium

Immersion Cooling of IGBTs: Thermal Performance, Packaging Density and In Situ Degassing Techniques
P. E. Tuma, 3M Electronics Markets Materials Division, -United States

Enhanced Boiling Heat Transfer using Acoustic Interfacial Actuation
A. Glezer, T.R. Boziuk, M.K.Smith Woodruff School of Mechanical and Engineering
Georgia Institute of Technology – United States

Micro-Channel variation within Liquid Cold Plate design and Impact on Thermal Performance
M. Reeves, S.J. Loong, P. Beucher, Wolverine Tube Inc. - United States

Modelling of Heat Pipes by averaging balance equations on the cross section
G. Massiot, EADS IW, - France

10.45 - 11.15 am

Coffee break

11.15 am

SESSION 3 B SIMULATION, MODELING, TEST Chairs : J. Coletto, INASMET-Tecnalia / M. Mermet- Guyennet, ALSTOM Transport

Thermal simulation for space program package designs using ANSYS software
B. Dervaux, E2V Grenoble - France

Thermal measurements of integrated inductors in CMOS technology
V. Chatziathanasiou, I.Papagiannopoulos, A. Hatzopoulos,
Aristotle University of Thessaloniki, -Greece, B.Wiecek, Technical University of Lodz
G.de Mey, University of Ghent, - Belgium

12.15 am - 1.30 pm

Lunch

01.30 pm

SESSION 2 B MATERIALS Chairs : J.M. Yannou, Yole Développement / Dave Saums, DS&A LLC

Natural Graphite Reinforced Aluminium and Copper Composites for High Heat flux Thermal Management
J. A. Cornie, R. Hay, K. Fennessy, S. Cornie, Metal Matrix Cast Composites LLC,
- United States

Printed Circuit Board Technologies for thermal management
P.E. Goutorbe, CIRE, O. Belnoue, BREE Industries - France

Low Temperature Sintering Technology (LTST) for new thermal Interface material (TIM) at die attach : Ag Sintering
R. de Langlade, Novapack Technologies, J.L.Diot, NovaPack SAS, - France
H.W Hagedorn, W.C Heraeus, - Germany

02.45 - 03.15 pm

Coffee Break

3.15 pm

SESSION 1 B APPLICATIONS Chairs : G. De Mey Ghent University / P. Lewandowski, Continental Automotive

Vaporizable dielectric fluid cooling applications for IGBT power semiconductors
D.L. Saums, DS&A LLC, - United States

Evaluation of Thermal Resistance for Power Packages
J.L. Diot, R. de Langlade, M.. Seleznev, Novapack, - France,
E. Leblanc, C. Serre, ST Microelectronics Tours, - France

04.05 pm

End of session / Final Coffee / Departure

NEXT 2010 EVENT:

☛ JUNE 24, 2010 Grenoble France Embedded Wafer Level Packaging "MINATEC CROSSROADS"

REGISTRATION FORM

Early Registration ends January 15, 2010

Final Registration ends on January 25, 2010

RETURN REGISTRATION FORM ADDRESS :

INTERCONEX Florence Vireton 49 rue Lamartine 78035 Versailles France tel. : +33 (0) 1 39 67 17 73
fax : +33 (0) 1 39 02 71 93 e-mail : imaps.france@imapsfrance.org Web site : www.imapsfrance.org

WORKSHOP FEES: These prices include: Hotel for 2 nights (arrival on Tuesday), lunches and dinners for 2 days.

SPEAKERS/CHAIRS/TECHNICAL COMMITTEE 401.34 VAT excluded 480 €* VAT

Please confirm your participation for first day dinner around 8 pm (February 2, 2010)

AUDITORS 2 DAYS :

Before January 15, 2010

IMAPS MEMBER 543, 48 VAT €* excluded 650 €*VAT included

IMAPS NON MEMBER 627, 09 VAT €* excluded 750 €*VAT included

After January 15, 2010

IMAPS MEMBER 627, 09 €VAT* excluded 750 €*VAT included

IMAPS NON MEMBER 710, 70 €VAT* excluded 850 €*VAT included

Please confirm your participation for first day dinner (February 2, 2010)-dinner around 8 pm

Vegetarian Food

AUDITORS ONE DAY :

167.22 €VAT excluded 200 €VAT* (lunch included, no hotel).

February 3

February 4

STUDENTS :

83.61 €VAT Excluded 100 €* VAT (lunch excluded, no hotel)

TOTAL FEES :

VAT included :€ *No refund in case of cancellation.

*For foreign companies, VAT will not be charged. VAT excluded€

PAYMENT MEANS : By bank transfer or by cheque to the order of INTERCONEX, cash. No credit card accepted.

INTERCONEX BANK REFERENCES :

BANK CODE 30004	AGENCY CODE 00859	ACCOUNT NUMBER 00010022786	RIB KEY 63	BANK ADDRESS : BNP PARIBAS VERSAILLES ET GX (00859)
IBAN FR 76 3000 4008 5900 0100 22 78 663			BIC BNPAFRPPVRS	
BNP PARIBAS Agency Versailles ETATS GENERAUX 36 rue des Etats Généraux 78002 Versailles France				

ATTENDEE ADDRESS :

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IMAPS MEMBERSHIP NUMBER.....