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Table of Contents

EMPC 2013

September 9 – 12 September 2013

Session TuA1 : Challenges in 2.5 and 3D packages

Chairs : Juergen Wolf (Fraunhofer IZM), Jean Marc Yannou (ASE)

1 - 3D Chip and System-Level Novel Interconnects for Improved Signaling and Cooling

Muhannad Bakir - Georgia Institut of Technology, Atlanta, USA

2 - Silicon Embedded Line Integration for High End Passive Silicon Interposer

Jean Charbonnier, Myriam Assous, Jean-Philippe Bally, Robert Cuchet, Thierry Mourier, Stéphane Minoret, Thomas Magis, Alain Toffoli, Fabienne Allain, Gilles Simon - CEA-LETI, Minattec Campus, Grenoble, France

3 - Silicon interposers with Integrated Passive Devices, an excellent alternative to discrete components.

Florent LALLEMAND, Frédéric VOIRON - IPDIA, Caen, FRANCE

Session TuA2 : Interconnections for dedicated applications

Chairs : Luigi Calligarich (Electron Mec), Thierry Lacrevez (Université de Savoie)

4 - Optimized wire-bond transitions for microwave applications up to 67 GHz using the low loss LTCC material DuPont 9k7

Alexander Schulz, Dirk Stöpe¹, Tilo Welker, Robert Müller, Frank Wollenschläger and Jens Müller - Ilmenau University of Technology, Institute of Micro- and Nanotechnologies MacroNano¹ Ilmenau, Germany

5 - Au-Sn Transient Liquid Phase Bonding for Hermetic Sealing and Getter Activation

S.Giudice, Ch. Bosshard - CSEM SA, Alpnach, Switzerland

6 - Copper Ribbon Bonding for Power Electronics Applications

Norman Marengo, Magdalena Kontek, Wolfgang Reinert, Jan Lingner, and Max-Hermann Poech - Fraunhofer-Institute for Silicon Technology ISIT, Itzehoe, Germany

Session TuA3 : Wafer Level Packaging for MEMS

Chairs : Christian Bosshard (CSEM), Jiri Haze (Brno University of Technology)

7 - Systematic characterization of key parameters of hermetic wafer-level Cu-Sn SLID bonding

H.J. van de Wiel*, A-S. B. Vardøy**, G. Hayes*, M.H.M. Kouters*, A. van der Waal*, M. Erinc*, A. Lapadatu***, S. Martinsen***, M.M.V. Taklo**, H.R. Fischer* - * TNO, Eindhoven, The Netherlands - *** SINTEF ICT, Oslo, Norway - *** Sensoror, Horten, Norway

8 - Reliable wafer-level-bonding method for MEMS packaging using LTCC interposers

Martin Ihle¹, Steffen Ziesche¹, Frank Roscher², Beate Capraro³ and Uwe Partsch¹ - ¹Fraunhofer Institute for Ceramic Technologies and Systems, Dresden, Germany - ²Fraunhofer Institute for Electronic Nano Systems, Chemnitz, Germany - ³Fraunhofer Institute for Ceramic Technologies and Systems, Hermsdorf, Germany

9 - Vacuum packaging at wafer level for MEMS using gold-tin metallurgy

C.-A. Manier*, K. Zoschke*, H. Oppermann*, D. Ruffieux**, S. Dalla Piazza***, T. Suni****, J. Dekker****, G. Allegato***** - * Fraunhofer IZM, Berlin, Germany - ** CSEM SA, Neuchâtel, Switzerland - *** Micro Crystal AG, Grenchen, Switzerland - **** VTT Technical Research Centre of Finland, Espoo Finl - ***** STMicroelectronics, Agrate Brianza, Italy

Session TuA4 : Packaging and bonding

Chairs : Markus Detert(University Magdeburg,), Changqing Liu (Loughborough University)

10 - Improved chip & component encapsulation by dedicated diffusion barriers to reduce corrosion sensitivity in biological and humid environments.

Maaïke Op de Beeck^{1,2}, Ahmed Jarboui^{1,3,4}, Maarten Cauwe¹, Heidi Declercq⁵, Griet Uytterhoeven², Maria Cornelissen⁵, Jan Vanfleteren¹, Chris Van Hooft^{1,2-1} CMST - UGent/Imec, Belgium - ² Imec, Leuven, Belgium - ³ LMF, Sfax university, Tunisia - ⁴ KACST-Intel Consortium CENA - ⁵ Faculty of Medicine and Health Sciences - UGent, Belgium

11 - Solid-Liquid Interdiffusion (SLID) Bonding Intermetallic Bonding for High Temperature Applications

Knut E. Aasmundtveit¹, Torleif A. Tollefsen^{1,2}, Thi-Thuy Luu¹, Ani Duan¹, Kaiying Wang¹, and Nils Hoivik¹ - ¹Vestfold University College, Tonsberg, Norway - ²SINTEF, Oslo, Norway

12 - Ultra-fine pitch redistribution for 3D interposer

R. Segaud*, C. Aumont**, R. Eleouet*, N. Allouti*, T. Mourier*, L. Gabette*, S. Minoret*, T. Magis*, A. Roman** R. Hida*, C. Ratin*, L. Lachal*, S. Delachanal*, M.L. Cordini**, P. Nardi*, H. Feldis**, A. Charpentier*, P. Chausse*, C. Laviron*, S. Chéramy* - * CEA-LETI, Minatec Campus, Grenoble, France - ** STMicroelectronics, Crolles, France

Session TuP1 Modules and sensors for applications

Chairs : Severine Cheramy (CEA-LETI), Bernd Roemer (Infineon)

13 - Power Modules with Embedded Components

*A. Ostmann¹, L. Boettcher¹, D. Manassis², S. Karaszkievicz¹ and K.-D. Lang² - ¹Fraunhofer IZM, Berlin, Germany
- ²Technical University Berlin, Germany*

14 - Custom Plastic Ball Grid Array Packages for Microwave Space Applications up to 30 GHz

Barbara Bonnet¹, Nicolas Malgouyres¹, Olivier Vendier¹, Sophie Dareys², Jean-François Villemazet¹ - ¹Thales Alenia Space, Toulouse, France - ²CNES, Toulouse, France

15 - Hermetic Packaging for Millimetre Wave Applications

M. Lahti, K. Kautio, J. Ollila, T. Vähä-Heikkilä, and M. Kaunisto - VTT Technical Research Centre of Finland, Oulu, Finland

16 - Thin Film Flexible Circuits: Technology, Characteristics and Applications

A. Kaiser, K. Rueß, P. Matej, C. Herbort, B. Holl, G. Bauböck - Cicor Microelectronics Reinhardt Microtech GmbH, Ulm, Germany

17 - Assembly of High-Aspect Ratio Optoelectronic Sensor Arrays on Flexible Substrates

W. Buß, F. Kraze, A. Brückner, R. Leitel, A. Mann, and A. Bräuer - Fraunhofer Institute for Applied Optics and Precision Engineering, Jena, Germany

Session TuP2 Interconnects reliability

Chairs : Jean Luc Diot (Novapack), Jan Felba (Wroclaw University of Technology)

18 - Micro-Structural Changes and Crack Propagation in Solder Joints due to Vibration

Bastian Reichling¹, Andreas Fix¹, Roumen Ratchev¹, and Jürgen Wilde² - ¹Robert Bosch GmbH, Schwieberdingen, Germany - ²IMTEK, Universität Freiburg, Germany

19 - Study of influential parameters for Lead-Free Flip chip solder joint cracking

A. Ayari-Kanoun¹, V. Oberson², I. Paquin², C. Fortin², R. Fontaine², D. Danovitch², D. Drouin¹ - ¹3IT, Université de Sherbrooke, Canada. - ²IBM Systems & Technology Group, Bromont, Canada.

20 - Combining Humidity Testing and Static Bending with Flip Chip Test Structures

Kati H. Kokko - Tampere University of Technology, Finland

21 - Novel investigation of influencing factors for corrosive interface degradation in wire bond contacts

Robert Klengel, Sandy Klengel, Tino Stephan, Matthias Petzold - Fraunhofer Institute for Mechanics of Materials, Halle (Saale), Germany

22 - Flex to Flex Bonding using Anisotropic Conductive Film for Imaging Systems

K. Imenes^{1}, H.-V. Nguyen¹, A. Lifjeld², T. Eggen², C. E. Baumgartner³ and K. E. Aasmundtveit¹ - ¹Vestfold University College, Borre, Norway - ²GE Vingmed Ultrasound, Horten, Norway - ³GE Global Research, Niskayuna, NY, USA*

Session TuP3 Design for reliability and functionality

Chairs : Chris Bailey (University of Greenwich), Petri Savolainen (DfR solutions)

23 - Impact of Integrating Microchannel Cooling within 3D Microelectronic Packages for Portable Applications

Louis-Michel Collin^{1,2,3}, Luc G. Fréchette¹, Abdelkader Souifi¹, Sandrine Lhostis^{2,3}, François de Crécy³, Séverine Chéramy³, Jean-Philippe Colonna³, Vincent Fiori² - ¹Unité Mixte Internationale UMI-LN2, 3IT, Université de Sherbrooke, Canada - ²STMicroelectronics, Crolles, France - ³CEA-Leti, Minatec Campus, Grenoble, France

24 - BGA package technology considerations for High Speed and RF applications

Laurent MARECHAL, David AUCHERE, Yvon IMBS - STMicroelectronics, Grenoble, France

25 - Embedded capacitor design rules in multilayer organic-based substrate for HF circuits

Massar Wade, Isabelle Bord-Majek, Tristan Dubois, Genevieve Duchamp - University of Bordeaux, IMS Laboratory, Talence, France

26 - Release Holes : Physical implementation checks for Thin Films Packaging

M. Gary, J-L. Pornin, G. Cibrario, and C. Jaffard - CEA-Leti, Minatec Campus, Grenoble, France

27 - Ball Grid Array package for automotive application : strong link between design and 3D modeling

Giovanni Graziosi, Cristina Somma*, Arianna Morelli*, Claudio Maria Villa*, Patrice Joubert Doriol*, Laurent Marechal**, Sebastien Gallois-Garreignot*** - *STMicroelectronics, Agrate Brianza, Italy - ** STMicroelectronics, Grenoble, France - *** STMicroelectronics, Crolles, France*

Session TuP4: Packaging for LED and power electronic

Chairs : Johan De Baets (IMEC University Ghent), Giovanni Del Rosso

28 - Transfer Molding of Primary LED Optics ; High Aspect Ratio Domes

S. H. M. Kersjes*, J.L.J. Zijl*, R.H. Poelma** and H.Wensink* - * BESI Netherlands, duiven, The Netherlands - ** Delft University of Technology, The Netherlands

29 - Electro-optical strength assessment of white LEDs multichip modules for automotive forward-lighting application: failure analysis and packaging influence

B. Chambion^{1,2}, L.Mendizabal³, L.Bechou², A.Gasse³, Y. Deshayes², V.Carreau¹⁻¹RENAULT, Guyancourt, France - ²IMS Laboratory, University of Bordeaux 1, France - ³CEA-LETI, Minatec Campus, Grenoble, France

30 - Heterogeneous packaging for mixed LED and electronic packages

B.R. de Jong*, E.A. Patent[‡] and M.A. de Samber* - * Philips Research, Eindhoven, The Netherlands - [‡] Philips Research, Eindhoven, The Netherlands

31 - Packaging Material Issues in High Temperature Power Electronics

B. Boettge, F. Naumann, R. Klengel, S. Klengel, M. Petzold - Fraunhofer IWM, Halle, Germany

32 - Utilising Advanced Packaging Technologies to enable Smaller, More Efficient GaN Power Devices.

Andy Longford¹, Greg Klowak² - ¹Panda Europe, Berkshire, UK. - ²GaN Systems Inc, Ottawa, Canada

Session WA1 Thermal, mechanical and electrical Modelling

Chairs : Andrew Holland (Samsung), Sandrine Feneyrou (Zodiac Aerospace)

33 - Computational Modeling of Electrodeposition in Small Features under Megasonic Agitation

N.Strusevich, C.Bailey, M.K. Patel - University of Greenwich, London, U.K.

34 - Solder Joint Fatigue Model for Large Silicon Interposers

C. Ferrandon^a, F. de Crécy^a, S. Moreau^a, D. Yap^b and G. Simon^a - ^aCEA, LETI, MINATEC Campus, Grenoble, France - ^bSTMicroelectronics, Singapore

35 - Constitutive Modeling of Thin Films Under Thermal Cycling

Tiphaine Pélisset^{1,2}, Walther Heinz¹, Balamurugan Karunamurthy¹, Thomas Antretter² - ¹KAI GmbH, Villach, Austria, - ²Institute of Mechanics, Montanuniversitaet Leoben, Austria

36 - RF Characterization and Modeling of Through-Silicon Vias

X. Sun, J. Ryckaert, G. Van der Plas, E. Beyne - Imec, Leuven, Belgium

37 - BGA packages classification to reach ESD CDM standards

David AUCHERE, Gerald AFFLARD, Blaise JACQUIER, Stephan JEUNE, Corinne RICHIER, Alexandre DRAY, Celine ROUSSEL, David Aleo, Eric PICOLET, Cedric LE BORGNE, Yvon IMBS, Laurent MARECHAL - STMicroelectronics Crolles, France

Session WA2 Materials and processing

Chairs : Brahim Lakssir (MAScIR), Bradford Factor (ASE)

38 - Improvement of low-temperature sintered ink containing nano-Ag for ink-jet printing of conductive structures on flexible substrates

Jan Felba^{1*}, Anita Smolarek², Andrzej Mościcki², Tomasz Fala¹, Michał Zawierta¹, and Zbigniew Żaluk¹ - ¹ Wrocław University of Technology, Poland - ² Amepox Microelectronics Ltd., Łódź, Poland

39 - Multi Beam Low- λ Grooving Evaluation of various removal principals

Richard van der Stam, Jeroen van Borkulo, Peter Dijkstra -ALSI, Beuningen, The Netherlands

40 - Improvement of Connectivity in Cu/OSP Flip Chip Package Using NCP

Masaaki Hoshiyama, Toyokazu Hocchi, Hirotsu Ikarashi, Yosuke Sakai, Hiroki Myodo, Takuya Hoshino, Shinichi Munemura, Kiyoshi Kotaka - Namics corporation, Niigata city, Japan

41 - New Method for Deposition of Thixotropic Materials with Resolution under 100 μ m

M. Buršík, J. Háze, I. Szendiuch, J. Jankovský, M. Řezníček - Brno University of Technology, Czech Republic

42 - Thermo-Mechanical Material Characterization of Organic Polymer Films in Advanced Packages Using Nanoindentation

Katrin Unterhofer¹, Harald Preu¹, Jürgen Walter¹, Georg Lorenz², Walter Mack¹, Matthias Petzold² - ¹Infineon Technologies AG, Regensburg, Germany - ²Fraunhofer Institute for Mechanics of Materials, Halle, Germany

Session WA3 Biomedical electronics and sensors

Chairs : Steffen Krohnert (Nanium), Franck Dosseul (ST Microelectronics)

43 - Smart Neuroprobes with disposable micro-machined shank protection defined at wafer level

A. Andrei, C. Mora Lopez, and P. Soussan - Imec, Leuven, Belgium

44 - Development of a Conductometric Biocompatible Sensor For Detecting Ischemia

Lars Holhjem^a, Runar Strand-Amundsen^b, Knut E. Aasmundtveit^a, Tor Inge Tønnessen^c - ^a Vestfold University College, Borre, Norway - ^b Universitet i Oslo, Norway - ^c Division of Emergencies and Critical Care, Oslo, Norway

45 - Thermoplastic Packaging and Embedding Technology for ID-cards

Joao Marques, Barbara Pahl**, Christine Kallmayer** - *Technische Universität Berlin, Berlin, Germany - **Fraunhofer IZM, Berlin, Germany*

46 - Dispersion of functionalized SiO₂ particles into a Liquid Crystal Polymer matrix for a reliable HF package

Walide Chenniki^a, Isabelle Bord-Majek^a, Mélanie Louarn^b, Vincent Gaud^b, Jean-Luc Diot^c, Bruno Levrier^a, Virginie Verriere^c, Thomas Frank^d, Komkrisd Wongtimnoi^e, Yves Ousten^{a-a} IMS Laboratory, University of Bordeaux, France - ^bPolyrise, Pessac, France - ^cNovapack SAS, Saint Egrève, France - ^dSerma technologies, Grenoble, France - ^eINSA Lyon, France

47 - Thermal Cycling of Anisotropically Conductive Adhesive Interconnections in Demanding Sensor Applications

Sanna Lahokallio, Anniina Parviainen, and Laura Frisk - Tampere University of Technology, Finland

Session WA4 Poster Session

Chairs : Yves ousten (IMS Bordeaux), Jean-Charles Souriau (CEA-LETI)

48 - PZT acoustic wave force sensor made in LTCC technology

Dabrowski A, Golonka L. J. - Wroclaw University of Technology, Poland

49 - Importance of Vibration Testing for New Technological Configurations in Electronics

Szendiuch I, Psota B, Otahal A, Klapka M - Brno University of Technology, Czech Republic

50 - Heterogeneous Wafer reconstruction and wafer level hybridization by Copper Direct Bonding for Infrared imagers

Ait Mani A, Huet S - CEA-LETI, Minatec Campus, Grenoble, France

51 - STMICROELECTRONICS PACKAGE DESIGN RULES CHECK COVERAGE ENHANCEMENT WITH CADENCE RAVEL

Bouteloup G, Franiatte O., Gracietti, Imbs Y, Jaklic J, Lindberg B, Lopez J, Signoret D - STMICROELECTRONICS, Grenoble, France

52 - Cleaning in Electronics: Understanding Today's Needs

P.J.Duchi, Laught A.M., Verdier M - INVENTEC PERFORMANCE CHEMICALS, Bry Sur Marne, France

53 - Novel Interconnection Technology for Flex-on-Glass (FOG) Applications

Haksun L, Eom Y. S., Bae H.C., Choi K.W. - Electronics and Telecommunications Research Institute, Daejeon, Republic of Korea

54 - Novel Low-Volume Solder-on-Pad for Fine Pitch Cu Pillar Bump

Bae H.C, Haksun L, Eom Y. S., Choi K.W. - Electronics and Telecommunications Research Institute, Daejeon, KOREA

55 - Toward a Reliability Analysis Method of Wide Band Gap Power Electronic Components and Modules

Parent G, Massiot G, Rouet V, Munier C, Vidal P.E., Carillo F - EADS Innovation Works, Suresnes, France

56 - Effect of Protective Casting Materials on Product Level Reliability under Accelerated Test Conditions

Pippola J., Marttila T, Frisk L - Tampere University of Technology, Finland

57 - Optimizing of PCBA Cleaning Process through process calibration tools

Sitko V, Saffer M, Bursik M, Szendiuch I, Jankosky J, Ezni M - Brno University of Technology, Czech Republic

58 - Handling of ultra-thin dies with fine pitch micro-bumps for advanced packaging applications

Hajdarevi Z, Malachowski K, Attard A - Besi Austria GmbH

59 - UV Replication Technology for Micro optical applications and bonding challenges using active alignment

Kraft A, Bitzer K, Brehm, Dorfner R - DELO Industrial Adhesives, Windach, Germany

60 - Impact of pad finish on mechanical shock resistance of lead-free solder joints tested under shear and in pull mode

Vandeveld B, Van Kerkhove M, Degryse D, D'Haese W, Schaubroeck D, Allaert B, Geerinckx E, Lauwaert R, Willems G - Imec, Leuven, Belgium

Session WP1: : 3D processing and technologies

Chairs : Coen Tak (NXP), Voya Markovich (MOPC, LCC)

61 - Bridging the Infrastructure Gap Between Traditional Wire-Bond and TSV Semiconductor Package Technology

Vern Solberg, Belgacem Haba, Ph.D., Wael Zohni and Ilyas Mohammed, Ph.D. - Invensas Corporation, San Jose, California USA

62 - 3D TSV System in Package (SiP) for aerospace applications

*JC. Riou *, E. Bailly *, C. Bunel **, L. Lenoir **, M. Pommier ** - * Safran Electronics- Sagem, Valence France; - ** IPDiA, Caen, France*

63 - Low Temperature Dielectric Deposition for Via-Reveal Passivation.

Kath Crook, Mark Carruthers, Daniel Archard, Steve Burgess, Keith Buchanan - SPTS Technologies, Newport, UK.

64 - Development of Through Glass Via Technology For 3D Packaging

Shintaro Takahashi, Kohei Horiuchi, Shigetoshi Mori, Kentaro Tatsukoshi, Motoshi Ono, Masaki Mikayama, Nobuhiko Imajo, Tim Mobley - ASAHI GLASS CO., LTD. /1-5-1 Marunouchi, Chiyoda-ku, Tokyo 100-8405, JAPAN
- *Triton Microtechnologies Inc., Tucson, AZ, U.S.A.*

Session WP2 Emerging materials

Chairs : Jens Mueller (Ilmenau University of Technology), Martin Schneider Ramelow (Fraunhofer IZM)

65 - Direct Integration of Carbon Nanotubes in Si Microsystems – Towards Truly Integrated Micro/ Nano Systems

Knut E. Aasmundtveit, Bao Quoc Ta, Quoc-Huy Nguyen, Tormod B. Haugen, Nils Hoivik, and Einar Halvorsen - Vestfold University College, Tonsberg, Norway

66 - Graphene applications with printed electronics technology

Marcin Sloma^{1,2,}, Daniel Janczak¹, Grzegorz Wroblewski¹, Anna Mlozniak² and Malgorzata Jakubowska^{1,2} -
¹Warsaw University of Technology, Faculty of Mechatronics, 8 sw. A. Boboli st., 02-525 Warsaw, Poland -
²Institute of Electronic Materials Technology, Warsaw, Poland*

67 - A Bottom-up Approach to Developing Innovative Resistive Sensors

*S. Behar¹, B. Viallet², J. Grisolia², N. M. Sangeetha² and L. Ressier², - 1- Nanolike, Ramonville Saint Agne, France
- 2 - Université de Toulouse, Toulouse, France*

68 - Investigation on interaction between indium based thermal interface material and copper and silicon substrates

*Tomasz Fałat¹, Przemysław Matkowski¹, Bartosz Płatek¹, Carl Zandén², Jan Felba¹, Li-Lei Ye³, and Johan Liu^{2 - 1})
Wrocław University of Technology, Poland - ²) Chalmers University of Technology, Göteborg, Sweden - ³) SHT
Smart High-Tech AB, Göteborg, Sweden*

Session WP3 Packaging for MEMS

Chairs : Nihal Sinnadurai (Imaps Europe), Alain Bensoussan (Thales)

69 - The Discrete Vacuum Packaging Reliability Issue in MEMS

L. Mauri, E. Rizzi, M. Moraja, M. Campaniello - SAES GETTERS S.p.A., Lainate, Italy

70 - Wireless communicating implant for record of vital diagnosis parameters

Achkar Charbel*, **, Molina Julien***, Sou Gérard**, Koskas Fabien***, Haentjens Yan*, Alquié Georges**, Leborgne Alain* - *VectraWave, Les Loges en Josas, France - **L2E-UPMC, Paris, France - ***Pitié-Salpêtrière, Paris, France

71 - Technological Investigation of LTCC-Based Micro-electro-mechanical Systems (MEMS) to improve reliability and accuracy

Christian Lenz¹, Steffen Ziesche¹, Uwe Partsch¹, and Holger Neubert^{2)·1)} Fraunhofer Institute for Ceramic Technologies and Systems, Dresden, Germany- ²⁾Dresden University of Technology, Germany

72 - Holed Packaging for Mems Sensors

Fulvio Fontana, Kevin Formosa#, Giovanni Graziosi, Mark Shaw, Fabrizio Soglio*, Marco Tumiatì - STMicroelectronics, Castelletto, Italy.

Session WP4 Assembly and embedding structures

Chairs : Rozalia Beica (Yole), Gilles Poupon (CEA-LETI)

73 - Demonstration of a 3D Embedded Wafer-Level SIP for Smartcard Application

G. Parès¹, C. Bouvier¹, L. Castagné¹, M. Saadaoui², J. Mazuir², J. Noiray³, K. Martinschitz⁴, L. Mercier⁵, A. Planchais⁵ and G. Simon¹. - 1 : CEA-LETI, Minatec Campus, Grenoble, France - 2 : Ecole Nationale Supérieure des Mines de Saint-Étienne (ENSM-SE), Centre of microelectronics, Gardanne, France, - 3 : 3D-PLUS, Buc , France - 4: EV Group E. Thallner GmbH, St. Florian am Inn, Austria - 5 : STMicroelectronics, Rousset, France

74 - Large-Scale Manufacturing of Embedded Subsystems-in-Substrates and a 3D-Stacking Approach for a Miniaturised Medical System Integration

D. Manassis¹, A. Podlasly¹, A. Ostmann², R. Aschenbrenner², and K-D. Lang¹ - ¹ Technical University of Berlin, Berlin, Germany - ² Fraunhofer IZM, Berlin, Germany

75 - Assembly and Embedding of Ultra-Thin Chips in Polymers

Mahadi-UI Hassan, Christiane Schomburg, Christine Harendt, Elisabeth Penteker and Joachim N. Burghartz - Institute for Microelectronics Stuttgart, Germany

76 - High curvature bending characterization of ultra-thin chips and chip-on-foil assemblies

Daan van den Ende^{1*}, Frits Verhoeven², Pepijn van der Eijnden², Roel Kusters¹, Ashok Sridhar¹, Maarten Cauwe³, Jeroen van den Brand¹ - ¹ Holst Centre, TNO, High Tech Campus 31, 5656 AE Eindhoven, The Netherlands. +31-040420476, daan.vandenende@tno.nl - ² TNO, Eindhoven, The Netherlands - ³ IMEC CMST, Zwijnaarde, Belgium

Session WP5 PCB solutions

Chairs : Muhannad Bakir (Georgia Tech), Philippe Pons (Airbus)

77 - Advanced Organic Substrate Technologies for HiRel and Medical Applications

Frank Egitto, Dave Alcoe, Susan Bagen, Rabindra Das, Kim Blackwell, Steven Rosser, Glen Thomas, Voya Markovich - Endicott Interconnect Technologies, Endicott, USA

78 - Challenges in IC-Package-PCB Co-design of an Advanced Flip-Chip PoP Package for a Mobile Application

Xavier Lecoq¹, Stephane Cosmo², Prem Bacle³, Corinne Devey³, Olivier Bayet³, Laurent Schwarz³ - ¹STMicroelectronics Grenoble, France - ²ST-Ericsson Le Mans, France - ³ST-Ericsson Grenoble, France

79 - Study on high density interconnect with organic build up substrate

Takuya Torii, Masahiro Inoue, Erina Miyamoto, Toshinori Hida - NGK SPARK PLUG CO.,Aichi, Japan

Session WP6 Reliability on MEMs and structures

Chairs : Gilles Simon (CEA-LETI), Matthias Petzold (Fraunhofer Institute for Mechanics of Materials)

80 - Reliability of wafer-level SLID bonds for MEMS encapsulation

H. Xu¹, M. Broas¹, H. Dong¹, V. Vuorinen¹, T. Suni², S. Vähänen^{2,3}, P. Monnoyer², and M. Paulasto-Kröckel¹ - ¹Department of Electronics, School of Electrical Engineering, Aalto University, PO Box 13340, FI-00076, Aalto, Finland. E-mail hongbo.xu@aalto.fi - ²VTT Technical Research Centre of Finland, Espoo, Finland - ³Advacam Oy, Espoo, Finland

81 - MEMS packaging reliability assessment: Last development in the field of residual gas analysis tests.

P-L. Charvet, P. Nicolas, D.Bloch, B Savornin - CEA-LETI, Minatec Campus, Grenoble, France

82 - Board Level Reliability comparison of Bump on Polymer WLCSP Structures

Yu-Chih Chen¹, Martyn Owen¹, Chiung-Chen Chen², Chun-Hung Tsa², Jui-Tu Huang², Hiew-Watt NG², Hsin-Lun Chang², Shih-Ying Wu², Shih-Chieh, Lin² - ¹Cambridge Silicon Radio Ltd, Cambridge, UK - ²Advanced Semiconductor Engineering, Kaohsiung, Taiwan, R.O.C

83 - Non-Destructive Fault localization in Advanced IC Packages Using Electro Optical Terahertz Pulse Reflectometry

Jesse Alton and Martin Igarashi - TeraView Limited, Cambridge, UK

Session ThA1 : Warpage and process impact on devices

Chairs : Caroline Beelen-Hendrikx (NXP), Alexandre Val (3DPlus)

84 - Bow Management with Temperature for Thin Chips Integration

Jean Charbonnier, Myriam Assous, Jean-Philippe Bally, Edouard Deschaseaux, Christophe Ratin, Rachid Hida, Christophe Poulain, Nacima Allouti, H  l  ne Issel  , Lionel Vignoud, St  phane Moreau and Gilles Simon - CEA - L  ti, MINATEC Campus, Grenoble, France

85 - Wafer Warpage in FO-WLP - Making friends out of enemies

Eoin O'Toole, Mario Ribeiro, and Jos   Campos - Nanium S.A. Vila do Conde, Portugal.

86 - 60GHz BGA solution packaging reliability and warpage study

Didier Campos, Romain Pilard, Yvon Imbs** - * ST Microelectronics Grenoble, France - ** ST Microelectronics Crolles, France*

87 - Performance of Molding Materials and Interconnections Integrated in Interposers Dedicated to RF or Microwave 3DIC applications

T. Lacrevez, C. Bermond*, B. Fl  chet*, Y. Lamy **, O. El Bouayadi*, G Houzet*, P Artillan* - * Universit   de Savoie, Le Bourget du Lac, France - ** CEA-LETI, Minatec Campus, Grenoble, France*

88 - Study of 3D Process Impact on Advanced CMOS devices

A. La Manna, W. Guo*, S. Van Huylenbroeck*, E. Sirignano**, V. Cherman*, G. Van der Plas*, B. De Wachter*, A. Phommahaxay*, Anne Jourdain*, G. Beyer*, and E. Beyne* - *IMEC, Heverlee, Belgium - **University of Naples, Italy*

Session ThA2 : Flip chip Interconnect

Chairs : Andreas Ostmann (Fraunhofer IZM) Pierre Lewandoswki (Continental)

89 - Flip Chip Market and Technology Trends

Rozalia Beica - Yole D  veloppement, Villeurbanne, France

90 - Copper Pillar Shape and Related Stress Simulation Studies in Flip Chip Packages

Ying-Chih Lee¹, Bradford Factor², Chin-Li Kao¹, Jean-Marc Yannou² - 1. ASE Group, Kaohsiung, - 2. ASE Group, Europe

91 - Integration of capillary self-alignment for Face to Face micro bump bonding

Nga. P. Pham, Robert Daily, Silvia Armini, Tinne Delande, Marianna Pantouvaki and Philippe Soussan - Imec, Leuven, Belgium

92 - Joint strength of Cu-to-Cu joint using mixed Ag particle paste

H. Nishikawa, and K. Niwa - Osaka University, Ibaraki, Osaka Japan

93 - Factors Affecting Conduction in Novel Isotropic Conductive Adhesives Filled with Silver Coated Polymer Spheres

S. Jain^a, D.C. Whalley^a, M. Cottrill^a, H. Kristiansen^{b,c}, K.Redford^c, S.Helland^b, T. Helland^b, Erik Kalland^b, C. Liu^a -
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Session ThA3 : Molding, filling and finishing

Chairs : Eric Saugier (ST Microelectronics), Martin Schneider Ramelow (Fraunhofer IZM)

94 - Evaluation of the Hot Embossing Technology for the Fabrication of Resonant Circuits as Instrument Visualization Method for Interventional Magnetic Resonance Imaging

Markus Detert, Mandy Kaiser, Stephan Friebeck, Georg Rose, and Bertram Schmidt - Otto-von-Guericke-University Magdeburg, Institute of Micro- and Sensor Systems, Magdeburg, Germany

95 - Epoxy Molding compounds for High Temperature Applications

A. Mavinkurve*, L. Goumans* and J. Martens** - * NXP Semiconductors, Nijmegen, The Netherlands - ** NXP Semiconductors, Hamburg, Germany

96 - Copper Filled Polyurethane Based Electrically Conductive Adhesive with Improved Mechanical Strength

Li-Ngee Ho* **and Hiroshi Nishikawa* - * Osaka University, Ibaraki, Osaka, Japan. - ** University Malaysia Perlis, Arau, Perlis, Malaysia.

97 - Reliable filling of through vias with silver based conductive adhesives in flexible PEN substrates using low-cost optimized stencil printing methods

Mária Péter*, Daan van den Ende*, Bart van Remoortere* ***, Steven van Put**, Tomas Podprocky**, Anja Henckens***, Jeroen van den Brand - *Holst Centre, TNO, Eindhoven, The Netherlands - **IMEC-CMST, Ghent, Belgium - ***Henkel Electronic Materials NV, Westerlo, Belgium

98 - ENEPIG finish: An Alternative Solution for Space Printed Circuit Boards (PCB)

A. Chaillot*, N. Venet**, P-E. Tegehall***, J. Hokka****, J-L. Lortal***** - * ASTRIUM, ** THALES ALENIA SPACE, *** IVF, **** ESA, ***** CNES

Session ThP1 : WLP and PoP : Innovations and processes

Chairs : Yann Lamy (CEA- LETI), Jean Christophe Crébier (CMP)

99 - Evolution of Wafer Level Packaging for Mobile Devices

John Hunt¹, Adren Hsieh², Christophe Zinck³ - ¹ ASE Group, US - ² ASE Group, Kaohsiung - ³ ASE Group, Europe

100 - Challenges with Manufacturability of Package on Package (PoP)

Petri Savolainen*, Craig Hillman, Cheryl Tulkoff, and Greg Caswell - DfR Solutions, Beltsville, MD, USA

101 - New approach for assessment of Dielectric Layer Adhesion Strength, demonstrated on eWLB FO-WLP Interfaces

Jorge Teixeira, Raquel Pinto, Abel Janeiro, Paulo Cardoso, Mário Ribeiro **Eoin O'Toole** - NANIUM S.A, Vila do Conde, Portugal

102 - Wafer-Level Underfill selection protocole for 3D stacks

Amandine Jouve^{1*}, Arnaud Garnier¹, Sylvain Joblot², Guillaume Riado², Rémi Franiatte¹, Alisée Taluy^{2,3}, Séverine Cheramy¹ - ¹ CEA, LETI, MINATEC campus, 17 rue des Martyrs, 38054 GRENOBLE Cedex 9, France. - ² STMicroelectronics, 850 rue Jean Monnet, F-38920 Crolles Cedex, France. - ³ G2ELab, University of Grenoble 1, BP166, 38042 Grenoble Cedex 9, France.

Session ThP2 : : Reliability for space applications

Chairs : Hervé Ribot (CEA-LETI), Brigitte Braux (Astrium)

103 - Probabilistic Design for Reliability (PdFR) in Space Electronics and Photonics: a Change of Vision.

A. Bensoussan - Thales Alenia Space France, Toulouse, France

104 - Board Level Reliability Testing of Hermetic Packages Equipped with High-Rel Interconnection Solutions and Dedicated to Space Applications

Olivier Gaillard - e2v semiconductors, St-Egrève, France

105 - Verification of an LTCC Packaging Technology on Board of the ongoing TET-1 Satellite Mission

Reinhard Kulke, Tobias Klein, Gregor Möllenbeck, Carsten Günner and Matthias Rittweger - IMST GmbH, Kamp-Lintfort, Germany

106 - Coupling experimental and modelling results for device failure anticipation

Diane Ecoiffier, Pierre Vernhes - Insidix, Seyssins, France

Session ThP3 : MEMS Process and Manufacturing

Chairs : Philippe Soussan (IMEC), Alan Mathewson (Tyndall)

107 - Wafer-Level AuSn and CuSn Bonding for MEMS Encapsulation 566

*T. Suni**, *H. Xu***, *V. Vuorinen***, *H. Heikkinen**, *S. Vähänen****, *A. Jaakkola**, *P. Monnoyer**, and *M. Paulasto-Kröckel*** - *VTT Technical Research Centre of Finland, Espoo, Finland - **Aalto University, Espoo, Finland - ***Advacam Oy, Espoo, Finland

108 - Chemically resistant encapsulant to enable a novel MEMS fabrication process 571

*Serguei Stoukatch**, *Thomas Walewyns***, *Ester Tooten***, *Fabrice Axisa**, *Laurent A. Francis***, *Jacques Destiné** - *Microsys, Université de Liège; Seraing, Belgium - **ICTEAM, Université catholique de Louvain-La-Neuve, Belgium

109 - Highly Flexible Die Attach Adhesives for MEMS packages 577

Dr. Tobias Königer - DELO Industrial Adhesives, Windach, Germany

110 - Analysis of Stress in Silicon-Based Microsystems by X-ray Diffraction Techniques 583

*T. Bandia,***, *A. Dommann**, and *A. Neels,** - *CSEM, Neuchâtel, Switzerland - **EPFL Microsystems for Space Technologies Laboratory Neuchâtel, Switzerland