

ECWC13

13th Electronic Circuits World Convention
7 – 9 May 2014, Nuremberg, Germany

Conference Program

Connecting the world
ecwc13.org

Organizer:



Hosted by:


Messe Frankfurt Group

Program Overview

Wednesday, May 7

09:00	OPENING CEREMONY – Welcome Address Keynote Speeches		
11:40	Session 1.1 Management I Markets	Session 1.2 Base Material I	Session 1.3 Design I
14:30	Session 2.1 Management II System Integration	Session 2.2 Plating & Reliability I	Session 2.3 Surface Finishes
16:10	Poster Session		

Thursday, May 8

09:00	Session 3.1 Soldering & Reliability	Session 3.2 Process Technology	Session 3.3 PCB Quality
11:30	Session 4.1 Soldering & Surface Finish	Session 4.2 Base Materials II	Session 4.3 Design II
11:30	Taiwan Forum		
14:30	Session 5.1 Embedding Technology I	Session 5.2 Base Materials & EMC Solutions	Session 5.3 Design III
16:30	Session 6.1 Flexible Circuits I	Session 6.2 Plating & Reliability II	Session 6.3 Design & Microvia Technology

Friday, May 9

09:00	Session 7.1 Flexible Circuits II	Session 7.2 New Standards	Session 7.3 Drilling & Routing
10:45	Session 8.1 Embedding Technology II	Session 8.2 Metal base PCB Technology	Session 8.3 Chemical Process Technology
12:30	AWARD CEREMONY CLOSING CEREMONY		

As of January 2013. Subject to change.

Registration Fees

More information at
www.ecwc13.org

Terms and Conditions

Registration Fees		Until March 30, 2014	From March 31, 2014
Full Conference	WECC Members	595.00 EUR	645.00 EUR
	Non-Members	745.00 EUR	795.00 EUR
One Day	WECC Members	245.00 EUR	295.00 EUR
	Non-Members	335.00 EUR	365.00 EUR

Special Rates		Until March 30, 2014	From March 31, 2014
Full Conference	Session Chairmen	295.00 EUR	295.00 EUR
	Speaker	295.00 EUR	295.00 EUR
	Students	145.00 EUR	145.00 EUR
One Day	Session Chairmen	Free of charge	Free of charge
	Speaker	Free of charge	Free of charge
	Students	95.00 EUR	95.00 EUR

Payment of fees entitles you to the following services:
Participation at the conference days as booked, conference documentation, lunch and coffee breaks on the days booked, free admission to the exhibition, exhibition catalogue, entry to the SMT Hybrid Packaging Exhibition Party on 6 May 2014.

Registration Terms

Mesago reserves the right to cancel the conference due to poor bookings or other reasons beyond our control. Registration for the ECWC13 from 7 – 9 May 2014 is binding and only accepted online at www.ecwc13.org. Participation fees are due on registration with payment by credit card (VISA, Master/Euro Card and Amex) via the Saferpay gateway. Cancellations will be accepted in writing only. Cancellation received by Mesago by 11 April 2014 will incur a processing fee of 74 EUR. Thereafter if the participant does not attend, the full fee will be due. If a participant is unable to attend, a substitute may be nominated.

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Organizer



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Conference Program

Wednesday, May 7

09:00 – 10:55	OPENING CEREMONY
	Welcome Address
	Keynotes
	TBD Dr. Marc Schweizer, Schweizer Electronic AG
	TBD Dr. Ho-Ming Tong, ASE Group
	Creative Designs and New Manufacturing Technologies Will Shape the Future of the PCB Industry Phil Plonski, Prismark

	Session 1.1 Management I Markets	Session 1.2 Base Material I	Session 1.3 Design I
11:40	What next after China Dr. Hayao Nakahara, N.T. Information Ltd	The Reliability Challenge of Laminate material for Automotive electronics Wallance Hung, Nan Ya Plastic Co.	Ensuring Electronic Design Quality by Analyzing Creepage and Air Gap Compliance using 3D PCB Tools Dr. Thomas Krebs, Mecadtron GmbH
12:05	Global Electronic Industry Supply Chain Dynamics; Forecasting Demand Fluctuations due to Business Cycles and Product and Technology Changes Walter Custer, Custer Consulting Group	New Low Transmission Loss & Halogen-free Material for Next Generation High-Frequency & High-speed applications Kazutoshi Danjobara, Hitachi Chemical	Integration of Semi-Automated routing Algorithms for Spatial Circuit Carriers into Computer-Aided Design Tools Jochen Zeitler, University of Erlangen-Nuremberg
12:30	Embedding Component Technology in PCBs. Opportunity for the future? Michael Weinhold, EIPC	Preparation of a Halogen-free and Phosphorus-Free Copper clad laminate Su Shiguo, Shengyi Technology Co. Ltd	Euclidean move surface decomposition of non-planar surfaces for the electronic system design Alexander Steinhardt, Fraunhofer EAS / IIS
12:55	Is it Really Time for Overdrive? The LED Substrate Dilemma Nick Pearne, Selling Technology	Thermal Management: the role of substrate Manfred Walchshofer, Panasonic Industrial Devices Materials Europe GmbH	Bypasses for High Currents in Power Printed Circuit Boards Juergen Westenkirchner, Jumatech GmbH
	Session 2.1 Management II System Integration	Session 2.2 Plating & Reliability I	Session 2.3 Surface Finishes
14:30	Printed Circuits Board (PCBs) Strategies for the European Market Thomas Hofmann, Hofmann Leiterplatten GmbH	Application to Copper Electroplating Solution for Via Matellization of HDI Printed Circuit Boards Yuanming Chen, Guangdong Guanghua Sci-Tech Co.	Direct EPAG as a surface finish for future Interconnection Technologies Maren Bruder, Atotech Deutschland GmbH
14:55	Sustainability as Strategic Business Model for Profitable Business Dr. Constantin Herrmann, PE INTERNATIONAL AG	Plated Through Reliability and Material Integrity Results for 24 Materials Processed Through Lead Free Assembly Bill Birch, PWB Interconnect Solutions Inc.	ENTEK OM – New generation PCB nano surface finish Chris Klok, Enthone
15:20	CAMEST – Coalition for Advancement of Micro Electronic Systems Technology – Cooperation for a Better Understanding of Interconnection Technology Needs Dennis Fritz, MacDermid, Inc	A Novel Through-Hole Filling Technology for Next Generation Organic Interposer Applications Dr. Tao-Chi Liu, Enthone, Inc. Taiwan Branch	A New Surface Finish for the Electronics Industry Lenora Toscano, MacDermid
16:10	Poster Session A list of all poster presentations is available at www.ecwc13.org		

Subject to change

In conjunction with SMT Hybrid Packaging 2014

For more information about the exhibition and the tutorials go to www.smt-exhibition.com

Thursday, May 8

	Session 3.1 Soldering & Reliability	Session 3.2 Process Technology	Session 3.3 PCB Quality
09:00	The Reliability Study of Thermo-stability for High layer heavy copper PCB Yuting Lu, Shenzhen Kinwong Electronic Inc. Company	The Method of resin plugging with vacuum lamination Du Luqian, Shenzhen King Brother Electronics Technology Co., Ltd.	Mitigating Against Counterfeit and Grey Market Components Nick Aitken, ERA Technology
09:25	Refine Microstructure of Solder Material via Minor Element Addition Cheng Kai Chung, National Taiwan University	Optimizing Morphology of Plated Copper Sub-Assemblies through Oxide Alternative Process John Marshall, MacDermid Inc.	Development of a Fixture Accuracy Optical Inspection System Dr. Jim Long, Landrex
09:50	Performance of improved SAC solders under high thermo-mechanical stress condition Prof. Dr. Gordon Elger, Technische Hochschule Ingolstadt	The application of treatment for freestyle RTO incinerator in the phenolic containing wastewater Guanglong Zeng, Ganzhou Yi Hao Industrial Co., Ltd	Registrate or Die! Roberto Tulman, Eltek Ltd.
10:15	Reliability Testing of Ag Sinter Joints Constance Weber, Fraunhofer IZM	Laser Technology opens new possibilities for glass marking – Highly individualized User Interfaces with Capacitive Input Christian Borgert, FELA GmbH	Dielectric Material Characterization for the PCB Pad Cratering Resistance Jeffrey ChangBing Lee, iST-Integrated Service Technology Inc
10:40	Flux Impact on IC Package Creep Corrosion Cherie Chen, Integrated Service Technology, Inc.	Reliability Enhancing of Heavy Wire Bonds through Manipulation of Geometry by Laser Dr. Andreas Middendorf, Technische Universitaet Berlin	The consequent use of LDI capability over the complete PCB manufacturing flow Daniel Schulze, DYCONEX AG
	Session 4.1 Soldering & Surface Finish	Session 4.2 Base Materials II	Session 4.3 Design II
11:30	Temperature-dependent failure mechanism of SnAg solder joints with Cu metallization after current stressing: experimentation and analysis Chung-Kuang Lin, National Chiao Tung University	Fire Retardancy – The What, Why, and How Alun Morgan, Isola Group Europe	Miniaturization Influence on Electrical Functionality of High Density Printed Circuit Board Erkko Helminen, TTM Technologies, Inc.
11:55	The Electroless Ni-P Plating Film Adapting for Flexible Printed Wiring Boards Yasuhiro Tanabe, Okuno Chemical Industries Co., LTD.	Metal Hydrates and Oxides as Functional Fillers to Improve Flame Retardancy and Properties of Thermo-setting Compounds in E&E Applications Carsten Ihmels, Nabaltec AG	Missive Profiles as an Approach to Manage Specific Automotive Requirements for Robust Design of Automotive Semiconductors Daniel Hahn, Fraunhofer IZM
12:20	Characteristics of Epig Deposits for Fine Line Applications Katsuhisa Tanabe, C. Uyemura & Co., Ltd.	Ultra-low Transmission Loss Multi-layer Material for High-Speed and High-Frequency Applications Dr. Lin Lin, Automotive & Industrial Systems Company (Panasonic Corporation)	The Study of coaxial via in multi-layers PCB Ming-Tsun Lu, HannStar Board Corporation
12:45	New Copper Surface Treatment for CO2 Laser Direct Drilling Yasutaka Amitani, MEC COMPANY LTD.	Impact of the Linear Coefficient of Thermal Expansion Jens Buerger, ELANTAS Beck GmbH	Next generation ultra thin HDI PCB manufacturing challenges Tarja Rapala-Virtanen, TTM Technologies
	Session 5.1 Embedding Technology I	Session 5.2 Base Materials & EMC Solutions	Session 5.3 Design III
14:30	Embedded RFID in PCB's Martin Cotton, RIB-Technology Ltd	Influence on Skew Characteristic by Composition of Printed Wiring Board Material Tetsuro Yamada, Fujitsu Advanced Technologies Limited	Application of Ohmic Equivalent Circuit Modeling to the Board Level Thermal Management Problem William Burr, BPA Consulting Ltd.
14:55	Investigation of Multilayer PCB with Embedded Magnetic Core Technology Fan Siwei, Shenzhen King Brother Electronics Technology Co.,Ltd.	Analysis Of Fibre Cracking And Its Influence To Anti-CAF Capability Of PCB Menghai Hu, Guangzhou Fastprint Circuit Tech. Co., Ltd.	Modern Human-Machine Interfaces using Capacitive Input Systems based on Glass Christian Borgert, FELA GmbH
15:20	Power integrity with thin film decoupling capacitors embedded in organic interposer Masamitsu Yoshizawa, Noda Screen Co., Ltd.	Electrostatic Discharge (ESD), Sources of electrostatic charge in a production line (SMT); Factory Issues and Product Quality Hartmut Berndt, B.E.STAT European ESD competence centre	De-risking High-Density PCB/PCBA Technologies for High-End Hardware Applications Arnaud Grivon, Thales Global Services
15:45	Ultra-thin Silicon Chips in Flexible Microsystems Juergen Wolf, Wuerth Elektronik GmbH & Co. KG	State-of-the-Art Microcontroller EMC Methods Markus Ridder, SGS INSTITUT FRESENIUS GmbH	Embedded Product Descriptions in XML – Supply Chain Data Transfer Methodology Dieter Bergman, IPC Inc.
	Session 6.1 Flexible Circuits I	Session 6.2 Plating & Reliability II	Session 6.3 Design & Microvia Technology
16:30	Study on processing of Thermotropic liquid crystal polymer material Xin Ai, Guangzhou Fastprint Circuit Tech. Co., Ltd.	Ultrasonically enabled low temperature electroless plating Dr. Andrew Cobley, Coventry University	Manufacturing – PCB Design data transfer to manufacturing using IPC-2581 Nikola Kontic, Zuken UK Limited
16:55	Newly developed LCP film fabricated for FCCL Dr. Kuo Chao-Hui, ITEQ Corporation	Through Hole Fill Electrodeposition in Geometries used for Core Layers – A Novel DC Acidic Copper Process for Through Hole Fill Plating Elie Najjar, THE DOW CHEMICAL COMPANY	Fabrication and characteristics of embedded passive substrate for application of RF modules Prof. Dr. Hyunho Kim, CISS
17:20	Delamination Prevention of Rigid-flex PCB with Plasma Treatment on Polyimide Film Yingtao Dong, University of Electronic Science and Technology of China (UESTC)	The study and discussion on Pull-away of large and irregular hole Roc Wang, Shengyi Technology Co.,Ltd.	A proposal of new process to improve the reliability of micro-diameter micro vias by effectively removing smear at the via bottom Yoshitaka Takeuchi, MEC COMPANY LTD.
17:45	A Novel Film-type Connection toward Flexible Electronics Dr. Shin-ichiro Nakajima, Japan Aviation Electronics Ind., LTD.	Establishing Effective Accelerated Testing Conditions and Criteria for Confirming Reliability for High Density Interconnect Circuits Bill Birch, PWB Interconnect Solutions Inc.	Study on Single-ended Vias in High Speed PCB Hongfei Wang, Guangzhou Fastprint Circuit Tech. Co., Ltd.

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Thursday, May 8

	Taiwan Forum
11:30	Device-Embedded Substrate Technology for Mobile Applications Dr. C.T. Liu, Industrial Technology Research Institute of Taiwan (ITRI), Hsinchu, Taiwan
11:55	PCB with different embedded elements Jason Lee, BoardTek Electronics Corp., Taoyuan, Taiwan
12:20	Development and Characterization of Low Dk/Df Materials for High Frequency Application Dr. Jeng-I Chen, Taiwan Union Technology Corporation, Hsinchu, Taiwan

Friday, May 9

	Session 7.1 Flexible Circuits II	Session 7.2 New Standards	Session 7.3 Drilling & Routing
09:00	Flexible Circuit Materials to Enable Demanding Applications Richard Wessel, DuPont Electronics and Communications	JISSO – Standardization Bridging the Gaps Walter Huck, Murata Electronics Europe B.V	Machining of PCB with diamond coated tools Johann Schmidt, GCT GmbH
09:25	Impact of two Adhesives on Reliability of PTH in Rigid-Flex PCB Xinman Mo, Guangzhou Fastprint Circuit Tech. Co., Ltd.	Introduction of Standard of electronic circuit board for high-brightness LEDs Naomi Yonemura, Denki Kagaku Kogyo Kabushiki Kaish	Optimization of Drilling Parameters by the Investi-gation of Drilling Temperature Dr. Lianyu Fu
09:50	Study on Impedance Design for Rigid-flex Board Xiaoyu Chen, Shenzhen Kinwong	Printed Electronics 2014: Status of World Standardiza-tion Efforts Peter Marc Carter, IPC	TBD
	Session 8.1 Embedding Technology II	Session 8.2 Metal base PCB Technology	Session 8.3 Chemical Process Technology
10:45	Embedded Components – Why Now? Karen Carpenter, TechSearch International Inc.	Optimization of life cycle cost by selection of PCB material with physics of failure simulation Viktor Tiederle, RELNETyX Consulting UG	The etch back process of Multilayer printed circuit board Rong Cui, Shennan circuits co., LTD
11:10	Embedded System Access as a Board Level Test and Programming Strategy Jan Heiber, GÖPEL electronic GmbH	Latent short circuit failure in high-rel PCBs caused by lack of cleanliness of PCB processes and base materials Stan Heltzel, European Space Agency	Optimized Copper activation systems in PCB fabrication to meet needs for advanced PCB fabricators Dr. Peter Amann, KIV PCB ProfiChem GmbH
11:35	Insertion Loss Testing Procedure for Polymer Waveguides Embedded on Optical PCBs Marika Immonen, TTM Technologies	Aluminum Base Circuit Technology – Structures and manufacturing methods Joseph Fjelstad, Verdant Electronics	Development of compact inspection apparatus for the digitization of nonuniformity in the luster of gold plating Kazuhiro Nonaka, National Institute of Advanced Industrial Science and Technology
12:30	AWARD CEREMONY CLOSING CEREMONY		

Subject to change

Social Program:

– Golf Tournament

– Company Visits to Atotech and Zollner

– Welcome Dinner

Check out the details at www.ecwc13.org