

The Weekly On-Line Newsletter from the European Institute of Printed Circuits.

Issue 17 – July 2015

NEWS FROM THE EIPC

Two new members for EIPC

EIPC is pleased to advise that we have two new companies who have joined us in the last few days.

They are:

1. Technolam, Froisdorf, Germany

Contact person: Mr. Günther Fuchs and Mr. Andreas Folge

Phone: +49-2241-8737-0 Website: <u>www.technolam.de</u>

2. HDP User Group International Inc., Cave Creek, USA

Contact person: Mr. Marshall Andrews and Mr. Larry Marcanti

Phone: +1-512-258-0332 Website: www.hdpug.org

High Density Packaging (HDP) User Group is a global research and development organization based in Cave Creek Arizona, USA dedicated to "reducing the costs and risks for the Electronics Manufacturing industry when using advanced electronic packaging and assembly". This international industry led group organizes and conducts R&D programs to address the technical issues facing the industry, including design, printed circuit board manufacturing, electronics assembly, and environmental compliance. Membership is open to all companies throughout the world who use, supply, or support electronics manufacturing.



HDP User Group Member Company Representatives at a recent Member Project Review Meeting.

Collaborative leverage is one of the keys to HDP User Group's success. Our projects provide extraordinary cost savings for our membership by employing shared resources directed at key issues or new technologies our membership wishes to address.

HDP User Group has been a project oriented industry consortium for over 20 years. In addressing the integration of new electronics component packaging and interconnect technologies into company supply chains, it continues to provide value to all its 51 member companies.

HDP User Group maintains additional offices in Austin, Texas, The UK, and Singapore.

EIPC-EFRA-CEFIC Workshop

In conjunction with CEFIC and EFRA (the European Flame Retardants Association), EIPC are pleased to announce that they will be holding a half-day workshop (10:00-14:00 h.) on Wednesday 23rd September 2015 at the Cefic - European Chemical Industry Council in Brussels, Belgium.

Flame retardants find use in many segments of the electronics industry; all of which provide protection from fire hazards to improve user safety.

During this workshop you will learn about the following topics;

- EU Legislative framework, RoHS REACH and WEEE and End of Life
- Possible impact of EU legislation on future PCB manufacture in Europe
- Legislative status of TBBPA, the most widely used flame retardant in PCBs

The speakers will include Alun Morgan, Chairman EIPC, Professor Martin Goosey, VP Technology EIPC who will be accompanied by Mr. L. Tange of ICL.

Workshop agenda:

- Introduction EFRA
- Overview on Legislation Prof. M. Goosey
- Flame retardant use in PCB Base Materials A. Morgan
- Lunch
- RoHS 2, current status and future impact F.Kohl
- Recycling, end of life L. Tange
- REACH process for end users EFRA
- Panel Q&A

Workshop fee:

EIPC Members / EFRA members: € 200.-

Non-members: € 300.-

Additional employee from the same company 20% discount: € 160.-/

€ 240

You can download the registration form at www.eipc.org

In case of any questions please feel free to contact the EIPC office at eipc@eipc.org or +31-43-3440872.



The Weekly On-Line Newsletter from the European Institute of Printed Circuits.

Issue 17 – July 2015

NEWS FROM BELGIUM

Integr8tor – in a class of its own

Ucamco is delighted to announce the release of Integr8tor 2015.06.

Existing users are encouraged to download this version as soon as possible.

Integr8tor v.2015.06 builds on the industry-leading Integr8tor platform to deliver even better functionality, performance and speed, confirming its status as the most powerful sales and engineering server for the automatic input and pre-quote analysis of client-generated PCB design data.

One of the most important developments in Integr8tor 2015.06 is its increased support of, and compatibility with, a wide range of data formats. Now, whether in colour or b/w for better readability, PDF files can be generated faster, and more reliably and accurately from source documents in the popular .docx, dwg and dxf formats. The converted files remain accurately faithful to the originals, with fully functional drop-down menus and checkboxes.

Integr8tor 2015.06 also offers broader drill support, allowing non-standard holes to be identified automatically and processed accordingly. This includes countersink or counterbore holes that are to be enlarged in a specific way, or holes that are to be filled with resin or copper. In another drill-based development, v.2015.06 is capable of calculating how many pressing cycles a board will have to go through from the drill spans. Both improvements ensure that, for every board being engineered, the processes needed and potential production bottlenecks can be identified, costed and calculated early, so they are part of the

quote preparation and delivery commitment process right from the outset.

Among the throughput-and quality-enhancing features that improve Integr8tor's quality reporting are its recognition of even more edge-connector and SMD pad shapes; a new algorithm that improves the calculation of spacing between lines of the same net; and a new "auto-snap" feature that improves annular ring analysis by automatically placing plated drill holes in the centre of the copper pads. It also now flags overlapping holes within drill sequences. Furthermore, the QED XML files now enable technologies and capability classes to be identified quickly and easily, together with their critical parameter values, and now it's also possible to tailor which checks are run by Integr8tor.

Not least, Integr8tor 2015.06 offers even more support for the powerful Gerber X2 format.

Integr8tor 2015.06 is about speed, accuracy and reliability – all of which are essential in the race to generate quotes in real time that reflect your real costs, your real processes, and your business's real needs. Integr8tor is helping PCB makers the world over revolutionise their businesses. Visit www.ucamco.com today and find out what it can do for yours.

About Ucamco

Ucamco (formerly Barco ETS) is a market leader in PCB CAM software, photoplotting and direct imaging systems, with a global network of sales and support centers. Headquartered in Ghent, Belgium, Ucamco has over 25 years of ongoing experience in developing and supporting leading-edge photoplotters and front-end tooling solutions for the global PCB industry. Key to this success is the company's uncompromising pursuit of engineering excellence in all its products.

For more information on Integr8tor 2015.06, please contact Ucamco:

Phone: +32 (0)9 216 99 00
Email: info@ucamco.com
Web: www.ucamco.com



The Weekly On-Line Newsletter from the European Institute of Printed Circuits.

Issue 17 – July 2015

NEWS FROM GERMANY

Atotech increases its equipment manufacturing capacity with a brand new facility in Guangzhou, China

Built on an area of 63,000 sqm, the new plant is estimated to create close to 200 jobs locally (over the next three years) and expand the manufacturing capacity of Atotech's production equipment serving the PCB, IC Substrate and Semiconductor industries.

BERLIN, Germany/ GUANGZHOU, China July 7, 2015: Atotech, a global leader in specialty plating chemicals, equipment and services today held the inauguration of its second equipment manufacturing facility in Guangzhou, China to meet the growing demand for its plating equipment. Globally this is Atotech's third facility dedicated to manufacturing production equipment for the electronics industry. The plant, built on an area of 63,000 sqm leaving space for further expansion and will generate close to 200 local jobs over the next three years. State-of-the-art machines and processes have been deployed to ensure greater precision, accuracy and efficiency in the production of next generation PCB, IC Substrate and Semiconductor manufacturing equipment.

Commenting on the development, Mr. Reinhard Schneider, President of Atotech said:

"The opening of this facility in Guangzhou marks a new milestone for Atotech and our commitment to China. The new plant is a direct response to our customers' trust in our pioneering technology and sharply rising demand for our manufacturing equipment. In-line with our

corporate priority, the facility meets latest technology and quality standards, as well as rigorous sustainability norms."

Atotech is an unrivalled supplier to the PCB and IC Substrate industries backed with over two decades of experience, a strong focus on R&D and cost-optimized manufacturing. The company's flagship brands Uniplate and Horizon are market-leading horizontal systems serving the global leaders in PCB and IC Substrate manufacturing. The Uniplate systems provide production solutions for desmear, through hole metallization and electrolytic copper processing and the Horizon systems production solutions for final finishing using immersion tin, and for surface treatment e.g. bonding enhancement and permanent non-etching adhesion processes. Both brands have been driving Atotech's success for several years now.

Phase 1 of the new investment (33 M US\$) will ramp up the production capacity of Uniplate and Horizon, as well as the newly introduced local platform for manufacturing equipment. Phase 2 will further expand the production capacity of the facility to include semiconductor equipment part manufacture and assembly to serve the increasing demand for new advanced packaging production solutions.

With the new facility Atotech aims to react faster to the rapidly changing and highly demanding markets and cater to individual customers' demands.

The new facility will effectively support Atotech's customers' next generation manufacturing programs. Furthermore, it will contribute significantly to the local economy and its development within the technology industry.



From left to right: Mr. Stephen Lee (Vice President Far East), Mr. Bertrand Furno (Consul Général de France à Canton), Mr. Zhaoping Zhang (Government official GETDD), Mr. Reinhard Schneider (President), Mr. Bertrand de La Noue (China Representative, Total), Mr. Longji Wang (Chairman of CPCA), Mr. Uwe Hauf (Vice President, Electronics), Ms. Jin ZHANG (Chief Secretarial CPCA), Mr. Ma Jie (Chairman of China Plating Association), Mr. Canice Chung (Chairman of HKPCA), Mr. Simon Chan (Unitech)

About Atotech

Atotech is one of the world's leading manufacturers of specialty plating chemicals and equipment for the printed circuit board, IC-substrate and semiconductor industries, as well as for the decorative and functional surface finishing industries. Atotech has annual sales of \$ 1.3 billion and is fully committed to sustainability - we develop technologies to minimize waste and to reduce environmental impact. Atotech is a division of the Total Group, and has its headquarters in Berlin, Germany. The company employs around 4,100 people in more than 40 countries.

SMT Hybrid Packaging 2015 - A worthwhile package for visitors

From 5 to 7 May 2015 the industry met in Nuremberg, Germany and took advantage of the platform for information and knowledge exchange.

According to the visitor survey of the SMT Hybrid Packaging 2015 the main visitors interest laid in assembly systems, solder technologies and test. 92 % of all surveyed visitors indicated, that they have found products and / or solutions for their company.

470 exhibiting companies from Germany, and abroad, offered trade visitors the opportunity to gather information about new products and trends in face to face discussions.

Sought special areas and joint stands

Leader of the visited highlights according to the visitor survey is the production line, organized by Fraunhofer IZM, with 68% of the visitors. Followed by the High Tech PCB Area with 31% visitors and the 3-D MID joint stand with 28% visitors. The special joint stands "EMS Intersection" and "Optics meets Electronics" were visited b 20% of the trade visitors.

The visitor statements confirm the high importance of the SMT Hybrid Packaging in the field of system integration in microelectronics in the European market: "SMT Hybrid Packaging 2015 the place where innovation and experience come together as a complete package." Paul Bigyilan, PCBA Area Coordinator, Hella Romania, Romania.

"One of the best exhibitions in Europe for electronics manufacturing". Gábor Futó, Head of Industrial Engineering, BALLUFF Elektronika Kft, Hungary.

"We really benefited from visiting SMT in Nuremberg this year: we

met up with friends and colleagues, shared experiences and discovered what's new in the field of electronics and SMD and THT assembly. Thank you!" Stefan Bozhkov, Sales Engineer, AMTEST EOOD, Bulgaria.

The SMT Hybrid Packaging 2016, international Exhibition and Conference, will take place from 26 to 28 April 2016 in Nuremberg, Germany.

Additional information is available at smt-exhibition.com or from the organizer Mesago Messe Frankfurt at smt@mesago.com.



The Weekly On-Line Newsletter from the European Institute of Printed Circuits.

Issue 17- July 2015

NEWS FROM THE UK

Stevenage Circuits Ltd. Purchases Orbotech's Nuvogo™ 800 DI System

Stevenage Circuits Ltd., ("SCL") has purchased Orbotech's latest cuttingedge Direct Imaging (DI) system, the Nuvogo™ 800. The UK-based company is an established leader in the manufacture of bare printed circuit boards (PCB's), flex and rigid-flex circuits and RF PCBs.

This order was received and delivered during the first quarter 2015. SCL was looking for a DI system capable of increasing overall productivity and accuracy in production and concluded that the Nuvogo 800, Orbotech's latest DI innovative solution answers these needs. The system, which utilizes field-proven laser technology, was designed to provide a highly efficient and cost effective solution for today's most demanding PCB applications.

Commenting on this purchase, Mr. Rob Brown, Managing Director at SCL explained: "SCL specializes in the manufacture of high reliability PCBs for the aerospace, medical and industrial sectors. Our customers are constantly pushing for tighter tolerances for both track and gap, and for positional accuracy. To accommodate these requests, our management team decided that the entire manufacturing process should be digital.

After a visit to Orbotech's LIS facility in Jena, Germany, and subsequent trials, the Nuvogo 800 with its superior MultiWave Technology was the obvious choice. Compared to other available solutions, only the Orbotech Nuvogo 800's MultiWave laser can enable us to produce tight

solder dams at the highest quality. It was clear that this system would enhance the capability options for our customers."

"We are pleased to provide SCL, our long-time customer and technology partner, with the Nuvogo 800, the only DI system capable of meeting its requirements," said Mr. Hadar Himmelman, President of Orbotech West. "We look forward to continuing to support SCL with our top-of-the-line digital production solutions."

Nuvogo™ 800 is a next-generation Direct Imaging (DI) solution capable of imaging on almost every resist type, affording maximum flexibility to PCB makers. Powered by MultiWave Laser Technology™, Nuvogo 800 generates a multi wavelength laser beam for optimal line structure. This provides PCB manufacturers the ability to choose lower-cost resist types in order to further reduce total operating costs. This high-productivity system is able to achieve up to 7,000 panels/day/line at unprecedented quality. Superior line quality and registration accuracy is achieved through Orbotech's field-proven Large Scan Optics (LSO) Technology™.

Suitable for the most advanced HDI production, Nuvogo 800 ensures a high depth-of-focus critical for maximizing yields in increasingly challenging production environments. The combination of super high-productivity, flexibility to use almost any resist and unmatched yields results in the lowest possible cost-per-print and significantly lowers the system's total cost of ownership.

www.orbotech.com

Connecting Research to Industry – Conference

3rd September 2015 University of Sheffield

Monday 13 July - 2015
Time to EXHIBIT? Time to Take on Staff? Time to look at Research
PLEASE MAKE A DATE IN YOUR DIARY FOR

The next IMAPS-UK event - the R2i conference. This unique event will have around 40 presentations from Institutional and Academic research centres within the UK and Europe showing the depth of research

underway in the area of electronics systems packaging and interconnection technologies.

This year the programme will consist of 4 conference sessions on Advanced Electronics research. Each session will open with a keynote presentation, followed by short high-impact presentations of Academic research from a wide range of Universities and Institutes involved in electronics.

Delegates will have the chance to further discuss topics of interest around the Academic posters.

A co-located IMAPS-UK table top exhibition will be available to delegates, and representatives of the Industry will advise on available internships, collaboration and career opportunities.

SPECIAL OFFER:

To encourage attendance at the event IMAPS-UK and the KTN have arranged for the conference to be free to attend and open to members of IMAPS, the KTN, JEMI, IEEE, NMI and other organisations as well as for Students and other Academic personnel.

Pre-Registration is necessary for admittance to the conference.

Andy Longford, IMAPS-UK Secretariat Telephone: + 44 (0)131 202 9004 Email: andy.longford@imaps.org.uk

This event is supported by the KTN and University of Sheffield



The Weekly On-Line Newsletter from the European Institute of Printed Circuits.

Issue 17 – July 2015

NEWS FROM THE USA

Registration Opens for Inaugural Boards, Chips and Packaging IMPACT Conference Hosted by Isola and Semico Research

Airline Captain Chesley B. "Sully" Sullenberger, III to deliver a keynote address during this one-day event that is focused on system-level integration across the entire hardware development process.

Isola Group, a market leader in copper-clad laminates and dielectric prepreg materials used to fabricate advanced multilayer Printed Circuit Boards (PCBs) and Semico Research, a semiconductor marketing and consulting research company, announced today that they have teamed up to launch Boards, Chips and Packaging: Designing to Maximize Results. This new industry event will span the system-level ecosystem to address the roles of system architecture, board design, chip design, package design and final fabrication and assembly processes for hardware product development. Conducted under the auspices of Semico's highly regarded and respected IMPACT Conference series, this one-day conference will take place on October 13, 2015 at the Computer History Museum in Mountain View, California.

Among the keynote speakers of the event will be Captain Chesley B. "Sully" Sullenberger, III., best known for serving as the Captain during what has been called the "Miracle on the Hudson," Captain Sullenberger has become known for his expertise in safety and knowledge of improvements of high-performance systems to save lives, save money and bring value to communities.

For years, software has been viewed as providing the most "value-add" for electronic products; however, without a solid foundation of properly functioning hardware, the reliability of the software is secondary. As

such, all phases of the overall hardware development process need to be addressed at a higher level—and with greater emphasis—as part of the whole product development cycle. This event is targeted toward PCB designers, system architects, chip designers, package designers, program managers and marketing executives involved in system-level, ecosystem decisions.

Jim Feldhan, President for Semico Research stated, "From the hardware development perspective, companies are faced with the requirements of meeting ever-increasing market demands for lower power, higher performance and lower costs. While chips may meet system specifications, complex designs require even more attention at the board, packaging, manufacturing and assembly levels to deliver products that not only work right the first time but are also reliable across the entire product life cycle. In order to develop and bring these life-enhancement products to market, it is necessary to start with a firm foundation, and that is where Isola comes into play. Its history as a premier materials science company, along with the quality of its laminate materials, makes Isola an optimal partner for this conference."

In addition, Feldhan noted, "There is no one conference that is dedicated to the hardware side of the product development process. That is one of the key reasons that we are launching this event at this point in time."

Tarun Amla, Executive Vice President and Chief Technology Officer at Isola Group noted, "Today's technology affects all facets of consumer lifestyles. The electronics industry is undergoing a major metamorphosis in terms of how consumers influence next-generation product features and delivery requirements. Gone are the days of shouting at consumers, telling them what they need. Now we must listen to the markets and design around their needs. This event will bring the industry together to ensure the consumers' voices are heard to deliver the most feature rich, compact and affordable devices to market by sharing best practices and engaging at all levels of the design cycle."

Boards, Chips and Packaging: Designing to Maximize Results will cover a variety of industry topics such as How Can Board Companies, Chip Companies and Fabrication Companies Work Together to Ensure That Hardware Products Are Right the First Time; How Do We Get to 32Gb/S

and Beyond; The Role of mm-Wave Automotive RADAR; Phased Array RADAR Antenna Solutions and RF/Digital Hybrid Boards.

For information on sponsorships and speaking opportunities, please contact Jim Feldhan from Semico Research at 602-997-0337, Opt#1, jimf@semico.com or Joanne Itow from Semico Research at 602-997-0337, Opt#2, joannei@semico.com.

To learn more about the Boards, Chips and Packaging: Designing to Maximize Results conference and to register for the event, please visithttp://www.semico.com/events.

About Isola

Isola Group, headquartered in Chandler, Arizona, is a global material sciences company focused on designing, developing, manufacturing, and marketing copper-clad laminates and dielectric prepregs used to fabricate advanced multi-layer printed circuit boards. The company's high-performance materials are used in sophisticated electronic applications in the communications infrastructure, computing/networking, military, medical, aerospace and automotive industries. For more information, visit our website athttp://www.isola-group.com/.

About Semico

Semico Research Corp. is a semiconductor marketing & consulting research company located in Phoenix, Arizona.

Semico was founded in 1994 by a group of semiconductor industry experts. We have improved the validity of semiconductor product forecasts via technology roadmaps in end-use markets.

Semico offers custom consulting, portfolio packages, individual market research studies and premier industry conferences. For more information, visit our website at http://www.semico.com/.



The Weekly On-Line Newsletter from the European Institute of Printed Circuits.

INTERNATIONAL DIARY 2015 -2016

IPCA SHOW

New Delhi, India 20th -22nd August 2015 www.ipcaindia.org

SMART Group European Conference 2015

NPL, Teddington 22nd - 23rd September 2015 www.smartgroup.org

EIPC-EFRA-CEFIC Workshop

Cefic, Brussels 23rd September 2015 www.eipc.org

TPCA SHOW

Taipei, Taiwan 21st -23rd October 2015 www.tpcashow.com

EIPC @ PRODUCTRONICA

Messe München, stand B1-529 10th - 13th November 2015 www.productronica.com

HKPA SHOW

Shenzen, China 2nd-4th December 2015 www.hkpca.org

2016

Southern Manufacturing 2016 FIVE, Farnborough, Hampshire, GU14 6XL, UK 9-11 February 2016

enquiries@etes.co.uk