



Electronic
Circuits
World
Convention 15

Bridging Technology Sharing Innovation

30/11-1/12/2020 @ Hong Kong 香港

2/12/2020 @ Shenzhen 深圳

The Electronic Circuits World Convention (ECWC) is the most notable and recognized international PCB symposium hosted by different members of the World Electronic Circuits Council (WECC) every three years. The 15th ECWC will be hosted by the Hong Kong Printed Circuit Association from 30 Nov to 2 Dec 2020, the full conference will be conducted online with Day 3 of the conference being simultaneously held at the Shenzhen Convention & Exhibition Center, China in conjunction with the "International Electronics Circuit Exhibition (Shenzhen)". The ECWC15 brings giants and experts from the PCB and electronics manufacturing industry around the world to share, explore and present solutions as well as the latest development in PCB technologies with you. Join our online conference! Enroll now!

世界電子電路大會(ECWC)為世界電子電路理事會(WECC)每三年舉行一次的國際研討會。會議首次由香港綫路板協會舉辦，於11月30至12月2日一連三天以線上形式舉行(其中第三天的會議將會在中國深圳會展中心，與2020國際電子電路(深圳)展覽會同期進行)。ECWC15聚集世界各國學術、行業和政府的專家學者、技術人員參與及分享，形成一個共同探討電子電路領域最新技術和發展的互相交流平台。會議現正進行登記，歡迎踴躍參與!

30 Nov – 1 Dec 2020

Online Webinar
線上舉行

2 Dec 2020

Hybrid Conference*
線上、線下同步舉行*

Registration Fee 會議費用

	1 DAY PASS 一天通行證	3 DAYS PASS 三天通行證	2/12/2020 LIVE Conference 實體會議
WECC Member 世界電子電路理事會會員	USD70	USD180	FREE 免費
Non-Member 非會員	USD100	USD250	FREE 免費

ENROLL NOW!
立即報名



ecwc15.org

* Live and Virtual Conference will be simultaneously held in conjunction with the "International Electronics Circuit Exhibition (Shenzhen) 2020" at Shenzhen Convention & Exhibition Center, China
實體會議於中國深圳會展中心的2020 國際電子電路(深圳)展覽會中期舉行

Enquiry
查詢

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The 15th Electronic Circuits World Convention (ECWC15)

Tentative Program Rundown

DAY 1, 30 NOVEMBER 2020 (MONDAY) – HONG KONG

9:00 - 9:30 am	Welcome Speeches		
9:30 - 10:15 am	Keynote Session (K1) Brief History of PCB and Technology Trend Dr. Hayao Nakahara, President of N.T. Information Ltd.		
10:15 - 11:00 am	Keynote Session (K2) VeCS: Complementation of HDI Technology and Through Hole Technology Mr Happy Holden		
11:00 - 11:15 am	BREAK		
11:15 - 12:00 pm	Keynote Session (K3) Adaptive PCB Design for Automotive Mr James Tam, Robert Bosch GmbH		
12:00 - 12:30 pm	Presentation S01 Solution Physical and Chemical Properties Changes by Far Infrared Magnetic Resonance Mr Dong Liu Shenzhen Fixing Intelligentech Ltd.	Presentation S02 A novel method for accurate PCB impedance simulation of any specific stack-ups Mr Terry Ho University of Electronic Science And Technology of China	Presentation S03 Electrical and Mechanical Reliability of an RF Laminate are Key Requirements For Selection in 77/79 GHz Safety and Reliability Applications Mr Manfred Huschka AGC Multi-Materials Division
12:30 - 1:00 pm	Presentation S04 Versatile TIM Solution with Chain Network Solder Composite Mr Ning-Cheng Lee, Indium Corporation	Presentation S05 A novel super water repellency for glass and metal surfaces based on a dissipative structure control Dr Shin-ichiro Nakajima Japan Aviation Electronics Ind., Ltd.	Presentation S06 Development of organic composite materials for 5G application Ms Misato Takemura Japan Aviation Electronics Ind., Ltd.
1:00 - 2:15 pm	LUNCH BREAK		
2:15 - 2:45 pm	Presentation S07 5G PCB Technology Requirements and Challenge Mr Feng Gao Huawei Technologies Co., Ltd.	Presentation S08 A New Assembly Solution for High-Voltage Device of GaN on Si Substrate Ms Hsinjou Lin Siliconware Precision Industries	Presentation S09 Research on Key Technology of AL-base PCB for Power Battery Module Mr Changming Zhang Shenzhen Bomin Electronics Co., Ltd.
2:45 - 3:15 pm	Presentation S10 Transmission Line Loss Analysis of High Speed Signal Ms Lingzi Zhang The 52nd China Electronics Technology Group	Presentation S11 Effect of the conditioner on deposition characteristics of electroless copper plating Mr Jinfeng Liu Shennan Circuits Co., Ltd	Presentation S12 Research on Skip Via processing technology of high-speed PCB Mr Canjun Xiang Delton Technology (Guang Zhou) Inc.
3:15 - 3:45 pm	Presentation S13 The Technology Development of Cavity in High-level HDI PCB Mr Rui Sun Zhuhai Founder PCB Development Co., Ltd.	Presentation S14 Using traditional Routing machine to treat with LED PCB Mr Junlin Zhou Jiangxi Zhihao Electronic Technology Co., Ltd.	Presentation S15 Research on the difference of TDR measurement characteristic impedance of different brands and technical analysis for CPCA standard formulation Mr Yong Cao University of Electronic Science And Technology of China
3:45 - 4:15 pm	Presentation S16 How to effectivity verify the creep corrosion failure occurrence on electronics? Mr Dem Lee Integrated Service Technology Inc.	Presentation S17 A robust Palladium-free Activation Process for Electroless Copper Plating Mr Pentel Yu Atotech Taiwan Limited	Presentation S18 Local deformation preventing of large board setting in multilayer printed circuit manufacture Mr Shijin Chen Bomin Electronics Co., Ltd
4:15 - 4:30 pm	BREAK		
4:30 - 5:00 pm	Presentation S19 Research Manufacturing Technology of Through-hole and Blind Hole in PTFE-doping Heterogeneous PCB Dr Guoyun Zhou University of Electronic Science and Technology of China	Presentation S20 An overview of key technologies on manufacturing high-order HDI printed circuit board Mr Shijin Chen Bomin Electronics Co., Ltd	Presentation S21 New Black Oxide Chemicals for pretreatment of Copper Direct Laser Drilling Mr Tadayuki Nakamura Meltex Inc.
5:00 - 5:30 pm	Presentation S22 Advanced adhesion enhancement system for high frequency PCB manufacturing Dr Thomas Thomas Atotech Deutschland GmbH	Presentation S23 Development of automotive BMS acquisition harness and application of polyethylene naphthalene diformate materials Mr Mingming Zhang AKM Industrial Company Limited	Presentation S24 Development of a pressure sensing module Mr Hao Yong Guo AKM Industrial Company Limited
5:30 - 6:00 pm	Presentation S25 The Higher Etch Factor Conductor Traces Fabricated with Etching Additive Chemicals Dr Chul Lee Hwabaek Engineering Co., Ltd.	Presentation S26 The effect of final surface finish on signal integrity for 5G high-speed printed circuit board Ms Yali Gao Zhuhai Founder PCB Development Co., Ltd.	Presentation S27 The convection-dependent competitive adsorption of copper electroplating additives in open circuit for PCB via filling Dr Kai Zhu Shennan Circuits Co. Ltd

The 15 th Electronic Circuits World Convention (ECWC15) Tentative Program Rundown			
DAY 2, 1 DECEMBER 2020 (TUESDAY) – HONG KONG			
9:00 - 9:45 am	Keynote Session (K4) 5G Technology & Material Challenges Dr Shiuk Kao Chiang, Managing Partner of Prismark		
9:45 - 10:30 am	Keynote Session (K5) New Advancing PCB Technology Dr Sun Yao Feng, Senior Manager of ASTRI		
10:30 - 11:15 am	Keynote Session (K6) Industrial IoT. Mistakes Made, Lessons Learned Based on Real-Life Installations Mr Hajime Sugiyama, Industrial IoT Evangelist, Factory Automation Systems Group, Mitsubishi Electric Corporation		
11:15 - 11:30 am	BREAK		
11:30 - 11:45 am	Q&A session 1	Q&A session 2	Q&A session 3
11:45 - 12:00 pm	Q&A session 4	Q&A session 5	Q&A session 6
12:00 - 12:30 pm	Presentation S28 5G EMI Shielding Assembly Solution for System in Package Mr James Su Siliconware Precision Industries Co. Ltd. (SPIL)	Presentation S29 Embedded Deep Learning Inference platform for Medical Image Segmentation Dr Yu-Jung Huang I-Shou University	Presentation S30 Reliability and challenge analysis for 3D printed PCB Mr Liyang Chen Guangzhou Fastprint Circuit Tech Co., Ltd
12:30 - 1:00 pm	Presentation S31 Be Flexible, Go Digital Dr Rudy Coquet Agfa-Gevaert NV	Presentation S32 Study of SM Ink-jet Printing Technology in PCB manufacturing Mr Tie Li Dongguan Wuzhu Electronic-tech Co., Ltd.	Presentation S33 An Advanced Horizontal Electroless Copper Plating Technology Ms Xiao-Hong Li Guangdong Skychem Technologies Ltd
1:00 - 2:15 pm	LUNCH BREAK		
2:15 - 2:45 pm	Presentation S34 A Novel Glass Antenna Fabrication with Single TGV for 5G Communication Applications Mr Yiu-Hsiang Chang Industrial Technology Research Institute, Taiwan	Presentation S35 Reliable Nickel-free Surface Finish for Next Generation PCB Technologies - 5G, HDI, RF-Microwave, High Frequencies Dr Kunal Shah LILOTREE	Presentation S36 Tin/Silane Modified Copper Enhances Interlayer Bonding Strength for Signal Loss Reduction in High-frequency PCB Lamination Mr Haolin Li Chongqing Founder Hi-Tech Electronic Inc
2:45 - 3:15 pm	Presentation S37 Temperature Effects on Signal Integrity of PCB Transmission Line Ms Xiaojing Ye SCC	Presentation S38 Some cases on the structure designs, simulation and signal integrity test of printed circuit board for 5G communication application Dr Yuanming Chen University of Electronic Science and Technology of China	Presentation S39 Stretchable Ni@NiCoP Textile for Wearable Energy Storage Clothes Mr Peng Sun Sun Yat-sen University
3:15 - 3:45 pm	Presentation S40 Advanced PCB technologies for space and their assessment using up-to-date standards Mr Stan Heltzel European Space Agency	Presentation S41 In-plane printed Micro-Supercapacitor with Integral Photocatalytic Fuel Cell for Self-Charging Mr Peng Sun Sun Yat-sen University	Presentation S42 Discussion on the operation and management plan of PCB manufacturers to maintain sustainable profit under current situation Mr Bo Chen Jiangxi Zhihao Electronic Technology Co., Ltd.
3:45 - 4:15 pm	Presentation S43 The Current Status of Korea's PCB industry Dr Minsu Lee Korea Electronics Packaging and Circuits Association	Presentation S44 The Application of Innovative Industrial Water-saving Technology in PCB Industry Mr Qiang Lai Guangzhou Jiejun Electronic Technology Co., Ltd	Presentation S45 IPC Secure Material Supply Network With Blockchain-Powered Anonymity Mr Radu Costin Diaconescu, Swissmic SA
4:15 - 4:30 pm	BREAK		
4:30 - 5:00 pm	Presentation S46 IPC CFX: Standards-Based IIoT for All-Inclusive Interoperability Mr Michael Ford Aegis Software, UK	Presentation S47 Development of novel low-temperature curable positive-tone photosensitive polybenzoxazole with high reliability Satomi Fukushima Taiyo Holdings Co. Ltd.	Presentation S48 The Development of a New Oxide Replacement Process to Meet the High Process Cleanliness Requirements of mSAP Production Dr Thomas Thomas Atotech Deutschland GmbH
5:00 – 5:30 pm	Presentation S49 Application of CCD Drilling Machine in Back Drilling Mr Gen dai Zhong Delton Technology (Guang Zhou) Inc.	Presentation S50 Research and Sharing of Resin Plug Hole Equipment and Quality Problems Based on 5G High-speed PCB Mr Maolin Liu Guangzhou Jiejun Electronic Technology Co., Ltd	
5:30 - 5:45 pm	Q&A session 7	Q&A session 8	Q&A session 9
5:45 – 6:00 pm	Q&A session 10	Q&A session 11	Q&A session 12

The 15 th Electronic Circuits World Convention (ECWC15) Tentative Program Rundown	
DAY 3, 2 DECEMBER 2020 (WEDNESDAY) – SHENZHEN	
10:00 am	HKPCA Show Opening Ceremony
10:30 – 10:40 am	Welcome Messages
10:40 - 11:25 am	Keynote Session (K7) The New World of 5G Trend Mr. Zhe Liu, Chief Engineer of ZTE Corporation
11:25 - 12:10 pm	Keynote Session (K8) PCB Application on Electrical Products Dr. Dahai Yu, General Manager of TCL Corporate Research (Hong Kong) Co., Limited
12:10 – 2:00 pm	LUNCH BREAK
2:00 – 2:30 pm	GOLD SPONSOR Session PCB制造导通孔黑影工艺应用介绍 Mr Huang Jin, Technical Director of Shenzhen Baikal Electronic Materials Co., Ltd.
2:30 – 3:15 pm	Keynote Session (K9) Smart Home to A.I Representative from Xiaomi Corporation
3:15 – 4:30 pm	Panel Discussion The Development of 5G and its Driver for PCB Industry
4:30 – 5:00 pm	Closing Ceremony
- Day 3 Program will be held in parallel at the Shenzhen Convention and Exhibition Centre together with 2020 HKPCA Show.	

The 15th Electronic Circuits World Convention (ECWC15) Poster Presentation			
PAPER SCOPE	PAPER TITLE	AUTHOR	COMPANY
Materials, Components and Traceability	Requirements on new generation adhesive system for high-frequency & high-speed and high density flex PCBs	Mr Genghong Chen	Nikkan Industries Co., Ltd.
Manufacturing	Technical developments and application study of microwave PCB	Mr Huanxin Yuan	China Circuit Technology (Shantou) Corporation
Manufacturing	The development and application of high frequency & high speed PCB	Mr Huanxin Yuan	China Circuit Technology (Shantou) Corporation
Manufacturing - Process Development	Research on the process optimization of buried sub-board PCB	Mr Junquan Wu	KingBrother Technology Limited
Manufacturing - Process Development	Defect analysis and improvement of micro via filling plating use SOC process	Mr Beston Liu	Guangdong Guanghua
Manufacturing - Process Development	Study on processing technology of antenna panel using PTFE covering film	Hengwen Li	Shennan Circuits Co., Ltd
Manufacturing - Equipment	Development of Embedded Ceraminc PCB Technology	Mr Chengguang Ji	Shengyi Electronics Co
Quality, Test, and Life Cycle Management	Research and improvement on the lamination void Of HDI boards	Mr Gangjun Zhao	Shengyi Electronics Co
Quality, Test, and Life Cycle Management	The Research on the influence of resistance value of embedded resistance products	Jun Du	Dong guan Hong Yuen electronics co., Ltd.
Quality, Test, and Life Cycle Management	PCB electrical measurement technology for large "D" shaped pads with soldermask and window opening	Mr XingPei Nie	Huizhou Jinbaize Circuit Technology Co., Ltd.
Quality, Test, and Life Cycle Management	Research on Technology of Embedding Discrete Components in PCB	Mr Liqin Chen	Guangzhou FastPrint Circuit Tech Co., Ltd
Quality, Test, and Life Cycle Management	Study on Growth Mechanism and Characteristics of Tin Whiskers in Immersion Tin	Ms Ting Jin	Guangzhou FastPrint Circuit Tech Co., Ltd
Quality, Test, and Life Cycle Management	Study on Mechanism of Bonding Tin Beads Produced by Wave Soldering Process	Mr Yafeng Deng	Guangzhou FastPrint Circuit Tech Co., Ltd
Quality, Test, and Life Cycle Management	Study on Pull Strength of Rigid PCB	Mr Dingfeng Luo	Guangzhou FastPrint Circuit Tech Co., Ltd
Quality, Test, and Life Cycle Management	Study on the mechanism of annular ring of plated-through hole crazing failure mode in PCB with ENIG a surfac treatment	Ms Xuemei Zhang	Guangzhou FastPrint Circuit Tech Co., Ltd
Quality, Test, and Life Cycle Management	Study on the SMT Process And Mechanism of Temperature Change Failure of CBGA Mixed Solder Joints	Ms Ting Jin	Guangzhou FastPrint Circuit Tech Co., Ltd
Quality, Test, and Life Cycle Management	The mechanism of plated-through hole electrolytic corrosion failure	Ms Xuemei Zhang	Guangzhou FastPrint Circuit Tech Co., Ltd



The 15th Electronic Circuits World Convention (ECWC15) Poster Presentation

PAPER SCOPE	PAPER TITLE	AUTHOR	COMPANY
Quality, Test, and Life Cycle Management	FTIR Application in area of Foreign Material Analysis	Ms Angela Lee	TTM Technologies
Quality, Test, and Life Cycle Management	New Technical Model of detection of " short circuit defect" of embedded single winded inductor coil circuit image of PCB	Mr Rick Chung	Olympic Circuit Technology Co. Ltd
PCB Process	The Effect of Water-Jet Pressure on the PTH Reliability and the Quality of Electroless Cu Films	Dr Xiao-Hong Li	Guangdong Skychem Technologies Ltd
PCB Process - Chemical Technology	Study on the mechanism of short circuit initiation of PTFE board PCB Immersion silver	Mr Jian Zhang	Shengyi Electronics Co
PCB Process - Chemical Technology	High performance nano palladium colloid and its application in horizontal PTH	Dr Lei Zhang	Shenzhen Tianxi science development Co., LTD
PCB Process - Chemical Technology	Study of anti-bleeding additive effect on ink-jet solder mask	Mr Tie Li	Dongguan WuZhu Electronic-tech Co., Ltd.
PCB Process - Mechanical Technology	Depth Control Mechanism Comparison between Depth Controlled Drilling and Depth Controlled milling	Mr Haibo Zou	Aoshikang Technology Co., Ltd.
Energy Harvesting / Green Energy	Discussion on recycling technology of machining waste in PCB industry	Mr Xiaobin Xu	Glorysky Electronics Co., Ltd
Energy Harvesting / Green Energy	Add Algae Systems Into Sha Tin Sewage Treatment Works	Ms Lili Chen	HKPC
Advanced and Emerging Technologies	Prospect of Application of Plasma in Circuit Board Industry	Mr Wen Hui, Sun	Zhuhai Henger Electronics Technical Co., LTD
Advanced and Emerging Technologies	The study on different ultra thin foils with carrier for manufacturing fine line (For MSAP process)	Ms HuaLi Chen	China Circuit Technology (ShanTou) Company
5G Requirements on PCB	Estimation of High-Frequency CCL Materials from Chinese Local Suppliers for 5G RF application	Mr Wen-Ren Chen	Sunshine Global Circuits Co., Ltd.
Smart Living Applications	Neuroscience Analysis for Education	Mr Qi Zheng	The University of Hong Kong

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