2012电子封装技术与高密度封装国际会议

ICEPT-HDP 2012

2012 International Conference on Electronic Packaging Technology & High Density Packaging

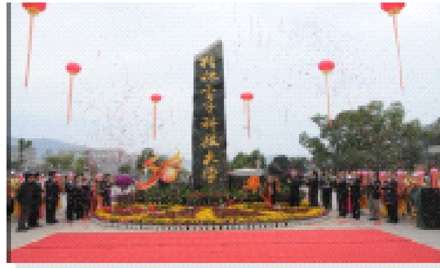
会议手册

Conference Program

会议主办单位：
Sponsored by

桂林電子科技大学

GUILIN UNIVERSITY OF ELECTRONIC TECHNOLOGY



Guilin University of Electronic Technology (GUET)

GUET is located in the beautiful heartland of Guangxi Province in south central China. During its 50 year history, GUET has gradually developed into a university with electronic information technology as its primary discipline with other educational opportunities offered in fields. Currently there are over 26,000 full-time students in attendance at the four campuses, more than 300 of which have come to study from overseas. The university has 18 distinct schools and departments offering 55 undergraduate programs, 34 post-graduate programs, and 8 state-funded programs.

Research Center for Micro/Nano-Electronics Packaging and Assembly (MEPA)

MEPA of GUET was established in April 2007. It is a combined effort of GUET's faculties of Mechanical & Electrical Engineering, Electronic Engineering and Material Science and Technology. Currently, MEPA has over 30 staff members, including 7 full professors, 6 adjunct professors, 6 specially invited professors from abroad, and 12 associate professors.

The missions of MEPA is to provide a center of excellence for scientific research and advanced technology development for micro/nano-electronics packaging and assembly; to establish and manage a platform of collaboration between industry and education/ research institutions both nationally and internationally; to provide multi-level and the state-of-the-art education and training program and curriculum in the fields of micro/nano-electronics packaging and assembly.

R&D program (not limited to):

- Advanced electronics packaging and high density assembly technologies
- Packaging & System Integration for SSL
- Packaging and interconnection materials
- Reliability
- Advanced mechanics for micro/nano-electronics
- Key technologies for packaging equipment

Experimental Facilities in MEPA

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WELCOME FROM THE GENERAL CHAIR

Started in 1994, the International Conference on Electronic Packaging Technology (ICEPT), organized by Electronics Manufacturing and Packaging Technology Society (EMPT) of Chinese Institute of Electronics (CIE), has been holding 12 times in Beijing, Shanghai, Shenzhen and Xi'an. This international conference provides a communication platform for experts, researchers, engineers from industry and academy, to exchange the new ideas and emerging technologies on electronics packaging.

ICEPT-HDP 2012, co-organized by Guilin University of Electronic Technology, China, will be held in Guilin from August 13 to 16, 2012. 420 abstracts were received and almost 380 papers were accepted for oral and poster presentation. On behalf of the conference organizers, I would like to express our sincere welcome and thanks to our guests, authors and delegates from 20 countries and regions. It is so happy to meet you in Guilin.

China's semiconductor industry was initiated in 1956 by the National Science & Technology Program. With the 50 years' development, it becomes the pillar industry of China. Nowadays, there are over 1000 companies in the semiconductor industry, among them over 280 companies' key businesses are related to electronics packaging. In 2011, the IC units shipment was approx. 71.96 billion, a 10.3% year-on-year growth, and with the sales revenues of approx. RMB 157.221 billion, a 9.2% year-on-year growth, while the discrete units shipment was approx. 358.43 billion, a 5.3% year-on-year growth, with the sales revenues of approx. RMB 124.21 billion, a year-on-year growth of 9.6%. Over the decades, 6 key semiconductor industrial bases were established, including Yangtze River Delta, Pearl River Delta, Around Bohai Gulf Area, Midwest Region, Old Industrial Base of Northeast China, Guanzhong – Tianshui Economic Zone. This year is the critical year of China's 12th Five-Year-Plan. National policies , e.g., electronics production promotion, Key S&T Projects 01and 02, etc.,are under executing, promoting this industry.

In order to enter the main stream of world electronic packaging industry soon, China packaging industry has to achieve volume process capacity of SiP,FC,BGA,CSP,MCP,WLP products, as well as obtain technology breakthroughs and master core technologies in TSV, 3D/PoP, RF, MEMS and IGBT.

We wish this conference will be a good communication platform for all the participants to exchange novel ideas, explore new collaborations and promote the global electronics packaging industry to face the historical challenge and opportunity.

Also, we hope this conference can enhance the long-term relationship and close collaboration on the electronics packaging between EMPT and other international organizations and conferences, such as IEEE-CPMT, IMAPS, ECTC, ESTC, EPTC and EPMT.

Lastly, we are pleased to inform you that the ICEPT-HDP 2013 will be held in Dalian, China. We look forward to seeing you in Guilin this August and in Dalian next year.

Prof. Keyun BI, General Chair of ICEPT-HDP 2012

CONFERENCE ORGANIZERS（会议组织结构）

Directed by	会议指导单位
Department of Higher Education, Ministry of Education, China	中华人民共和国教育部高等教育司
Department of Telecommunication, Ministry of Industry and Information Technology, China	中华人民共和国工业和信息化部电子信息司
China International Culture Exchange Center, China	中国国际文化交流中心
The Education Department of Guangxi Zhuang Autonomous Region, China	广西壮族自治区教育厅
Sponsored by	会议主办单位
Chinese Institute of Electronics, China	中国电子学会
IEEE Component, Packaging, &Manufacturing Technology Society (IEEE-CPMT) (Technical Sponsor)	国际电气电子工程师联合会电子元件封装和生产技术学会 (技术主办)
Organized by	会议承办单位
Electronic Manufacturing & Packaging Technology Society of the Chinese Institute of Electronics, China	中国电子学会电子制造与封装技术分会
Guilin University of Electronic Technology, China	桂林电子科技大学
Co-organized by	会议协办单位
CEPREI, China	中国工业和信息化部电子第五研究所

CONFERENCE CHAIRS（大会主席）

General Chair

Keyun BI	Vice Director General of Standing Committee, CIE, China President of Electronic Manufacturing and Packaging Technology Society (EMPT), CIE, China President of Packaging Branch, CSIA, China

Co-chairs

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Rolf ASCHENBRENNER	Former President of IEEE-CPMT, USA Deputy Director of IZM, Fraunhofer, Germany
Ricky S. W. LEE	Prof. of HKUST, Hong Kong, China; President of IEEE-CPMT, USA
GuoQi (Kouchi) ZHANG	Senior Director and Fellow of Philips Lighting Prof. of Delft University of Technology, Netherlands
Johan LIU	Prof. of Shanghai University, China; Prof. of Chalmers Univ. of Science & Technology, Member of Royal Swedish Academy of Engineering, Sweden;

ADVISORY COMMITTEE（顾问委员会）

Huaiying ZHOU	President, Guilin University of Electronic Technology, China
Shichang ZOU	Academician of CAS; President of Shanghai Integrated Circuit Industry Association, China
Juyan XU	Academician of CAE; Honorary Director of No. 58 Institute of CETC, China
William T.CHEN	Former President of IEEE-CPMT, Senior Director of ASE, USA
C.P. WONG	Dean of School of Eng., CUHK, Hong Kong, China Prof. of Georgia Institute of Technology, USA
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Tadatomo SUGA	Prof. of University of Tokyo, Japan
Guoqiang DAI	Former Deputy Director, Ministry of Science & Technology, P.R. China
Wenwu DING	Director of Electronics Information Dept, Ministry of Industry and Information Technology, P.R. China
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Ke GONG	President of Nankai University, China

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Kees BEENAKKER	Director, Delft University of Technology,Netherlands
Roger HOSKENS	Director, Philips Lighting, Netherlands
Jusheng MA	Prof. of Tsinghua University, China
Yifan GUO	R&D Director, Skyworks, USA
Jie XUE	Director, Cisco Systems Inc., USA
Kuoning CHIANG	Former Prof. of National Tsinghua University, Taiwan, China

SECRETARY GENERAL（大会秘书长）

Wenbin CHEN	Guilin University of Electronic Technology, China
Qing LI	EMPT, CIE, China

ORGANIZING COMMITTEE（组织委员会）

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Kailin PAN	Guilin University of Electronic Technology, China

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Bill LI	Jiangsu Changjiang Electronics Technology Co. Ltd, China
Ming LI	Shanghai JiaoTong University, China
Chunqing WANG	Harbin Institute of Technology, China
Yiping WU	HUST, China
James CAI	Tsinghua University, China
Fei XIAO	Fudan University, China
Hao TANG	Nantong Fujitsu Microelectronics Co., Ltd, China
Tim CHEN	Yan Tai Darbond Ele Materials Co., Ltd., China
T ONISHI	GJ Tech, HK, China
Yunfei EN	CEPREI, China

Secretary

Xingzao HUANG	Beijing Faith Consulting Co., Ltd, China
Gang HUANG	Beijing Faith Consulting Co., Ltd, China
Zhen LI	EMPT, CIE, China
Wenbin CHEN	Guilin University of Electronic Technology, China
Zhen ZHANG	Guilin University of Electronic Technology, China
Shan WEI	Guilin University of Electronic Technology, China
Yanyan ZHOU	Guilin University of Electronic Technology, China
Chunhua MU	Guilin University of Electronic Technology, China

TECHNICAL COMMITTEE（技术委员会）

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Prof. Daoguo YANG	Guilin University of Electronic Technology, China

Co-chairs

Dr. Yong LIU	Fairchild Semiconductors, USA
Dr. Willem VAN DRIEL	Philips, the Netherlands
Dr. TongYan TEE	VP of Engineering, Silecs International, Singapore
Dr. Daniel SHI	R&D Director, ASTRI, Hong Kong, China
Prof. Sheng LIU	HUST, China
Prof. Jianhua ZHANG	Shanghai University, China
Dr. Wenhui ZHU	Tian Shui Hua Tian Technology Co., Ltd, China
Dr. Chiming LAI	JCAP, China
Prof. Mingliang HUANG	Dalian University of Technology, China

Chair for PDC

Prof. Fei QIN	Beijing University of Technology, China

Chair for Forum

Prof. Xuejun FAN	Lamar University, USA

Secretary

Miao CAI	Guilin University of Electronic Technology, China
Wenbin CHEN	Guilin University of Electronic Technology, China
Yubing GONG	Guilin University of Electronic Technology, China
Ruifeng LI	Guilin University of Electronic Technology, China

Session 1 -- Advanced Packaging & System Integration

Chairs

Dr. Lixi WAN	IMECAS, China
Dr. Bing DANG	IBM, USA

Members

Prof. Yufeng JIN	Peking University, China
Prof. GS KIM	Kangnam University, Republic of Korea
Dr. Yishao LAI	ASE, Taiwan, China
Dr. Shan LEI	IBM, USA
Prof. Gang DONG	Xidian University, China
Dr. Wei LIN	Amkor, USA
Dr. Charlie LU	Altera, Taiwan,, China
Dr. Klaus PRESSEL	Infineon, Germany
Dr. Ivan SHAM	ASTRI, Hong Kong, China
Dr. Cheng YANG	Intel, China
Dr. Herb HUANG	SMIC, China
Dr. Daniel YU	WLCSP, China
Dr. Robert LO	ITRI, Taiwan, China

Dr. Boping WU	Intel, USA

Session 2 -- Packaging Materials & Processes

Chairs

Prof. Ming LI	Shanghai Jiaotong University, China
Dr. Jerry LU	Intel, USA

Members

Dr. Kejun ZENG	TI, USA
Dr. Daniel LU	Henkel, China
Prof. Liangliang LI	Tsinghua University, China
Dr. Xinyu DU	Henkel, USA
Prof. Zhong CHEN	Nanyang Technological University, Singapore
Prof. Guoyuan LI	South China University of Technology, China
Prof. Guangbin DOU	Imperial College of London, UK
Prof. Jeng-Gong DUH	Tsinghua University, Tai Wan, China
Prof. Anmin HU	Shanghai Jiaotong University, China
Prof. Changqing LIU	Loughborough University, UK
Prof. Young-Bae PARK	Andong National University, Republic of Korea
Prof. Yanhong TIAN	Harbin Institute of Technology, China
Mr. Itsuo WATANABE	Hitachi Chemicals, Japan
Dr. Rong SUN	SIAT, China
Dr. Su WANG	Sinyang, China
Dr. Hengyun ZHANG	Dowcorning, China
Dr. Hong Meng HO	SemiWire, Singapore
Prof. Xicheng WEI	Shanghai University, China
Dr. Zhiquan LIU	The Institute of Metal Research, CAS, China
Prof. Shiyong YANG	The Institute of Chemistry, CAS, China
Prof. Huarui XU	Guilin University of Electronic Technology, China
Prof. Dayong GUI	Shenzhen University, China

Session 3 -- Packaging Design & Modeling

Chairs

Prof. Fei QIN	Beijing University of Technology, China
Prof. Jingsong ZHANG	Shanghai University, China

Members

Dr. Yong LIU	Fairchild, USA
Dr. Juergen AUERSPERG	ENAS, Germany
Dr. Zhongping BAO	Qualcomm, USA
Dr. Haibo FAN	Philips Shanghai, China
Dr. Jingen LUAN	ST, Singapore
Dr. Heinz PAPE	Infineon, Germany
Dr. Lianxi SHEN	Nvidia, USA
Dr. Bin XIE	ASTRI, China
Dr. Hongfei YAN	Intel, USA

Dr. Xiaowu ZHANG	IME, Singapore
Dr. Jiangtao ZHENG	IBM, USA
Dr. Jack HU	Wuhan University, China
Dr. Wenchao TIAN	Xidian University, China
Mr. Barry BAI	3DS, China
Dr. Xiujuan ZHAO	Philips, Netherlands
Prof. Hua LU	Greenwich University, UK
Prof. Xinping ZHANG	South China University of Technology, China
Dr. Qing ZHOU	Intel, China
Dr. An XIAO	NXP, the Netherlands Intel, China
Dr. Qiang WANG	Cisco Systems, Inc., China

Session 4 -- High Density Substrate & SMT

Chairs

Dr. Paul WANG	Mitac, Tai Wan, China
Prof. Mingyu LI	Harbin Institute of Technology, China

Members

Dr. C.Q. CUI	Compass Technology, China
Prof. Mingliang HUANG	Dalian University of Technology, China
Prof. Yuming WANG	Tsinghua University, China
Dr. Hong XIE	Intel, USA
Dr. Youzhi XU	Intel, USA
Prof. K.C. YUNG	HKUST, Hong Kong, China
Dr. Xiangyin ZENG	LSI, China
Prof. Zhaohua WU	GUET, China

Session 5 -- Advanced Manufacturing & Packaging Equipment

Chairs

Dr. Li-Qiang CAO	IMECAS, China
Dr. Chang ZHOU	SMEE, China

Members

Mr. KH TAN	JCAP, China
Dr. Liang TANG	The 45th research institute of CETC, China
Dr. Guohua GAO	Fujitsu-NT, China
Dr. Edward FENG	Linde Gas, China
Prof. Xuefeng SHU	Taiyuan University of Technology, China
Dr. James-Jian ZHANG	Numonyx, USA
Mr. Hai WU	Intel, China
Dr. Li GONG	SUSS, China
Prof. Fuliang WANG	South University, China
Prof. Meifa HUANG	Guilin University of Electronic Technology, China
Dr. Lingen WANG	Boschman Technologies, the Netherlands

Session 6 -- Quality & Reliability

Chairs

Prof. Chris BAILEY	University of Greenwich, UK
Prof. Dongyan DING	Shanghai Jiaotong University, China

Members

Prof. Chunqing WANG	Harbin Institute of Technology, China
Dr. Xiuzhen LU	Shanghai University, China
Prof. H.C. CHENG	Feng Chia University, Tai Wan, China
Dr. Klaus GALUSCHKI	Siemens ,Germany
Dr. Zezhong FU	Intel, China
Prof. Fu GUO	Beijing University of Technology, China
Dr. Dongming HE	Intel, USA
Prof. B.T. HAN	University of Maryland, USA
Dr. Xingjia HUANG	Intel, China
Dr. Xiaohu LIU	IBM, USA
Dr. Keith NEWMAN	Sun Microsystems, USA
Prof. Jun WANG	Fudan University, China
Dr. Dongji XIE	Nvidia, USA
Dr. Zhen ZHANG	Microsoft, USA
Dr. Liping ZHU	TriQuint, USA
Ms. Gieven DAI	Intel, China
Mr. Jeffrey LEE	IST, Taiwan, China
Dr. Ming XUE	Infineon, Singapore
Dr. Boyi WU	Flextronics, China
Prof. Ping YANG	Jiangsu University, China
Prof. Fenglian SUN	HUST, China
Mr. Miao CAI	Guilin University of Electronic Technology, China

Session 7 -- Solid State Lighting Packaging and Integration

Chairs

Prof. Sheng LIU	HUST, China
Dr. Willem VAN DRIEL	Philips Lighting, the Netherlands

Members

Mr. T. ONISHI	GJ Tech, Hong Kong, China
Mr. Chunjian FENG	Hebei Semi. RI, China
Prof. Xu CHEN	Tianjin University, China
Prof. Yuhua CHENG	PKU-SHRIME, China
Dr. Ming LI	ASM, Hong Kong, China
Prof. Peng JIN	Shenzhen Graduate School of Peking Univ., China
Mr. Lebbai MOHAMED	Philiphs, Singapore
Dr. Lianqiao YANG	Shanghai University, China
Dr. Weiqiao YANG	Shanghai Solid State Lighting Center, China
Prof. Minshu ZHANG	XMUT, China
Prof. Kailin PAN	Guilin University of Electronic Technology, China

Session 8 -- Emerging Technologies

Chairs

Prof. James CAI	Tsinghua University, China
Dr. Andy TSENG	ASE, USA

Members

Prof. Jim LEU	Chiao Tung University, Taiwan, China
Prof. Jintang SHANG	Southeast University, China
Prof. K. SUGANUMA	Osaka University, Japan
Dr. Yinghui WANG	Tokyo University, Japan
Dr. Zhenfeng WANG	SIMTech, Singapore
Dr. Tieyu ZHENG	Intel, USA
Prof. Le LUO	CAS, China
Prof. Yiping WU	HUST, China
Prof. Changhai WANG	Heriot-Watt University, UK
Mr. Tonglong ZHANG	STATS Chippac, Chin

Poster Session

Chairs

Dr. Cadmus YUAN	Stake Key Laboratory of Solid-State Lighting, China
Dr. Wenbin CHEN	Guilin University of Electronic Technology, China

OVERVIEW OF CONFERENCE PROGRAM（会议议程总览）

Date	Time	Room E	Room F	Room D
Aug. 13	08:30--12:30	PDC-1	PDC-3	--
	12:30--13:30	*Lunch (for PDC only)*		
	13:30--17:30	PDC-2	PDC-4	--
	15:00--18:00	--	--	ITRS Assembly and Packaging Workshop
	18:00--20:00	*Dinner*		

Date	Time	Room A	Room B
Aug. 14	08:30--09:30	Opening Ceremony	
	09:30--10:30	Plenary Session A	
	10:30--11:00	*Coffee Break*	
	11:00--12:00	Plenary Session A	
	12:20--13:30	*Lunch*	
	13:30--15:30	Plenary Session B	Plenary Session C
	15:30--16:00	*Coffee Break*	
	16:00--18:00	Plenary Session B	Plenary Session C
	18:30--20:30	*Banquet*	

		Parallel Sessions						
Date	**Time**	**Room C**	**Room G**	**Room D**	**Room E**	**Room F**	**Room B**	**Room H**
Aug. 15	08:00--09:40	Oral Session 1 (5 papers)	Oral Session 2 (5 papers)	Oral Session 3 (5 papers)	Oral Session 4 (5 papers)	Oral Session 5 (5 papers)	Oral Session 6 (5 papers)	Oral Session 7 (5 papers)
	09:40--10:40	*Poster Session , Exhibition & Coffee Break* ***(Room A)*** (all posters for this time slot)						
	10:40--12:25	Oral Session 8 (5 papers)	Oral Session 9 (5 papers)	Oral Session 10 (5 papers)	Oral Session 11 (5 papers)	Oral Session 12 (5 papers)	Oral Session 13 (5 papers)	Oral Session 14 (5 papers)
	12:25--13:30	*Lunch*						
	13:30--15:15	Oral Session 15 (5 papers)	Oral Session 16 (5 papers)	Oral Session 17 (5 papers)	Oral Session 18 (5 papers)	Oral Session 19 (5 papers)	Oral Session 20 (5 papers)	Oral Session 21 (5 papers)
	15:15--16:15	*Poster Session , Exhibition & Coffee Break* ***(Room A)*** (all posters for this time slot)						
	16:15--18:00	Oral Session 22 (5 papers)	Oral Session 23 (5 papers)	Oral Session 24 (5 papers)	Oral Session 25 (5 papers)	Oral Session 26 (5 papers)	Oral Session 27 (5 papers)	Oral Session 28 (5 papers)
	18:30--21:00	*Dinner*						
Aug. 16	08:00--18:00	*Lijiang River tour*						

OVERVIEW OF PROFESSIONAL DEVELOPMENT COURSE
Monday, August 13, 2012

Venue	Time	Topic	Speaker
Room E	08:30--12:30	*PDC-1* 3D IC Integration with TSV for System Packaging	**Dr. Wei Koh** Pacrim Technology, CA, USA
	12:30--13:30	Lunch	
	13:30--17:30	*PDC-2* Polymers and Nano-Composites for electronic and Photonic Packaging: recent advances	**Prof C.P. Wong** CUHK, HK, China GIT, USA
			Dr. Daniel Lu Henkel Corp., China
Room F	8:30--12:30	*PDC-3* Analog and Power Electronic Packaging & Electromigration–the Hurdle For Miniaturization and High Power Devices	**Dr. Ning-Cheng Lee** Indium, USA
			Dr. Yong Liu Fairchild, USA
	12:30--13:30	Lunch	
	13:30--17:30	*PDC-4* Embedding Reliability Engineering into the Product Development Cycle	**Dr. Jo Caers** Philips, the Netherlands
			Dr. Susan Zhao Philips, the Netherlands

Introduction of PDC Lecturers

Dr. Wei Koh, Pacrim Technology, CA, USA

Dr. Wei Koh is Managing Director of Pacrim Technology, Inc. in Irvine, CA, USA. He is experienced in semiconductor microelectronic packaging technology, having pioneered in flip chip assembly, BGA, CSP, WLP, and 3D TSV technologies for high-density, high- performance packages, modules, and system level assemblies. He has held technical and management positions at Motorola, Kingston Technology, and Northrop-Grumman in the US. Dr Koh has published over 70 papers and awarded 40 US and international patents in electronics assembly. He is a senior member of IEEE CPMT, IMAPS, and SMTA.

Prof C.P. Wong, CUHK, HK, China

Prof. C. P. Wong is currently Dean of the Faculty of Engineering at the Chinese University of Hong Kong. He is on a no pay long leave from Georgia Institute of Technology(GT) where he is a Regents' Professor and the Charles Smithgall Institute Endowed Chair at the School of Materials Science and Engineering He received his B.S. degree from Purdue University, and his Ph.D. degree from the Pennsylvania State University. After his doctoral study, he was awarded a two-year postdoctoral fellowship with Nobel Laureate Professor Henry Taube at Stanford University. Prior to joining GT in 1996, he was with AT&T Bell Laboratories for many years and became an AT&T Bell Laboratories Fellow in 1992 for his seminal contributions to low-cost high-performance

packaging of semiconductor devices and components. His research interests lie in the fields of polymeric electronic materials, electronic, photonic and MEMS packaging and interconnect, interfacial adhesions, nano-functional material syntheses and characterizations, nano-composites such as well-aligned carbon nanotubes, graphenes, lead-free alloys, flip chip underfill, ultra high k capacitor composites and novel lotus effect coating materials. He received many awards, among those, the AT&T Bell Labs Fellow Award in 1992(the most prestigious Technical Award bestowed by Bell Labs), the IEEE Components, Packaging and Manufacturing Technology (CPMT) Society Outstanding Sustained Technical Contributions Award in 1995, the IEEE Third Millennium Medal in 2000, the IEEE Educational Activity Board(EAB) Outstanding Education Award in 2001, the IEEE CPMT Society Exceptional Technical Contributions Award in 2002, the Georgia Tech Class 1934 Distinguished Professor Award(the highest Award bestowed by GT to the faculty) in 2004, named holder of the Charles Smithgall Chair(one of the two GT Institute-Endowed Chairs) in 2005, the GT Outstanding PhD Thesis Advisor Award, the IEEE Components, Packaging and Manufacturing Technology Field Award in 2006(hailed as "Father of Modern Semiconductor Packaging"), the Sigma Xi's Monie Ferst Outstanding Educational Award in 2007, the Society of Manufacturing Engineers' Total Excellence in Electronic Manufacturing Award in 2008 and the IEEE CPMT David Feldman Award in 2009. He holds over 50 U.S. patents, and has published over 1,000 technical papers, co-authored and edited 10 books and is a member of the National Academy of Engineering of the USA since 2000.

Dr. Daniel Lu, Henkel Corp., China

Dr. Daniel Lu is the Technical Director of Product Development – Asia Pacific, Henkel Corporation in China. Prior to joining Henkel, he worked for the R&D department of Intel Corp. as a Sr. Scientist and program manager for 7 years. He also had worked for Lucent Technologies, Amoco's Electronics Materials Division, and the Electronics Materials Group of National Starch and Chemical Company before. He has extensive experience in electronic packaging and materials and processing. He received his MS and PhD degrees on Polymer Science and Engineering from Georgia Institute of Technology in 1996 and 2000, respectively. Dr. Lu received many awards including the IEEE/CPMT Outstanding Young Engineer Award in 2004, the IEEE ECTC best poster paper in 2007, Intel's most patent filing in 2003-2007, Intel Divisional Recognition Awards in 2002, 2003, and 2007, Intel most patent granting of the year for 2006 and 2007. Dr. Lu has published more than 50 technical papers, wrote chapters for five books, and holds 68 US patents. He is the editor of the book "Materials for Advanced Packaging (2008)" and co-author of the book "Electronically Conductive Adhesives with Nanotechnologies (2009)". He has been serving key roles in organizing international electronic packaging conferences and teaching professional development short courses in these conferences. Dr. Lu is a senior member of IEEE, an associate editor of IEEE *Transactions on Advanced Packaging* and *Journal of Nanomaterials*, and an editorial board member of *Journal of Nano-Asia.*

Dr. Ning-Cheng LEE, Indium, USA

Dr. Ning-Cheng Lee is the Vice President of Technology of Indium Corporation of America. He has been with Indium since 1986. Prior to joining Indium, he was with Morton Chemical and SCM. He has more than 20 years of experience in the development of fluxes and solder pastes for SMT industries. In addition, he also has very extensive experience in the development of underfills and adhesives. He received his PhD in polymer science from University of Akron in 1981, and BS in chemistry from National Taiwan University in 1973. Ning-Cheng is the author of "Reflow Soldering Processes and Troubleshooting: SMT, BGA, CSP, and Flip Chip Technologies" by Newnes, and co-author of "Electronics Manufacturing with Lead-Free, Halogen-Free, and Conductive-Adhesive Materials" by McGraw-Hill. He is also the author of book chapters for several lead-free soldering books. He received 1991 award from SMT Magazine and 1993 and 2001 awards from SMTA for best proceedings papers of SMI or SMTA international conferences, and 2008 award from IPC for Honorable Mention Paper – USA Award of APEX conference. He was honored as 2002 SMTA Member of Distinction, and received 2003 Lead Free Co-Operation Award from Soldertec, and received 2006 Exceptional Technical Achievement Award from CPMT. He served on the board of governors for CPMT, serves on the SMTA board of directors. Among other editorial responsibilities, he serves as editorial advisory board of Soldering and Surface Mount Technology, Global SMT & Packaging and as associate editor for IEEE Transactions on Electronics Packaging Manufacturing. He has numerous publications and frequently gives presentations, invited to seminars, keynote speeches and short courses worldwide on those subjects at international conferences and symposiums.

Dr. Yong Liu, Fairchild Semiconductor, South Portland, USA

Dr. Yong Liu has been with Fairchild Semiconductor Corp in South Portland, Maine since 2001 as a Senior Member Technical Staff from 2008, and a Member Technical Staff from 2004 to 2007, and a Principal Engineer from 2001 to 2004. His main interest areas are advanced analog and power electronic packaging, modeling and simulation, reliability and material characterization. He has been invited to give keynotes talks, presentations and professional short courses at IEEE international conferences Eurosime, ECTC, APM, EPTC, ICEPT and universities and semiconductor industry in US, Europe and China. He has authored and co-authored 2 books, 3 book chapters and over 160 papers in journals and conferences and has filed or granted over 40 US patents in the area of stack/3D/embedded analog and power packaging. Dr. Liu was awarded Alexander von Humboldt Fellowship and studied at Tech University of Braunschweig, Germany in 1994. In 1997, he was awarded Alexander von Humboldt European Fellowship and studied at University of Cambridge, England. In 2000, he worked as a staff opto package engineer at Nortel Networks at Boston. Since he joined Fairchild in 2001, he was awarded Fairchild Key Technologist in 2009, the first Fairchild President Award in 2008, Fairchild Key Technologist in 2006, Fairchild BIQ award in product innovation in 2005, and Fairchild award for power of pen first place in 2004. Dr.Yong Liu is currently IEEE senior member and serves as several technical committees of international conferences.

Dr. Jo Caers, Philips, the Netherlands

Jo Caers got his Master Degree and PhD in Applied Sciences from the Catholic University of Leuven, Belgium. After being member of the Staff of the university for 5 years, he joined Philips in 1977 and he transferred to Philips CFT (currently Philips Applied Technologies) in 1982 and was responsible for process development for metal to glass and to ceramic interconnections. 15 years ago, started he to be responsible for quality and reliability and he focused on quantifying reliability, shortening qualification times, develop degradation mechanisms and kinetics for new failure modes and incorporating reliability right into the concept and design phase. In 2001, he got an assignment to set up the reliability competence in Apptech in Singapore. Jo Caers was one of earliest scientists to introduce flip chip, TAB, BGA and CSP type packages into Philips. He has good experience in wire bonding, solid state bonding, soldering and adhesive interconnects. He has been actively involved in the introduction of Pb-free soldering and of adhesive interconnects. His solid knowledge in applied material science and excellent experience in process and reliability in electronics industry make him the competence leader in several important projects within Philips: System in packaging, LED system, solder cell, medical system. Jo Caers has authored and co-authored more than 60 papers and contributions in international journals and conferences. He is member of the program committee of major international conferences as ECTC (in US) and EPTC (in Singapore). He has a strong network in Europe, US and Asia.

Dr. Susan Zhao, Philips, the Netherlands

Susan Zhao (XiuJuan Zhao) got her bachelor, master and Ph.D. in School of Material Science and Engineering from Harbin Institute of Technology, China in 1995, 1997 and 2000 respectively. After that she joined Philips Applied Technologies (AppTech) Singapore and was mainly involved in the feasibility and reliability study of variable electronics packaging/devices with interconnects of Pb_free soldering or adhesive, test and simulation on different electronics devices under different application environment, and consultant in design for reliability for various Philips products. In 2007, she was transferred to headquarter of AppTech in Netherlands. As a senior technical consultant, she is currently involved in quality and reliability evaluation in several key projects for applications in LED, consumer electronics, automotive and soler cell. She has authored more than 30 papers in international journals and conferences powered by IEEE and ASME and she has facilitated several workshops for some industry partner of Philips.

OVERVIEW OF ITRS Assembly and Packaging Workshop

Guilin Bravo Hotel，Room C (桂湖厅)
15:00 – 18:00, August 13, 2012

Chairs:
Dr. Wilmer R. BOTTOMS
Dr. Xuejun FAN

Time	Topic	Speakers
15:00--18:00	Welcome	Prof. Keyun BI, *General Chair of ICEPT-HDP 2012*
	ITRS Roadmap Overview	Dr. Bill CHEN, *ASE Group*
	ITRS Assembly & Packaging Roadmap (including 2.5D & 3D)	Dr. Wilmer R. BOTTOMS, *3MTS, USA*
	China Assembly & Packaging R & D	Mr. Xiekang YU, Jiangsu Changjiang Electronics Technology Co., Ltd, China
	Wrap up and Q&A	Prof. Ricky LEE, *HKUST, Hong Kong, China*

Introduction of ITRS

The International Technology Roadmap for Semiconductors, known throughout the world as the ITRS, is the fifteen-year assessment of the semiconductor industry's future technology requirements. These feature needs drive present-day strategies for world-wide research and development among manufacturers' research facilities, universities, and national labs. The ITRS Assembly and Packaging Working Group will present a workshop at the ICEPT-HDP, with the following agenda

Introduction of TSV Workshop Speakers

William T. Chen ASE Fellow and Senior Technical Advisor, ASE Group

William Chen (Bill) is a Fellow of ASE, where he currently holds the position of Senior Technical Advisor at ASE (U.S.) Inc. Prior to joining the ASE Group, Bill was Director of the Institute of Materials Research & Engineering (IMRE), located in the National University of Singapore. Previously, Bill worked for over thirty three years performing various R&D and management positions at IBM Corporation, where he was elected to the IBM Academy of Technology. He is currently the co-chair of the International Technology Roadmap for Semiconductors (ITRS) Assembly and Packaging International Technical Working Group. Bill has been an associate editor of the IEEE/CPMT transactions, and ASME Journal of Electronic Packaging, and has published extensively in the fields of microelectronics packaging and mechanics of materials. He held the position of President of the IEEE Components Packaging and Manufacturing Technology Society (CPMT) from 2006-2009. Bill has been elected a Fellow of IEEE and a Fellow of ASME. In 2011, he was awarded the University Medal from Binghamton University

Bill held adjunct faculty appointments at Cornell University, Binghamton University, University of Washington, and a visiting faculty appointment at Hong Kong University of Science of Technology. He received his B.Sc. at University of London, M Sc at Brown University and PhD at Cornell University.

Dr. Wilmer R. Bottoms 3MTS, USA

Dr. Bottoms received a B.S. degree in Physics from Huntington College in Montgomery, Alabama in 1965, and a Ph.D in Solid State from Tulane University in New Orleans in 1969 and is currently Chairman of SBA Materials. He has worked a faculty member in the department of electrical engineering at Princeton University, manager of Research and Development at Varian Associates, founding President of the Semiconductor Equipment Group of Varian Associates and general Partner of Patricof & Co. Ventures.

Dr. Bottoms has participated in the start up and growth of many companies through his venture capital activity and through his own work as an entrepreneur. These include companies both directly and indirectly related to semiconductor. Among these companies are: Microelectronics Packaging Inc. , Credence Systems, Third Millennium Test Solutions, Tessera, SBA Materials, APMT. He currently serves as: Member of the Board of Tulane University and the Chairman of its Academic Affairs Committee, Chairman of the Technical Working Group for Assembly and Packaging for the International Technology Roadmap for Semiconductors, Chairman of the Technical Working Group for Packaging and Package Substrates for the International Electronics Manufacturing Institute, Chairman of the Semiconductor Equipment and Materials International’s SEMI Awards Committee.

Mr. Xiekang Yu , Jiangsu Changjiang Electronics Technology Co., Ltd, China

Mr. Xiekang YU, is currently the VP of Jiangsu Changjiang Electronics Technology Co., Ltd, Executive Director of Technology Innovation Strategic Alliance on IC Packaging Industrial Chain, Vice President and Executive Director of Jiangsu Provincial Semiconductor Industrial Association, and President of Wuxi Semiconductor Industrial Association. Mr.YU has published over 100 papers in journals, including 10+ papers which received national awards.

Prof. S. W. Ricky Lee, HKUST, Hong Kong

Ricky Lee received his BSc and MSc degrees from National Taiwan University and Virginia Polytechnic Institute & State University, respectively. In 1992, he graduated from Purdue University with a PhD degree in Aeronautical & Astronautical Engineering. After one year of post-doctoral research at Purdue, he joined the Hong Kong University of Science & Technology (HKUST). During his career of tenure-track faculty at HKUST, Dr Lee once was on secondment to serve as Chief Technology Officer of Nano & Advanced Materials Institute (NAMI) for two and a half years. Currently Dr. Lee is Professor of Mechanical Engineering and Director of Center for Advanced Microsystems Packaging (CAMP) at HKUST. He also has a concurrent appointment as Director of HKUST LED-FPD Technology R&D Center at Foshan, Guangdong, China. Dr Lee has been focusing his research on the development of packaging and assembly technologies for electronics and optoelectronics. The topics of his R&D interests include wafer level packaging and 3D IC integration, through silicon vias (TSV) and high density interconnects, LED packaging for solid-state lighting, lead-free soldering and reliability analysis. The research outcomes of Dr Lee’s group have been documented in numerous technical papers in international journals and conference proceedings. He also co-authored three books and nine book chapters. Due to his technical contributions, Dr Lee received many honors and awards over the years. In addition to being the recipient of nine best/outstanding paper awards and three major professional society awards, Dr Lee is Fellow of IEEE, ASME, and Institute of Physics (UK). He is also an IEEE CPMT Distinguished Lecturer and has been invited to give workshops and short courses worldwide. Furthermore, Dr Lee was elected the President of IEEE CPMT Society in 2011 and is serving for the term of 2012-2013.

OVERVIEW OF INVITED PLENARY KEYNOTES

Tuesday, August 14, 2012

Plenary Session A 8:30—12:20, Room A (金桂厅), Guilin Bravo Hotel Chairs: *Prof. GuoQi (Kouchi) ZHANG*, Philips, Netherlands *Dr. William Chen,* Senior Technical Advisor, ASE Group, USA	
08:30--09:30	**Opening Ceremony**
09:30--10:05	**Quasi-conformal Phosphor Dispensing on LED for White Light Illumination** *Prof. Ricky Lee* Hong Kong University of Science & Technology, Hong Kong, China
10:05--10:40	Title: TBD *Shichang ZOU* Chinese Academy of Science, China
10:40--11:10	*Coffee Break*
11:10--11:45	**Recent Advances on Nano-materials for Advanced Electronic, Photonic, MEMS Packaging Applications** *Prof. C.P. WONG* The Chinese University of Hong Kong, Hong Kong, China Georgia Institute of Technology, USA
11:45--12:20	**Ultra-thin Electronics: Status, Challenges and Prognosis** *Prof. Rao TUMMALA* Georgia Institute of Technology, USA
12:20--13:30	**Lunch**
Plenary Session B **13:30—17:30, Room A (金桂厅), Guilin Bravo Hotel** **Chairs:** ***Dr. Daniel Shi*, ASTRI, Hong Kong, China** ***Prof. Sheng LIU,* Huazhong University of Science and Technology, China**	
13:30--14:05	**Wafer level packaging (WLP): fan-in, fan-out and three-dimensional integration** *Prof. Xuejun Fan* Lamar University, USA
14:05--14:40	**Trend of analog and power electronic packaging** *Dr. Yong Liu* Fairchild Semiconductor Corp, USA
14:40--15:15	**One-stop solution for TSV-CCM 3D integration** *Dr. Wenhui Zhu* Tian Shui Hua Tian Technology Co. Ltd, China
15:15--15:45	*Coffee Break*

OVERVIEW OF INVITED PLENARY KEYNOTES*(Cont.)*

Tuesday, August 14, 2012

Plenary Session B 13:30—17:30, Room A (金桂厅), Guilin Bravo Hotel Chairs: ***Dr. Daniel Shi***, ASTRI, Hong Kong, China ***Prof. Sheng LIU,*** Huazhong University of Science and Technology, China	
15:45--16:20	**Development of Advanced Packaging** *Jerry Zhang* Jiangyin Changdian Advanced Packaging Co.,LT , China
16:20--16:55	**Analysis and evaluation of IC package reliability** *Yunfei En* The Fifth Electronics Research Institute, China
16:55—17:30	**High Density Electronics Packaging and Assembly** *Dr. Dongkai Shangguan*
18:30--20:30	**Banquet**
Plenary Session C **13:30—17:30, Room B (芦笛厅), Guilin Bravo Hotel** **Chairs: *Dr. Lixi Wan,* IME-CAS, China**	
13:30--14:05	**Low Temperature Bonding for 3D Integration** *Prof. Tadatomo SUGA* University of Tokyo, Japan
14:05--14:40	**Heat Dissipation Using Nanotechnology Based Materials and Processes** *Prof. Johan Liu* Chalmers University of Technology, Sweden Shanghai University, China
14:40--15:15	**3D integration – an exciting step for future system integration** *M. Jürgen Wolf* Fraunhofer IZM-ASSID, Germany
15:15--15:45	*Coffee Break*
15:45--16:20	**Wafer bonding for CMOS integration and packaging** *Dr. Viorel Dragoi* EV Group, Austria
16:20--16:55	**The Thermal Management and Interface Materials Challenges of High Density and High Power IC Packages** *Dr. Tim CHEN* Darbond Technology, China
16:55—17:30	**Development and Prospect of New Electronic Packaging Materials** *Zheng Hongyu* Hebei Semiconductor Research Institute, China
18:30--20:30	**Banquet**

Introduction of Invited Plenary Keynote Speakers

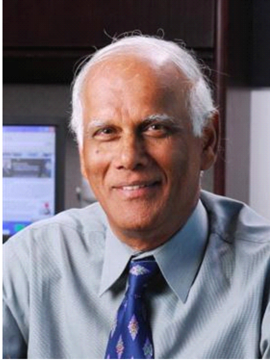
Prof. S. W. Ricky Lee, HKUST, Hong Kong
(Please see Page #16 for short biography)

Prof. Shichang ZOU , SICA, China

Prof. Shichang ZOU is currently Chairman of Shanghai IC Industry Association. He is also the member of China Academy Science. Prof. ZOU graduated from Jiaotong University and received PhD degree from Moscow Nonferrous Metal Institute. From 1979 to 1980, he has been a visiting professor at Fraunhofer Society in Munich, Germany. From the beginning of 1970s, he conducted a systematic study of the ion beam solid interactions and used ion beams for doping, synthesizing, fabrication and surface layer analysis of semiconductor materials. He published more than 200 scientific papers and won 14 prizes including National First Grade Invention prize. He is an honorary membership of the conference of Ion Beam Modification of Materials (IBMM). In the 1990s, he contributed to the development the Mainland Chinese semiconductor industry. He participated in the establishment of several IC companies, including Shanghai Huahong NEC Electronics Co., Shanghai Simconix Electronics, DuPont Photomasks and Shanghai Ericsson Simtek Electronics Co.

Prof C.P. Wong, CUHK, HK, China

Prof. C. P. Wong is currently Dean of the Faculty of Engineering at the Chinese University of Hong Kong. He is on a no pay long leave from Georgia Institute of Technology(GT) where he is a Regents' Professor and the Charles Smithgall Institute Endowed Chair at the School of Materials Science and Engineering He received his B.S. degree from Purdue University, and his Ph.D. degree from the Pennsylvania State University. After his doctoral study, he was awarded a two-year postdoctoral fellowship with Nobel Laureate Professor Henry Taube at Stanford University. Prior to joining GT in 1996, he was with AT&T Bell Laboratories for many years and became an AT&T Bell Laboratories Fellow in 1992 for his seminal contributions to low-cost high-performance packaging of semiconductor devices and components. His research interests lie in the fields of polymeric electronic materials, electronic, photonic and MEMS packaging and interconnect, interfacial adhesions, nano-functional material syntheses and characterizations, nano-composites such as well-aligned carbon nanotubes, graphenes, lead-free alloys, flip chip underfill, ultra high k capacitor composites and novel lotus effect coating materials. He received many awards, among those, the AT&T Bell Labs Fellow Award in 1992(the most prestigious Technical Award bestowed by Bell Labs), the IEEE Components, Packaging and Manufacturing Technology (CPMT) Society Outstanding Sustained Technical Contributions Award in 1995, the IEEE Third Millennium Medal in 2000, the IEEE Educational Activity Board(EAB) Outstanding Education Award in 2001, the IEEE CPMT Society Exceptional Technical Contributions Award in 2002, the Georgia Tech Class 1934 Distinguished Professor Award(the highest Award bestowed by GT to the faculty) in 2004, named holder of the Charles Smithgall Chair(one of the two GT Institute-Endowed Chairs) in 2005, the GT Outstanding PhD Thesis Advisor Award, the IEEE Components, Packaging and Manufacturing Technology Field Award in 2006(hailed as "Father of Modern Semiconductor Packaging"), the Sigma Xi's Monie Ferst Outstanding Educational Award in 2007, the Society of Manufacturing Engineers' Total Excellence in Electronic Manufacturing Award in 2008 and the IEEE CPMT David Feldman Award in 2009. He holds over 50 U.S. patents, and has published over 1,000 technical papers, co-authored and edited 10 books and is a member of the National Academy of Engineering of the USA since 2000.



Prof. Rao R. Tummala, GIT, USA

Prof. Rao Tummala is a Distinguished and Endowed Chair Professor, and Founding Director of NSF ERC at Georgia Tech, pioneering Moore's Law for System Integration. Prior to joining Georgia Tech, he was an IBM Fellow, pioneering the first plasma display and multichip electronics for mainframes and servers. He has received many industry, academic and professional society awards including Industry Week's award for improving U.S. competitiveness, IEEE's David Sarnoff, IMAPS' Dan Hughes, Engineering Materials from ASM, Total Excellence in Manufacturing from SME. He received Distinguished Alumni Awards from University of Illinois, Indian Institute of Science and Georgia Tech. In 2011, Prof. Tummala received the Technovisionary Award from Indian Semiconductor Association and IEEE Field Award for contributions in electronics systems integration, and cross-disciplinary education. He received his BS from Indian Institute of Science, and Ph.D. from University of Illinois.

Prof. Tummala has published about 500 technical papers, holds 74 patents and inventions; authored the first modern Microelectronics Packaging Handbook, the first undergrad textbook Fundamentals of Microsystems Packaging, and the first book introducing the System-On-Package technology. He is a Fellow of IEEE, a member of National Academy of Engineering as well as past President of IEEE-CPMT and the IMAPS Societies.

Prof. Xuejun Fan, Lamar University, USA

Prof. Xuejun Fan is an Associate Professor in the Department of Mechanical Engineering at Lamar University, Beaumont, Texas. He was a Senior Staff Engineer at Intel Cooperation, Chandler, Arizona, from 2004 to 2007, a Senior Member Research Staff with Philips Research Lab at Briarcliff Manor, New York from 2001 to 2004, and a Member Technical Staff and Group Leader at the Institute of Microelectronics (IME), Singapore from 1997 to 2000. In his earlier career, he was promoted to a full professor at age 27 in 1991 at Taiyuan University of Technology, Shanxi, China, and became one of the youngest full professors in China that time. He received his Ph.D. degree from Tsinghua University, Beijing, China in 1989, and his Master and Bachelor degrees from Tianjin University, Tianjin, China in 1986 and 1984, respectively. Dr. Fan's current research interests lie in the areas of design, modeling, material characterization, and reliability in micro-/nano- electronic packaging and microsystems. He has published over 130 technical papers, filed 5 patents, and has published three books, entitled "Mechanics of Microelectronics", "Moisture Sensitivity of Plastic Packages of IC Devices", and "Solid State Lighting Reliability: Components to System". Dr. Fan received IEEE CPMT Exceptional Technical Achievement Award in 2011, and won the Best Paper Award of IEEE Transactions on Components and Packaging Technologies in 2009. He is an IEEE CPMT Distinguished Lecturer. Dr. Fan was the nominee for the title of "Ten Outstanding Youth of China" in 1991.

Dr. Yong Liu, Fairchild Semiconductor, South Portland

Dr. Yong Liu has been with Fairchild Semiconductor Corp in South Portland, Maine since 2001 as a Senior Member Technical Staff from 2008, and a Member Technical Staff from 2004 to 2007, and a Principal Engineer from 2001 to 2004. His main interest areas are advanced analog and power electronic packaging, modeling and simulation, reliability and material characterization. He has been invited to give keynotes talks, presentations and professional short courses at IEEE international conferences Eurosime, ECTC, APM, EPTC, ICEPT and universities and semiconductor industry in US, Europe and China. He has authored and co-authored 2 books, 3 book chapters and over 160 papers in journals and conferences and has filed or granted over 40 US patents in the area of stack/3D/embedded analog and power packaging. Dr. Liu was awarded Alexander von Humboldt Fellowship and studied at Tech University of Braunschweig, Germany in 1994. In 1997, he was awarded Alexander von Humboldt European Fellowship and studied at University of Cambridge, England. In 2000, he worked as a staff opto package engineer at Nortel Networks at Boston. Since he joined Fairchild in 2001, he was awarded Fairchild Key Technologist in 2009, the first Fairchild President Award in 2008, Fairchild Key Technologist in 2006, Fairchild BIQ award in product innovation in 2005, and Fairchild award for power of pen first place in 2004. Dr.Yong Liu is currently IEEE senior member and serves as several technical committees of international conferences.

Dr. Wenhui Zhu, Tian Shui Hua Tian Technology Co. Ltd, China

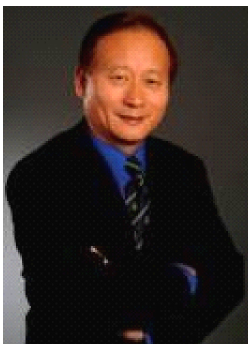
Dr. Wenhui ZHU is Chief Technology Officer of Tian Shui Hua Tian Technology Co. Ltd, CEO of Kun Shan Q Technology Limited Co., member of IEEE and invited professor of Beijing University of Technology. He is a key player of IEEE ICEPT and EPTC conference as organization committee or technical sub-comittee chairman / co-chairman. Dr. Zhu is also reviewer of a few international journals in packaging areas. He has been working in DFR (design for reliability), DFM (design for manufacturability) and DFP (design for performance), packaging materials and 3D nano-/micro-electronics packaging in leading semiconductor and packaging companies including Infineon, UTAC and Tian Shui Hua Tian. Dr. Zhu chaired many key projects in advanced packaging and structural integration such as national 863 project, Chinese natural science fund, and state key technology projects and made great achievements in technology innovation and cost-saving. He has been invited to give keynote talks and short courses in international forums and conferences. Dr. Zhu has published more than 90 technical papers and won 3 times of best paper awards.

Jerry Zhang, JCAP, China

Jerry Zhang, Sales VP of Jiangyin Changdian Advanced Packaging Co.,ltd (JCAP). He joined JCAP in 2003 and has been dedicating with the promotion and development of new packaing technology such as Cu pillar bump, WLCSP, RFID, FLIP CHIP, TSV, etc. Since 2003, California Micro Devices,Alien Technology, Texas Instruments,Analog Dvices,National Semiconductor,ST Micro etc are in mass produciton with JCAP with this leading and involvment. JCAP has been honored with Supplier Excellence Award from TI in the year of 2009 and 2011. JCAP also has been named as one of the major WLCSP and 3D packaing suppliers by Yole. JCAP has also earned his reputation in China local design houses with the production of advanced pacaking. Now JCAP has been the top 3 vendor in the world for WLCSP and Cu pillar bumping under his leadship in sales and marketing.

Yunfei En, CEPREI, China

Yunfei En received the B.S.(1990) and the M.S.(1995) in microelectronics(1995) from Xidian University. From 1995 to 2003, she worked on the main failure mechanism and reliability evaluation of integrated circuit, including HCI,TDDB, EM and SM. And also worked on the failure mechanism and evaluation, test structure design and test of reliability evaluation. Since 2003, she is senior engineer of . She lead a group working on VLSI failure analysis technology and reliability testing. Her current interests include defects location of ultra deep submicrometer IC, wafer level reliability evaluation, Known Good Die, etc. Her research interests also include failure mode and mechanism analysis of backward compatible solder joints, reliability evaluation and design of high density PCBA assembly. Yunfei En is member of IEEE, senior member of Chinese institute of electronic, member of the Youth Committee for Chinese institute of electronics, and member of the Reliability Society for Chinese institute of electronics. She is the director of the 7th Chinese Institute of Electronics council, and member of the Integrated Circuit Technology subcommittee for the National Semiconductor Standardization Technical Committee. She is member of the National electronic components standardization committee. She has won the award for national science and technology progress prize once, and the award for provincial science and technology progress prize 8 times. Enjoying the government special allowance. She has published more than 30 papers and 2 books.



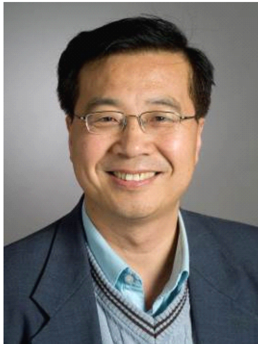
Dr. Dongkai Shangguan

Through his 20+ years with the industry, Dr. Shangguan worked for the Electronics Operations at Ford Motor Co. / Visteon Corporation in various technical and management functions, and at Flextronics as Corporate Vice President of Advanced Technology & Engineering Leadership. Dongkai received his BS degree in Mechanical Engineering from Tsinghua University, China, Ph.D. degree in Materials from the University of Oxford, U.K., and MBA degree from the San Jose State University. He conducted post-doctoral teaching and research at the University of Cambridge and The University of Alabama, and is currently a Guest Professor at several universities. Dr. Shangguan has published two books and authored/co-authored 200 technical papers and articles. He has over 20 patents issued. Dr. Shangguan is an IEEE Fellow, an associate editor of the IEEE CPMT Transactions, a Distinguished Lecturer for the IEEE CPMT Society, and serves on the IEEE CPMT Society Board of Governors. He also serves on the

editorial/advisory board of several technical journals, and has chaired technical sessions and panels at numerous conferences. He chaired the iNEMI 2007-2009 Roadmap for Board Assembly, and currently serves on the IPC Board of Directors, on the first Board of Directors for the Solar Engineering & Manufacturing Association (SEMA), and on the Advisory Board of the Sustainable Electronics Manufacturing (SEM) Working Group. Dongkai has received a number of recognitions for his contributions to the industry, including the "Leadership Award" from the Sustainable Electronics Manufacturing Working Group, "President's Award" from IPC, "Total Excellence in Electronics Manufacturing Award" from the Society of Manufacturing Engineers (SME), and the "Soldertec Lead-Free Soldering Award". He also received the "Distinguished MBA Alumnus Award" from the College of Business, San Jose State University.

Prof. Tadatomo SUGA, The University of Tokyo, Japan

Tadatomo SUGA, Professor, The University of Tokyo received Ph.D. from University of Stuttgart in 1983, while performing his Ph.D. research at the Max-Planck Institute für Metallforschung, Stuttgart. In 1984 he became a member of Faculty of Engineering, the University of Tokyo, and since 1993, he has been professor of the School of Engineering. He was also a director of National Institute of Materials Science (NIMS) conducting Interconnect Design Group and the chair of IEEE CPMT Society Japan Chapter. His researches focus on micro-systems integration and packaging, and development of interconnect technology, especially a room temperature bonding technique for 3D integration: Surface Activated Bonding (SAB). He has advocated also the importance of environmental aspects of packaging technology and is well known as the key organizer of Japanese roadmap of lead-free soldering and International Eco-design Conference.

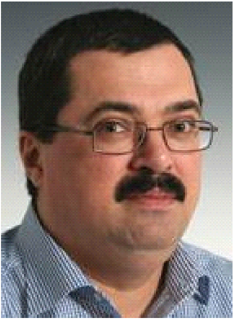


Prof. Johan Liu, halmers University of Technology, Sweden

Dr Johan Liu graduated with a master and Ph D degree in materials science from the Royal Institute of Technology, Sweden in 1984 and 1989 respectively. Before joining Chalmers University of Technology, he served in various positions at the Swedish National Institute for Production Research (IVF) as project manager, group leader and division manager. He is currently a professor and head of SMIT Center and Bionano Systems Laboratory, Department of Microtechnology and Nanoscience in Chalmers University of Technology, Sweden as well as a special recruited professor at Shanghai University, China. As a member of the Royal Swedish Academy of Engineering Sciences and a fellow of IEEE, he has published 2 books, 370 papers in journals, proceedings and 15 book chapters with a Hirsch index of 20 and with an citation of over 1100 times, He has 30 patents accepted or filed and has given over 40 key note/invited talks during the last 20 years. He has also received many awards including IEEE Exceptional Technical Achievement Award, IEEE CPMT Transaction Best paper Award in "Advanced Packaging".

Dr. Wolf JURGEN , Fraunhofer IZM-ASSID, Germany

Dr. Wolf Juergen received a MS degree in Electrical Engineering. In 1994, he joined Fraunhofer Institute for Reliability and Micro integration (IZM), Berlin and has worked as group & project manager in the field of wafer level packaging and system-in-package (SiP). Since 2011 he is the head of department HDI&WLP/ASSID, responsible for the coordination and management of ASSID - "All Silicon System Integration Dresden-ASSID" with its 300 mm Wafer Level Integration. He manages as well as participates in a number of research projects on European and international level. He is an European representative in the technical working group Assembly & Packaging of ITRS, JEC, JIC and a board member of EURIPIDES as well as member of IEEE and SMTA. He has authored and co-authored more than 50 papers and holds a number of patents.



Dr. Viorel Dragoi, EV Group

Dr. Viorel DRAGOI is currently Chief Scientist for wafer bonding at EVG. He graduated Faculty of Physics – University of Bucharest in 1995. Between 1988 and 1998 he occupied various positions in the National Institute of Materials Physics Bucharest (assistant, junior researcher). In 1998 he joined the wafer bonding group from Max Planck Institute of Microstructures Physics (MPI) – Halle, Germany. His main research interest was focused on direct wafer bonding of dissimilar materials (Si and GaAs) but also worked on wafer bonding applications in the fields of MEMS, photonics and LEDs. He received his Ph.D. in August 2000 from Institute of Atomic Physics – Bucharest, Romania. He is co-author of more than 80 contributions to international conferences and papers in international journals, as well as three book chapters. His research interest is focused on wafer bonding technology development.

Dr. Tim CHEN, Darbond Technology, China

Dr. Tim CHEN is currently the general manager of Darbond Technology. He is elected as a "Thousand Talents Plan" distinguished scholar by China central government, as well as a "Taishan Scholar" overseas distinguished scholar by Shandong provincial government in 2010,and was recently appointed as a Visiting professor of Chinese Academy of Sciences ,Zhejiang University ,Xiamen Univercity. He was the Global Business Director of Packaging for Honeywell Electronic Materials. Prior to joining Honeywell, Tim worked at Henkel Corp in Asia as the Greater China General Manager for Electronic material business, Prior to Henkel, Tim had 15 years work experience in the US and held positions at Intel, BP AMOCO Polymers. Tim Chen received his Ph.D. in Polymer/Organic Chemistry from University of Nebraska-Lincoln. Tim had a Post-Doctor Research Associate experience with Professor Alex Jen (Currently University of Washington), Tim has been working on electronics materials, opto-electronic materials and electronic packaging areas for 20 years. He has more than 50 scientific and technical publications in electronic materials, processes, and applications, especially in semiconductor area and holds more than 40 US patents in the field.

OVERVIEW OF ORAL PRESENTATION SESSIONS

Wednesday, August 15, 2012

		Parallel Sessions						
Date		**Room C**	**Room G**	**Room D**	**Room E**	**Room F**	**Room B**	**Room H**
Aug. 15		Oral Session 1 (Session A-1)	Oral Session 2 (Session B-1)	Oral Session 3 (Session C-1)	Oral Session 4 (Session C-2)	Oral Session 5 (Session B-2)	Oral Session 6 (Session F-1)	Oral Session 7 (Session H-1)
	Chairs	Yufeng Jin Wei Koh	Mingliang Huang Hengyun Zhang	Jingsong Zhang Xiujuan Zhao	Hua LU Xingping Zhang	Daniel Lu Liangliang Li	Chris Bailey Fu Guo	Andy Tseng Jintang Shang
	08:00--09:40	A-16, A-18, A-19, A-23, A-36	B-01, B-19, B-56, B-72, B-73	C-01, C-02, C-09, C-11, C-16	C-05 , C-24, C-30, C-76, C-77	B-10, B-39, B-85, B-91, E-22	F-02, F-20, F-42, F-55, F-60	H-04, H-13, H-16, H-19,H-21
	09:40--10:40	*Poster Session , Exhibition & Coffee Break* ***(Room A)***						
		Oral Session 8 (Session A-2)	Oral Session 9 (Session B-3)	Oral Session 10 (Session C-3)	Oral Session 11 (Session H-2)	Oral Session 12 (Session E-1)	Oral Session 13 (Session F-2)	Oral Session 14 (Session G-1)
	Chairs	Wenhui Zhu Hong Xie	A. Mavinkurve Yanhong Tian	Yong Liu Qiang Wang	James Cai Xuejun Fan	Liqiang Cao Liang Tang	Leo Ernst Xiaosong Ma	Jianhua Zhang Haibo Fan
	10:40--11:05	Keynote A-30	Keynote B-71	Keynote C-81	Keynote H-24	Keynote E-26	Keynote F-110	Keynote G-48
	11:05--12:25	A-06, A-35, A-41, A-46	B-15, B-64, B-81, B-87	C-04, C-31, C-42 , C-54	H-03, H-06, H-09, H-10	E-01, E-03, E-11, E-07	F-03, F-45, F-53, F-100	G-03, G-07, G-24, G-41
	12:25--13:30	*Lunch*						

OVERVIEW OF ORAL PRESENTATION SESSIONS *(Cont.)*

Wednesday, August 15, 2012

		Parallel Sessions						
Date		**Room C**	**Room G**	**Room D**	**Room E**	**Room F**	**Room B**	**Room H**
Aug. 15		Oral Session 15 (Session A-3)	Oral Session 16 (Session B-4)	Oral Session 17 (Session C-4)	Oral Session 18 (Session G-2)	Oral Session 19 (Session D)	Oral Session 20 (Session F-3)	Oral Session 21 (Session F-4)
	Chairs	Yifan Guo Shan Lei	Ming Li Changqing Liu	Andrew Tay An Xiao	Yuhua Chen Kailin Pan	Paul Wang Mingyu Li	Jun Wang Jo Caers	Dongyan Ding Jeffrey Lee
	13:30--13:55	Keynote A-43	Keynote B-52	Keynote C-49	Keynote G-21	Keynote D-13	Keynote F-43	Keynote F-05
	13:55--15:15	A-04, A-42 A-39, A-40	B-04, B-08, B-61 , B-75	C-12 , C-28, C-68, C-73	G-06, G-23 G-32, G-44	D-01, D-07 D-15, F-44	F-07, F-09, F-80, F-97	F-13, F-21, F-27, F-79
	15:15--16:15	*Poster Session , Exhibition & Coffee Break* ***(Room A)***						
		Oral Session 22 (Session F-5)	Oral Session 23 (Session B-5)	Oral Session 24 (Session C-5)	Oral Session 25 (Session B-6)	Oral Session 26 (Session E-2)	Oral Session 27 (Session F-6)	Oral Session 28 (Session G-3)
	Chairs	Chunqing Wang Xiuzhen Lu	Jerry Lu Dayong Gui	Fei Qin Wenchao Tian	Fei Xiao Zhiquan Liu	Li Gong Fuliang Wang	Ningcheng Lee Boyi Wu	T Onishi Minshu Zhang
	16:15--16:40	Keynote F-111	Keynote B-95	Keynote A-21	Keynote B-78	Keynote E-33	Keynote F-37	Keynote G-47
	16:40--18:00	F-22, F-38, F-58, F-98	B-20, B-68, B-80, C-74, B-79	C-43, C-61, C-62,C-65	B-32, B-42 B-43, B-90	E-10, E-17 E-18, E-28	F-10, F-50, F-107, F-108	G-10, G-35, G-38, G-45, H-20
	18:30--21:00	*Dinner*						

OVERVIEW OF POSTER PRESENTATION SESSIONS

August 15, Wednesday 09:20AM --10:20AM and 14:50--15:50

Poster Session 1

	Area 1	Area 2	Area 3	Area 4	Area 5	Area 6
	(Session A)	(Session B)	(Session B)	(Session B)	(Session C)	(Session C)
Chairs: Dr. Cadmus Yuang Dr. Wenbin Chen	A-02,A-03,A-05,A-07, A-08,A-09,A-10,A-11, A-12,A-13,A-15,A-17, A-22,A-24,A-26,A-27, A-29,A-31,A-33,A-34, A-38,A-44	B-02, B-03,B-05,B-06, B-07,B-09,B-12,B-13, B-14,B-17,B-21,B-22, B-23,B-24,B-25,B-26	B-27,B-28,B-29,B-30, B-31,B-34,B-35,B-37, B-38,B-41,B-44,B-45, B-46,B-48,B-51,B-53, B-55,B-57,B-58,B-59	B-60,B-65,B-66,B-67, B-69,B-70,B-76,B-77, B-82,B-83, 84,B-86, B-88, -89,B-92,B-94,	C-06,C-07,C-08,C-14, C-15C-17,C-18,C-19, C-22,C-23,C-25,C-26, C-27,C-29,C-32,C-34, C-36,C-37,C-38,C-40	C-41,C-44,C-45,C-48, C-51,C-52,C-53,C-55, C-56,C-57,C-58,C-59, C-60,C-63,C-64,C-69, C-70,C-71,C-72,C-75, C-78,,C-79,C-80

Poster Session 2

	Area 7	Area 8	Area 9	Area 10	Area 11	Area 12
	(Session D/E)	(Session F)	(Session F)	(Session F)	(Session G)	(Session H)
Chairs: Dr. Wenbin Chen Dr. Zupeng Zhou	D-02,D-03,D-04,D-05 D-08,D-09,D-10,E-05 E-06,E-08,E-12,E-13, E-15,E-19,E-24,E-25, E-27,E-29,E-30,E-31, E-32,E-34, E-35	F-04,F-06,F-08,F-104, F-106,F-109,F-11,F-12, F-14,F-15,F-18,F-19, F-23,F-24,F-25,F-29, F-30,F-31,F-32	F-33,F-34,F-35,F-36, F-39,F-40,F-41,F-46 F-47,F-48,F-49,F-52, F-54,F-57,F-59,F-61, F-62,F-63,F-64,F-66	F-67,F-68,F-70,F-72, F-74,F-78,F-81,F-82, F-83,F-84,F-86,F-88, F-89,F-90,F-91,F-94, F-96,F-99	G-02,G-04,G-05,G-08, G-11,G-12,G-15,G-16, G-18,G-19,G-22,G-26, G-27,G-28,G-30,G-31, G-33,G-34,G-36, G-40, G-43,G-46	H-01, H-05,H-07, H-11,H-12,H-14, H-15,H-18,H-22, H-23

ORAL SESSIONS

Note：Only the contact information of the first author is provided because of the length limitation of the conference program.

Session1: Advanced Packaging & System Integration

Date	**Wednesday, August 15, 2012**
Time	**8:00AM~9:40AM**
Venue	**Room C**
Chairs	**Prof. Yufeng Jin** *Peking University, China* **Dr. Wei Koh** *Pacrim Technology, CA, USA*

A-16 8:00-8:20
Effect of Additives on Copper Electroplating Profile for TSV Filling
Yunhui ZHU, Yuan BIAN, Xin SUN, Shenglin MA, Qinghu CUI, Xiao ZHONG, Jing CHEN1, Min MIAO, Yufeng JIN
Peking University, China.

A-18 8:20-8:40
Void free filling of TSV vias by bottom up copper electroplating for wafer level MEMS vacuum packaging
Chunlin Xu,Xuefang Wang,Yuzhe Wang,Minghai Xu,Chang Hu,Sheng Liu
Huazhong University of Science & Technology, China

A-19 8:40-9:00
Patterned Die-To-Die Thin Film Bonding for 3D Chip Stacks with Integrated Microfluidic Cooling
YassirMadhour, Thomas Brunschwiler, Mario El Kazzi, John Richard Thome, Bruno Michel
Heat and Mass Transfer Laboratory, Swiss Institute of Technology, Switzerland

A-23 9:00-9:20
Comprehensive Analysis of Thermal Mechanical Stress induced by Cu TSV and its Impact on Device Performance
Chongshen Song, Ran He, Daquan Yu, Lixi Wan
Institute of Microelectronics,Chinese Academy of Sciences, China

A-36 9:20-9:40
Thermal Measurement Method for Multi-Chip Packages
GOO FU TAT , LEE HAN MENG@EUGENE LEE , GEE KOK PENG Advance Package Development Group
Texas Instruments Malaysia, Malaysia.

Session2: Packaging Materials and Processes

Date	**Wednesday, August 15, 2012**
Time	**8:00AM~9:40AM**
Venue	**Room G**
Chairs	**Prof. Mingliang Huang** *Dalian University of Technology, China* **Dr. Hengyun Zhang** *Dowcorning, China*

B-01 8:00-8:20
Inkjet Printing of Silver Nano Particles doped PEDOT:PSS Thin Film
ZhaotingXiong, Changqing Liu, Xianglin Zhang
LoughboroughUniversity, UK

B-19 8:20-8:40
Oxidation and Corrosion of Au/Al and Cu/Al in Wire bonding Assembly
TeckKheng Lee, C.D Breach, Wee Ling Chong and ChweeSimGoh
ITE College Central, Singapore

B-56 8:40-9:00
Effects of Copper Plating Thickness of Ni/Fe Alloy Leadframe on the Thermal Performance of Small Outline Transistor (SOT) Packages
Weiqiang Li, Haibin Chen, Jiale Han, KeXue, Fei Wong, Ivan Shiu, Guangxu Cheng, Jingshen Wu
Hong Kong University of Science and Technology, Hong Kong

B-72 9:00-9:20
Development of Flexible Cu-MWCT Composite Thin Film for Functional Applications
R. Manu
Electroplating Metal Finishing Technology DivisionCentral, INDIA

B-73 9:20-9:40
Underfill Selection for Large Body (50x50mm) Lidded Flip Chip BGA Package with Low-K 40nm Pb-free Bumps
Peng SUN, Vivian ZHANG, Rocky XU, Tonglong ZHANG
STATS ChipPAC (Shanghai) Co., Ltd.China

Session3:Packaging Design & Modeling

Date	**Wednesday, August 15, 2012**
Time	**8:00AM~9:40AM**
Venue	**Room D**
Chairs	**Prof. Jingsong Zhang** *Shanghai University, China* **Dr. Xiujuan Zhao** *Philips, Netherlands*

C-01 8:00-8:20
Comparison of copper, silver and gold wire bonding on interconnect metallization
Hu Guojun
East China Research Institute of Electronic Engineering 199 Xiangzhang Avenue, China

C-02 8:20-8:40
Impact of Boundary Conditions, Glass Fiber Orientation and Stress-Free Temperature on the Performance of a Plastic-Enclosed Electronic Product in a Thermal Cycling Environment
Shrikant N. Bhadri
Delphi Electronics & Safety Technical Center India, KalyaniPlatina, EPIP, Phase II Whitefield, INDIA

C-09 8:40-9:00
Thermal Modeling and Analysis of High Power Semiconductor laser Arrays
Zhiyong Zhang, Pu Zhang, Xiaoning Li, LinglingXiong, Hui Liu, ZhiqiangNie, Zhenfu Wang, and Xingsheng Liu
Xi'an Institute of Optics and Precision Mechanics, China

C-11 9:00-9:20
Design of Die-Pad on Exposed Substrate (DOES)Leadframe Package for DDR3 Interface Applications
Nansen Chen
MediaTekInc.,Taiwan, China

C-16 9:20-9:40
Interfacial Delamination and Reliability Design of Exposed Pad Packages
XIA Guofeng, QIN Fei, ZHU Wenhui, GAO Cha, MA Xiaobo
Beijing University of Technology, China

Session4: Packaging Design & Modeling

Date	**Wednesday, August 15, 2012**
Time	**8:00AM~9:40AM**
Venue	**Room E**
Chairs	**Dr. Hua Lu** *Greenwich University, UK* **Prof. Xingping Zhang** *SCUT, China*

C-05 8:00-8:20
TSV Modeling and Thermal Analysis Based on 3D Package
TianWenchao, Wang Wenlong, Wang Hongming
Xidian University, China

C-24 8:20-8:40
Mechanical reliability characterization of 3D package
Hiroshi Nakaido, Takuya Hatao
Sumitomo Bakelite Co., Ltd JAPAN

C-30 8:40-9:00
Warpage Analysis on Package-on-Package (PoP) for Package Stacking Process
Minshu Zhang, An Xie, Yu Chen and Yifei Huang
Xiamen University of Technology, China

C-76 9:00-9:20
Optimization of Electronic Packaging Structure Taking into Account of Its Life Cycle Energy Consumption and Environmental Pollution
Z. P. Zhou, M. Cai, D. G. Yang , W. B. Chen
Guilin University of Electronic Technology, China

C-77 9:20-9:40
Millimeter-wave Performance of Various Interconnections Used for Si-based IC Packaging Technologies
Jie Cui, Qidong Wang, Guidotti.Daniel, Liqiang Cao, Lixi Wan
Institute of Microelectronics, Chinese Academy of Sciences,China

Session5: Packaging Materials and Processes

Date	**Wednesday, August 15, 2012**
Time	**8:00AM~9:40AM**
Venue	**Room F**
Chairs	**Dr. Daniel Lu** *Henkel, China* **Prof. Liangliang Li** *Tsinghua University, China*

B-10 8:00-8:20
Mechanism of Low Temperature Cu-In Solid-Liquid Interdiffusion Bonding in 3D Package
YanhongTian, Ning Wang, Yang Li, Chunqing Wang
Harbin Institute of Technology, China

B-39 8:20-8:40
The Influences of Grain Size Distributions on Thermal-Stresses in Cu-TSV
Yucheng Ma, Zhiheng Huang, Zhiyong Wu, Dong Wu and Yong Zhang
Sun Yat-sen University, China

B-85 8:40-9:00
Copper Chemical Mechanical Polishing and Wafer Thinning with Temporary Bonding for Through Silicon Via Interconnect
Ziyu LIU, Jian CAI, Qian WANG, Tao WANG, Tiwei WEI, Li LI
Tsinghua University, China

B-91 9:00-9:20
A Quick Turn Packaging Solution and its Application
Han Guo, JianCai, YuanyuanPu, Yu Chen, QianWang, Zhi Deng, Jing Jiang, Lingwen Kong
Tsinghua University,China

E-22 9:20-9:40
A Thick Film Accelerometer based on LTCC-Technology
ShichaoGuo, Min Miao, Runiu Fang, Duwei Hu, Yufeng Jin
Peking University,China

Session6: Quality & Reliability

Date	**Wednesday, August 15, 2012**
Time	**8:00AM~9:40AM**
Venue	**Room B**
Chairs	**Prof. Chris Bailey** *University of Greenwich, UK* **Prof. Fu Guo** *Beijing University of Technology, China*

F-02 8:00-8:20
Cell Balancing Technology in Battery Packs
Laura Yang, Eden W. M. Ma, Michael Pecht
City University of Hong Kong, Hong Kong, China

F-20 8:20-8:40
Reliability experiment of high power cm-bar arrays
Lu Guo-guang, Lei Zhi-feng, Huang Yun, En Yun-fei
The Fifth Electronics Research Institute of Ministry of Industry and Information Technology, China

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F-42 8:40-9:00
Process Control in Plasma Decapsulation: Preventing Damage to the Copper Wire Bonds & Controlled Removal of Si3N4 Passivation Layer
J. Tang, J.B.J. Schelen, and C.I.M. Beenakker
Delft University of Technology, the Netherlands

F-55 9:00-9:20
Non-destructive testing of through silicon vias by using X-ray microscopy
Xiangmeng Jing, Daquan Yu, Wei Wang, Guoqing Yu, Lixi Wan
Institute of Microelectronics, Chinese Academy of Sciences, China.

F-60 9:20-9:40
Failure Analysis of Assembly Defect with IR-OBIRCH from Backside
Li Tian, Miao Wu, Chunlei Wu, Diwei Fan, Gaojie Wen, Dong Wang
Product Analysis Engineer of Quality Department in Freescale Semiconductor (China) Limited, China

Session7: Emerging Technologies

Date	**Wednesday, August 15, 2012**
Time	**8:00AM~9:40AM**
Venue	**Room H**
Chairs	**Dr. Andy Tseng** *ASE, USA* **Prof. Jintang Shang** *Southeast University, China*

H-04 8:00-8:20
Experimental and Numerical Investigations on the Performance and Reliability of CNT Fins for Micro-Cooler
Yan Zhang, Hui-fengLv, Jing-yu Fan, Di Jiang, Johan Liu
Shanghai University, China

H-13 8:20-8:40
Mechanical Strength and Interface Characteristics of Glass-to-Glass Laser Bonding using Glass Frit
Zunmiao Chen, Yuneng Lai, Lianqiao Yang, Jianhua Zhang
Shanghai University, China

H-16 8:40-9:00
Influence of Strains on the Optical Properties of Non-polar and Semi-polar Gallium Nitride Based LEDs
Han Yan,ZhiyinGan , Sheng Liu
Huazhong University of Science and Technology, China

H-19 9:00-9:20
A Nanostructure Patterned Heat Spreader for On-Chip Thermal Management of High-Power LEDs
Zhen Sun, Xiaodan Chen, HuiheQiu
The Hong Kong University of Science &Technology,Hong Kong, China

H-21 9:20-9:40
An Effective Prediction Method for LED Lumen Maintenance
H. B. Fan, X. P. Li, J. X. Shen, M. Chen,
Philips Lighting, Philips (China) Investment Co.Ltd, Philips Innovation Campus Shanghai,China

Session8: Advanced Packaging & System Integration

Date	**Wednesday, August 15, 2012**
Time	**10:45AM~12:30AM**
Venue	**Room C**
Chairs	**Dr. Wenhui Zhu** *Tian Shui Hua Tian Technology Co., Ltd, China* **Dr. Hong Xie** *Intel, USA*

Keynote

A-30 10:45-11:10
Film assisted technology for the advanced encapsulation of MEMS/sensors and LEDs
Lingen Wang
Boschman Technologies B.V.Stenograaf 3, 6921 EX DUIVEN, the Netherlands

A-06 11:10-11:30
Enhancing Overall System Functionality and Performance with the Right Packaging Solutions
Nozad Karim, Yida Zou, Shengmin Wen
Amkor Technology, Inc.China

A-35 11:30-11:50
Low temperature Al based wafer bonding using Sn as intermediate layer
Zhiyuan Zhu, Min Yu,Yingwei Zhu, Peiquan Wang, Chenchen Liu, Wei Wang, Min Miao, Jing Chen, Yufeng Jin
Peking University,China

A-41 11:50-12:10
Development of Advanced Fan-out Wafer Level Package (embedded Wafer Level BGA) Packaging
Yonggang Jin, Jerome Teysseyre, Xavier Baraton,S.W. Yoon, Yaojian Lin and Pandi C. Marimuthu
STMicroelectronics, Singapore

A-46 12:10-12:30
Dissipating Heat from Hot Spot Using a New Nano Thermal Interface Material
Shuangxi Sun, Wei Mu, Yan Zhang, Björn Carlberg, Lilei Ye and Johan Liu
Key State Laboratory for New Displays & System Applications and SMIT Center, Shanghai University, China

Session9: Packaging Materials and Processes

Date	**Wednesday, August 15, 2012**
Time	**10:45AM~12:30AM**
Venue	**Room G**
Chairs	**Dr. Amar Mavinkurve** *NXP,The Netherlands* **Prof. Yanhong Tian** *Harbin Institute of Technology, China*

Keynote

B-71 10:45-11:10
Liquid Optically Clear Adhesives for Display Applications
Dr. D. Lu, Dr. J. Wang, Dr. C. Li, J. Yuan, J. Sawanobori, Dr. J. Lin, A. Litke, M. Levandoski
Henkel Corporation (China), Shanghai, China

B-15 11:10-11:30
Low-Temperature Sintering of Nanoscale silver Paste for Double-Sided Attaching 9×9 mm2 Chip
JiaoyuanLian, Yunhui Mei, Xu Chen1, Xin Li, Gang Chen, Keqin Zhou
Tianjin University, China

B-64 11:30-11:50
Silver-based Thermal Interface Materials with Low Thermal Resistance
Hui Yu, Rui Zhang, Liangliang Li, Xiaofei Mao, Hongda Du
Tsinghua University,China

B-81 12:10-12:30
Solder Extrusion Solution and Mold Adhesion to Die Surface Improvement with PI Isolation Design for FCOL Exposed Die Technology
Teck Siang Lim, CH Cheong, SH. Tan,
Texas Instruments Malaysia, Malaysia

B-87 12:10-12:30

Study on Short Time Interfacial Reactions between Sn-3.0Ag-0.5Cu Solder Balls and ENEPIG Pads
Fan Yang, Mingliang Huang, Ning Zhao
Dalian University of Technology, China

Session10: Packaging Design & Modeling

Date	**Wednesday, August 15, 2012**
Time	**10:45AM~12:30AM**
Venue	**Room D**
Chairs	**Dr. Yong Liu** *Fairchild, USA* **Dr. Qiang Wang** *Cisco Systems, Inc., China*

Keynote

C-81 10:45-11:10
Modeling of Delamination in IC Packages
Andrew A. O. Tay
National University of Singapore, Singapore

C-04 11:10-11:30
Parameterized Modeling and Thermal Analysis of High-power LED package with GMSH and GetDP
Dai Weifeng, Li Yuesheng, Rumao; Zhou Yinyuan, Li Shuzhi, Ma Kejun
Fudan University, Shanghai

C-31 11:30-11:50
A Dynamic Model for Analyzing the Motion of Molten Solder During Self-Assembly
Lei Yang, Chunqing Wang, Wei Liu, YanhongTian
Harbin Institute of Technology, China

C-42 11:50-12:10
Modeling and Simulation of a Micromachined Gyroscope Using Differential Frequency Approximate Match Method
Chang Hu,Xuefang Wang, and Sheng Liu
Huazhong University of Science & Technology, China

C-54 12:10-12:30
Hybrid Modeling and Analysis on the Interfacial Characteristics of Cu/Al Interface Structures in IC Packaging with Wire Bonding
Liqiang Zhang, Dongjing Liu, Min Chen, FangweiXie, Xingang Yu, Xifu Song, Tao Xi, YanfangZhao,Ping Yang
Jiangsu University, China

Session11:Emerging Technologies

Date	**Wednesday, August 15, 2012**
Time	**10:45AM~12:30AM**
Venue	**Room E**
Chairs	**Prof. James Cai** *Tsinghua University, China* **Prof. Xuejun Fan** *Prof. of Lamar University, USA*

Keynote

H-24 10:45-11:10
The Trend and Innovation of IC Packaging
Yifan Guo
ASE Assembly & Test (Shanghai) Limited. China

H-03 11:10-11:30
Wet etching of vias for wafer level packaging of GaAs based image sensor
Wang Shuangfu, Han Mei, XuGaowei, Luo le
Shanghai Institute of Microsystem and Information Technology, Chinese Academy of Sciences,China

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H-06 11:30-11:50
A Steel Pressure Sensor Based on Micro-fused Glass Frit Technology
Zongyang Zhang, Xingguo Cheng, XulongGui, Xiaojie Chen, Sheng Liu
Huazhong University of Science and Technology, China

H-09 11:50-12:10
A Novel Lens for High-luminance LED Direct Backlight
ChuangangJi, Mengxiong Zhao, Run Hu, Tao Peng, Zong Qin and Sheng Liu
Wuhan National Laboratory for Optoelectronics, China

H-10 12:10-12:30
Sinter-Attach of High-Temperature Sensors for Deep-Drilling Monitoring
Julian Kähler, Andrej Stranz, Erwin Peiner, and Andreas Waag
Institute of Semiconductor Technology,Germany

Session12:Advanced Manufacturing Technologies & Packaging Equipment

Date	**Wednesday, August 15, 2012**
Time	**10:45AM~12:30AM**
Venue	**Room F**
Chairs	**Dr. Liqiang Cao** *IMECAS, China* **Dr. Liang Tang** *The 45th research institute of CETC, China*

Keynote

E-26 10:45-11:10
The Challenge of Grinding Technology for TSV and BSI Device
Liew Loy Seng
DISCO HI-TEC CHINA CO, LTD., China

E-01 11:10-11:30
Carrierless thin wafer handling for 3D integration
Zhicheng LV, Jiaojiao Yuan, Jing Fang, Liang Yan, Xuefang Wang, ShengLiu
Huazhong University of Science and Technology,China

E-03 11:30-11:50
TSV Interposer with Au-Au Diffusion Bonding Technology for Wafer Level Fabrication
Xiao Chen, Jiaotuo Ye, GaoweiXu, Le Luo
Shanghai Institute of Microsystem andInformation Technology, Chinese Academy of Sciences, China

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E-11 11:50-12:10
Introducing FCA, a New Alloy for Power Systems on a Chip and Wafer Level Magnetic Applications
Trifon Liakopoulos, Amrit Panda, Matt Wilkowski, Ashraf Lotfi,
Enpiron Inc,　USA

E-07 12:10-12:30
Advanced Packaging Stepper for 300mm Wafer Process
Zhou Chang, Li Zhongyu, Zhang Lei
Shanghai Micro Electronics Equipment CO, LTD，China

Session13: Quality & Reliability

Date	**Wednesday, August 15, 2012**
Time	**10:45AM~12:30AM**
Venue	**Room B**
Chairs	**Prof. Leo Ernst** *Delft University of Technology, Netherlands* **Prof. Miaosong Ma** *GUET,China*

Keynote

F-110 10:45-11:10
Power Electronics Packaging Technology – Current Status and Future Challenges
Dr. Chris Bailey
University of Greenwich

F-03 11:10-11:30
Influence of Parameter Initialization on Battery Life Prediction for Online Applications
Yinjiao Xing, Eden W. M. Ma, K-L. Tsui, Michael Pecht
Centre for Prognostics and System Health Management (PHMC), Hong Kong, China

F-45 11:30-11:50
Isothermal Low Cycle Fatigue Behavior of Nano-Silver Sintered Single Lap Shear Joint
Xin Li, Xu Chen, Guo-Quan Lu
Tianjin University, China

F-53 11:50-12:10
Three-Dimensional Finite Element Analysis of Mechanical and Fracture Behavior of Micro-Scale BGA Structure Solder Joints Containing Cracks in the Intermetallic Compound Layer
Hong-Bo Qin, Xing-Ping Zhang
South China University of Technology, China

F-100 12:10-12:30
A Study of Ultrasonic Bonding Flip Chip Process and its Reliability for Low Temperature Interconnection
Yo-Han Song, Sang-woonSeo, and Gu-Sung Kim
Kangnam University, Korea

Session14: Solid State Lighting Packaging and Integration

Date	**Wednesday, August 15, 2012**
Time	**10:45AM~12:30AM**
Venue	**Room H**
Chairs	**Prof. Jianhua Zhang** *Shanghai University, China* **Dr. Haibo Fan** *Philips Shanghai, China*

Keynote

G-48 10:45-11:10
2D/3D Wafer Level Heterogeneous Integration for SSL Module
Dr. Cadmus Yuan
Stake Key Laboratory of Solid-State Lighting, China

G-03 11:10-11:30
Design of One Novel LED Airport Runway Centerline Light Suitable for Various Applications
ChuangangJi, Mengxiong Zhao, Tao Peng, Fei Wang, Cao Li, and Sheng Liu
Huazhong University of Science and Technology, China

G-07 11:30-11:50
Thermal Design of a LED Multi-chip Module for Automotive Headlights
Qi Lin, Wang Chunqing, TianYanhong
Harbin Institute of Technology, China

G-24 11:50-12:10
Angular Color Uniformity Enhancement of Phosphor Converted White LEDs Integrated with Compact Modified Freeform TIR Components
Shuiming Li, Kai Wang, Fei Chen, Shuang Zhao, Zhili Zhao, and Sheng Liu
Wuhan National Laboratory for Optoelectronics, China

G-41 12:10-12:30
Determination of Driving Current of RGB LEDs for White Light Illumination
Huishan ZHAO and S. W. Ricky Lee
HKUST LED-FPD Technology R&D Center at Foshan, China

Session 15: Advanced Packaging & System Integration

Date	**Wednesday, August 15, 2012**
Time	**13:30 ~15:15**
Venue	**Room C**
Chairs	**Dr. Yifan Guo** *R&D Director, Skyworks, USA* **Dr. Shan Lei** *IBM, USA*

Keynote

A-43 13:30-13:55
New Development of Contact and Proximity Mask Aligner for 3D Application
Li GONG
SUSS MicroTec (Shanghai) LTD.China

A-04 13:55-14:15
Synthesis of Multiferroic Ba0.7Sr0.3TiO3-Based Thin Films for Memory Devices by Chemical Solution Deposition
Bin Li, Chunqing Wang, Wei Liu, Ying Zhong, Zhixin Zhang
Harbin Institute of Technology, China

A-42 14:15-14:35
High Temperature Resistant Joint Technology for SiC Power Devices Using Transient Liquid Phase Sintering Process
Fengqun Lang, Hiroshi Yamaguchi, Hiroshi Nakagawa, Hiroshi Sato
Advanced Power Electronics Research Center (ADPERC), National Institute of Advanced Industrial Science and Technology (AIST), Japan.

A-39 14:35-14:55
Experiments of Adhesive Distribution Based on Two-phase Flow Dispensing Technology
Guiren Huang, Jinsong Zhang and Jianhua Zhang
Shanghai University, China

A-40 14:55-15:15
Formic acid with Pt catalyst combined treatment process for Cu low temperature bonding
Wenhua Yang, MasatakeAkaike, MasahisaFujino and TadatomoSuga
The University of Tokyo, Japan

Session 16: Packaging Materials and Processes

Date	**Wednesday, August 15, 2012**
Time	**13:30 ~15:15**
Venue	**Room G**
Chairs	**Prof. Ming LI** *Shanghai Jiaotong University, China* **Prof. Changqing Liu** *Loughborough University, UK*

Keynote

B-52 13:30-13:55
Spontaneous tin whisker growth from rare-earth tin alloys
Zhi-Quan Liu and Cai-Fu Li
Institute of Metal Research, Chinese Academy of Sciences, China

B-04 13:55-14:15
Thermal Performance Improving for Small Form Factor BGA
Simon Wang, Scott Chen, Coltrane Lee, Robin Cheng, TS Chen, Andy Tseng
ASECL, Inc., Taiwan, China

B-08 14:15-14:35
Research on Electroplating Process of SiC/Al Electronic Packaging Composites
WANG Kaikun, DU Jianquan, YANG Lei
University of Science and Technology Beijing,China

B-61 14:35-14:55
SuperiorDrop Test Performance of BGA Assembly Using SAC105Ti Solder Spheres - Virtual fracture analysis
Weiping Liu and Ning-Cheng Lee, SiminBagheri, PolinaSnugovesky, Jason Bragg, Russell Brush, and Blake Harper
Indium CorporationClinton, US

B-75 14:55-15:15
Ultra Thin Die Assembly Process for High Power RF Applications
M. Asis, A. Xiao, E. Del Rosario, F. Rabe, H. Thoonen
NXP Semiconductors, The Netherlands

Session 17: Packaging Design & Modeling

Date	**Wednesday, August 15, 2012**
Time	**13:30 ~15:15**
Venue	**Room D**
Chairs	**Prof. Andrew Tay** N*ational University of Singapore* **Dr. An Xiao** *NXP, the Netherlands Intel, China*

Keynote

C-49 13:30-13:55
ExperimentallyValidated Analysis and Parametric Optimizationof Monotonic 4-point Bend Testing of Advanced BGA Packages
Qiang Wang, Weidong Xie, Mudasir Ahmad
Cisco Systems, Inc.China

C-12 13:55-14:15
Study of Magnetic Properties for Iron Core in A Closed Loop Hall Current Sensor
Xingguo Cheng, Zongyang Zhang, Fuan Li, Sheng Liu
Huazhong University of Science & Technology, China

C-28 14:15-14:35
Theoretical study on power factor of Si/Ge multi-layer thermoelectric micro-cooler
Leilei Han, Chunqing Wang, Chunjin Hang
Harbin Institute of Technology, China

C-68 14:35-14:55
Analysis and Reduction of Simultaneous Switching Noise in Multi-layer Package Substrate
SUN Ling, WANG Shenglong, SUN Haiyan, and YANG Lingling
Nantong University,China

C-73 14:55-15:15
Study of the effect on die backside stress from coating of a nitride layer
J. Liao, S. H. Liu, Y. T. Yu, Y. Lin, G. Jin, G. Huang, Z. Z. Fu
University of Electronic Science & Technology of China, China

Session 18: Solid State Lighting Packaging and Integration

Date	**Wednesday, August 15, 2012**
Time	**13:30 ~15:15**
Venue	**Room E**
Chairs	**Prof. Yuhua Chen** *PKU-SHRIME, China* **Prof. Kailin Pan** *GUET,China*

Keynote

G-21 13:30-13:55
A Method to Design Freeform Lens for Uniform Illumination in Direct-Lit LED Backlight with High Distance-Height Ratio
Run Hu, HuaiZheng, ChuangangJi, Sheng Liu, XiaobingLuo
Huazhong University of Science and Technology, China

G-06 13:55-14:15
Research on eutectic bonding processes and interfacial damage features in high power LED package
W. Liu, and P. Jin.
Shenzhen Graduate School of Peking University,China

G-23 14:15-14:35
Angular Color Uniformity Improvement for Phosphor-converted White Light-Emitting Diodes by Optimizing Remote Coating Phosphor Geometry
HuaiZheng, Xing Fu, Run Hu, Sheng Liu and XiaobingLuo
Huazhong University of Science and Technology, China

G-32 14:35-14:55
Rapid thermal cycling by eddy current inducted heating on optical property and thermostability of high power LED
Jibing Chen Wei GuoYinong Liu Wenfei Zhang Bing An Yiping Wu
Huazhong University of Science and Technology, China

G-44 14:55-15:15
LED Packaging Trend View with Fine x-ray Imaging Technology
Onishi Tetsuya
Grand Joint Technology Ltd.Hong Kong,China

Session 19: High Density Substrate & SMT

Date	**Wednesday, August 15, 2012**
Time	**13:30 ~15:15**
Venue	**Room F**
Chairs	**Dr. Paul Wang** *Mitac, Tai Wan, China* **Prof. Mingyu Li** *Harbin Institute of Technology, China*

Keynote

D-13 13:30-13:55
Research on Shear creep properties of SAC305 Solder Bumps in Ball Grid Array
Wenfei Zhang, Bing An, Wei Guo, Shen Chai, Yiping Wu
Wuhan National Laboratory of Optoelectronics, China

D-01 13:55-14:15
Investigation of Reflow Soldering under Nitrogen Atmosphere
XulongGui, ZongyangZhong, Ling Xu and Sheng Liu
Huazhong University of Science & Technology, China

D-07 14:15-14:35
Effects of Ni/Ag coating on the wettability of Sn-3Ag-0.5Cu alloy on Cu substrates at different temperatures
Mali Zhao, Jun Shen, Jie Chen, Boyi Wu
Chongqing University , China

D-15 14:35-14:55
Compliant Pin Interconnect Challenging and Reliability after RoHS Exemption
David He, Yu Xiang, DF Chung and Dr. Paul Wang
MiTAC International, Inc., China

F-44 14:55-15:15
Key Failure Modes of Solder Joints on ENIG PCBs and Root Cause Analysis
Yao Bin, ZouYabing
Science and Technology on Reliability Physics and Application of Electronic Component Laboratory, China

Session 20: Quality & Reliability

Date	**Wednesday, August 15, 2012**
Time	**13:30 ~15:15**
Venue	**Room B**
Chairs	**Dr. Jun Wang** *Fudan University, China* **Dr. Jo Caers** *Philips, the Netherlands*

Keynote

F-43 13:30-13:55
Relationship between crack propagation trends and grains in SnAgCu interconnects
C.Q. Wang1,, Y. Zhong 1,, J.F.J.M. Caers2, X.J. Zhao, B.Li2*
Harbin Institute of Technology, China

F-07 13:55-14:15
The effect of Voids on Thermal Conductivity of Solder Joints
Hailong Li, Chunqing Wang, Meng Yang, Ningning Wang, Rong An, YanjunXu
Harbin Institute of Technology, China

F-09 14:15-14:35
The effects of thermal cycling on electromigration behaviors in lead-free solder joints
Zuo Yong, Limin Ma, Lu Yue, Sihan Liu, Fu Guo
Beijing University of Technology, China

F-80 14:35-14:55
Environmental reliability of nano-structured polymer-metal composite thermal interface material
Xiuzhen Lu, MengkeZhuang, Lei Zhang, Lilei Ye and Johan Liu
Shanghai University, China

F-97 14:55-15:15
Statistical Analysis of the Impacts of Refinishing Process on the Reliability of Microelectronics Components
C. Y. Yin, C. Best, C. Bailey, S. Stoyanov, M. O. Alam
University Of Greenwich, UK

Session 21: Quality & Reliability

Date	**Wednesday, August 15, 2012**
Time	**13:30 ~15:15**
Venue	**Room H**
Chairs	**Prof. Dongyan Ding** *Shanghai Jiaotong University, China* **Dr. Jeffrey Lee** *IST, Taiwan, China*

Keynote

F-05 13:30-13:55
Reliability and Failure Analysis of Lithium Ion Batteries for Electronic Systems
Nick Williard, Wei He, Dr. Michael Osterman, Professor. Michael Pecht
University of Maryland, USA

F-13 13:55-14:15
A Global Supply Chain Collaboration to Synergize Technology Achievement for Green QFN Qualification
Jeffrey ChangBing Lee, Graver Chang, Cherie Chen,ChengChih Chen ,Jandel Lin
IST-Integrated Service Technology,Taiwan, China

F-21 14:15-14:35
Investigation of Palladium Coverage on Free Air Balls of Palladium-Coated Copper Wires
HaonanPu; Tawei Lo; Techun Wang; Jiaji Wang
Fudan University, China

F-27 14:35-14:55
Effects of Micro Stamping Process on Optical Performance of Lead Frame LED Module
Tao Peng, Zhaohui Chen, ChuangangJi,FeiWang, KaiWang, Sheng Liu,
Huazhong University of Science & Technology,China

F-79 14:55-15:15
Influences of the Initial Thickness of the Interfacial IMC Layer on Electromigration Behavior of Cu/Sn/Cu Microscale Joints
Wu Yue, Hong-Bo Qin, Min-Bo Zhou, Guang-Sui Xu, Shan-Shan Cao, Xiao Ma, Xin-Ping Zhang
South China University of Technology, China

Session 22: Quality & Reliability

Date	**Wednesday, August 15, 2012**
Time	**16:15 ~18:10**
Venue	**Room C**
Chairs	**Prof. Chunqing Wang** *Harbin Institute of Technology, China* **Prof. Xiuzhen Lu** *Shanghai University, China*

Keynote

F-111 16:15-16:40
Tin whisker Growth on Electroplating Sn Films
Dongyan Ding
Shanghai Jiao Tong University, China.

F-22 16:40-17:00
Experimental and FEM Study of Hygro-Thermo Reliability of FCPBGA
Li Weijia, Gong Yonghui, and Su Fei
Institute of Solid Mechanics, BeiHang University, China

F-38 17:00-17:20
A Numerical Method on Thermal and Vapor Pressure Effects on Void Growth in Electronic Packaging
Yue Mei, Xiaoqing Zhang, XiangxinZeng
South China University of Technology， China

F-58 17:20-17:40
Reliability evaluation of GaN based light-emitting diodes under high-temperature stressing
Meijuan Fu, Luqiao Yin, FeiWeng, Lianqiao Yang, Jianhua Zhang
Shanghai University, China

F-98 17:40-18:00
Equivalent moisture distribution calculation for fast moisture sensitivity level analysis (MSLA)
Xiaosong Ma, D.G.Yang and G.Q.Zhang
Guilin University of Electronic Technology, China

Session 23: Packaging Materials and Processes

Date	**Wednesday, August 15, 2012**
Time	**16:15 ~18:10**
Venue	**Room G**
Chairs	**Dr. Jerry Lu** *Intel, USA* **Prof. Dayong Gui** *Shenzhen University, China*

Keynote

B-95 16:15-16:40
Solder Volume Effect on Interfacial Reaction of Sn-3.0Ag-0.5Cu Solder Balls - Experiment & Simulation
Mingliang Huang
Dalian University of Technology, China

B-20 16:40-17:00

Preparation of antioxidative nano copper pastes for printed electronics application
Dunying Deng, Tianke Qi, Yuanrong Chen, Yunxia Jin, Fei Xiao
Fudan University, China

B-68 17:00-17:20
Intermetallic compound formation in the interface between SAC305 solder and Cu-xZn-yNi substrates
Ji Hwan Hwang, Young Min Kim, Tae Jin Kim, Young-Ho Kim, and Won Jong Lee
Hanyang University, Korea

B-80 17:20-17:40
Analysis of new lead-free solder alloy microstructure
GengZhiting , Heqing, Cheng Guohai, Ma Jusheng
North China Electric Power University,China

C-74 17:40-18:00
Simulation of IMC Layer Growth and Cu Consumption in Sn-Ag-xCu/Cu Solder Joints during Reflow
Xiaohui Wang, Mingliang Huang, Fan Yang, Ning Zhao
Dalian University of Technology, China

B-79
Suppressing effect of 1 wt.% nano-TiO2 addition into low Ag content Sn-Ag-Cu solder alloy on the intermetallic growth with Cu substrate during isothermal aging
L. C. Tsao, W. T. Huang, M. W. Wu, Sheng-Lung, Su
National Pingtung University of Science &Technology, Taiwan, China

Session 24: Packaging Design & Modeling

Date	**Wednesday, August 15, 2012**
Time	**16:40 ~18:10**
Venue	**Room D**
Chairs	**Prof. Fei Qin** *Beijing University of Technology, China* **Prof. Wenchao Tian** *Xidian University, China*

Keynote

A-21 16:15-16:40
Low Latency Compute Node Architecture Cooled by a Two Phase Fluid Flow
Qidong Wang, Daniel Guidotti, Lixi Wan, Liqiang Cao, Jie Cui, Fujiang Lin, Guang Zhu, Qian Wang, Tianchun Ye,
Institute of Microelectronics,Chinese Academy of Sciences, China

C-43 16:40-17:00
The Influence of Die Tilting on the Thermal Response and Die Attach Stress of a Bottom Exposed Package
Cong Yue, Mingzhen Lu, ZhiqiangNiu
Alpha and Omega Semiconductor, China

C-61 17:00-17:20
Thermo-mechanical characteristics of indium micro-joint under various low-temperature excursions
X.Cheng, C.Liu, V.V. Silberschmidt
Loughborough University, Leicestershire, United Kingdom

C-62 17:20-17:40
Simulation Analysis for Interfacial Failure of A Poymer Sealed MEMS Device
Jing Zhou, Lixi Wan, Fengwei Dai, Xiangmeng Jing, Chongshen Song, Daniel Guidotti, Liqiang Cao, Daquan Yu
Institute of Microelectronics, Chinese Academy of Sciences, Beijing, China

C-65 17:40-18:00
Solder Constitutive Models and Failure CriteriaSelectioninBoard Level Cyclic Bending Simulation
Xiaoqing Li, Xingming Fu, MinyiLou,Jianwei Zhou, Maohua Du and Myungkee Chung
Samsung Semiconductor (China) R&D CO.LTD., China.

Session 25:Packaging Materials and Processes

Date	**Wednesday, August 15, 2012**
Time	**16:15 ~18:10**
Venue	**Room E**
Chairs	**Prof. Fei Xiao** *Fudan University, China* **Dr. Zhiquan Liu** *The Institute of Metal Research, CAS, China*

Keynote

B-78 16:15-16:40
Advanced Underfill Materials
Qiaohong Huang, Tadashi Takano, Rose Guino, Ruihua Li
Henkel Electronic Materials LLC, Irvine

B-32 16:40-17:00
Ultrasonic-induced Deformation Nanostructures in Coarse-grained Aluminum Wires at Room Temperature
HongjunJi , Mingyu Li , and Chunqing Wang
Shenzhen Graduate School, Harbin Institute of Technology, China

B-42 17:00-17:20
TEM study on interface of palladium coated copper wire bonding on aluminum metallization
HuiXu, Ivy Qin, Ashish Shah, Horst Clauberg, Bob Chylak, and Viola L. Acoff
The University of Alabama, U.S.A

B-43 17:20-17:40
Effect of Palladium on Copper Aluminide Intermetallic Growth in Palladium Copper Bonding Wire
Johnny Yeung PH, XuHui, Effie Chew
Heraeus Materials Singapore PteLtd,Singapore

B-90 17:40-18:00
Suppression of Electro Chemical Migration Generation through Forming Parylene Coating and Improving Adhesion Strength between Polyphthalamide Substrate Used for Molded Interconnection Device and Coated Film
Yuji KIMURA, Sanae ISAWA and Mitsuru CHINO
Kogakuin University andMISUZU Industrial Corporation, Japan

Session 26: Advanced Manufacturing Technologies & Packaging Equipment

Date	**Wednesday, August 15, 2012**
Time	**16:40 ~18:10**
Venue	**Room F**
Chairs	**Dr. Li Gong** *SUSS, China* **Prof. Fuliang Wang** *South University, China*

Keynote

E-33 16:15-16:40
A Primer to Applying Real Time Dispatching in Semiconductor Test Operations
Ng Yuh Lin
Applied Materials South East Asia Pte Ltd., Singapore

E-10 16:40-17:00
Integrated Wafer Thinning Process with TSV Electroplating for 3D Stacking
Cao Li, Shengjun Zhou, Run Chen, Tao Peng, Xuefang Wang, Sheng Liu
Huazhong University of Science & Technology, China

E-17 17:00-17:20
An improved mean filter algorithm based on gray-scale difference and its application in X-ray detection system
PengWang,WeiwenLv,Wenfei Zhang, Bing An,Yiping Wu
HuazhongUniversity of Science & Technology, China

E-18 17:20-17:40
Challenges and Feasibility of Copper Wire bonding for Non-hermetic Packaging
Jing-en Luan
STMicroelectronics PteLtd.,China

E-28 17:40-18:00
Topology optimization of Swing-arm in LED Die Bonder
Meifa Huang, Dawei Zhang, Zhiyue Wang, WeichuangQuan
School of Mechanical and Electrical Engineering, China

Session 27: Quality & Reliability

Date	**Wednesday, August 15, 2012**
Time	**16:15 ~18:10**
Venue	**Room B**
Chairs	**Dr. Ningcheng Lee** *Indium, USA* **Dr. Boyi Wu** *Flextronics, China*

Keynote

F-37 16:15-16:40
Fracture Properties of Cu-EMC Interfaces at Harsh Conditions
M.Sadeghinia, K. M. B. Jansen, L. J. Ernst, H. Pape
Delft University of Technology, the Netherlands

F-10 16:40-17:00
Microstructure and Mechanical Properties of Lead-free PV Ribbon
Xuewei Wu, Dongyan Ding, Bai Han, Dali Mao
Shanghai Jiao Tong University,China

F-50 17:00-17:20
Dimensional change in micro-scale solder joint induced by evolution of IMCs
Zhiwen Chen, Bing An, Yiping Wu, Changqing Liu, Rob Parkin
Huazhong University of Science and Technology, China

F-107 17:20-17:40
Effects of Cooling Rate and Solder Volume on the Formation of Large Ag3Sn Plates inSn-Ag Based Solder Joints
Qiang Zhou, Mingliang Huang, Ning Zhao, Zhijie Zhang
Dalian University of Technology, China

F-108 17:40-18:00
Abnormal phase segregation induced by void formation in Cu/Sn-58Bi/Cu solder joint during current stressing
Hongwen He, GuangchenXu, Fu Guo
Institute of Microelectronics of Chinese Academy of Sciences, China

Session 28: Solid State Lighting Packaging and Integration

Date	**Wednesday, August 15, 2012**
Time	**16:15 ~18:10**
Venue	**Room H**
Chairs	**Mr. T.ONISHI** *GJ Tech, Hong Kong, China* **Prof. Minshu Zhang** *XMUT, China*

Keynote

G-47 16:15-16:40
An Effective Prediction Method for LED Lumen Maintenance
H. B. Fan, X. P. Li, J. X. Shen, M. Chen,
Philips Lighting, Philips (China) Investment Co.Ltd, Philips, China

G-10 16:40-17:00
Study on Mechanical Behavior and Interfacial Strength of YAG Phosphor-Filled Silicone
Xing Chen, Simin Wang, Fei Chen, HuaiZheng, Sheng Liu
Huazhong University of Science and Technology, China

G-35 17:00-17:20
Research on thermal shock test for the optical and electrical properties of white LEDs
Yinong Liu, Jibing Chen, Wei GuoWenfei, ZhangYiping,WuBing An
Huazhong University of Science & Technology, China

G-38 17:20-17:40
Reliability Analysis Method of LED Luminaries
M. Cai, D. G Yang, H. L Jia, H. Y Tang, S. Koh , C. A Yuan , W. B Chen, G. Q. Zhang
Guilin University Of Electronic Technology,China

G-45 17:40-18:00
Thermal Analysis of High-Powered Devices Using Analytical and Experimental Methods
J.H.L. Ling, A.A.O. Tay[1]andK.F. Choo
National University of Singapore, Singapore

H-20
Direct robust active bonding between Al heat sink and Si substrate
*L. C. Tsao,S. Y. Chang,Meng-Syuan, Huang, C. S. Chen*NationalPingtung University of Science &Technology, Taiwan, China

POSTER SESSION 1

Note: Only the contact information of the first author is provided because of the length limitation of the conference program.

August 15, Wednesday 09:20AM –10:20AM and 14:50 –15:50

Area 1 (Session A) Advanced Packaging & System Integration

A-02
SOS Wafer Cu Pillar Bumping Process Development for Flip Chip Package Application
John, Zhiyuan Yang
Peregrine Semiconductor, USA

A-03
Process Development of a Stacked Chip Module with TSV Interconnection
Xiao Zhong, Shenglin Ma, Yunhui Zhu, Yuan Bian, Xin Sun, Qinghu Cui, Min Miao, Jing Chen, Yufeng Jin
Peking University, China

A-05
The study of testing scenario for a SIP microcomputer
Liangliang Liu, Penglong Jiang, Xiongbo Zhao
Beijing Aerospace Automatic Control Institute, China

A-07
Structural and Compositional Optimization of Advanced Fan-in WLCSPs Base on FEA Simulation
Guo Hong Yan, Qin Shun Jin, Zhang Li, Tan KH, Lai CM
Jiangyin Changdian Advanced Packaging Co., Ltd, China

A-08
Simulation and Modeling of Wafer Level Silicon-Base Spiral Inductor
Bian Xinhai, Guo Hongyan, Zhang Li, KH Tan, CM Lai
Jiangyin Changdian Advanced Packaging Co., Ltd, China

A-09
Anodic bonding for Pyrex 7740 and nitride silicon for wafer level vacuum packaging
Minghai Xu, Xuefang Wang, Yuzhe Wang, Chunlin Xu, Chang Hu, Sheng Liu
Huazhong University of Science & Technology, China

A-10
Development and Thermo-mechanical Stress Analysis of TSVs filling with Sn-based Intermetallics
Ran He, Chongshen Song, Fengwei Dai, Hong Wang, Daquan Yu
Jiangsu R&D Center for Internet of Things, China

A-11
Growth and shear strength of intermetallic compounds in Sn-Ag-Cu solder joints
Jiandong Zhu, Chunqing Wang, Chunjin Hang, Yanhong Tian
Harbin Institute of Technology, China

A-12
Deep wet etching process of Pyrex glass for vacuum packaging
Shuai Shi, Xuefang Wang, Minghai Xu, Yuzhe Wang, Jiaojiao Yuan, Sheng Liu
Huazhong University of Science & Technology, China

A-13
The development of low cost Through Glass Via (TGV) interposer using additive method for via filling
Yu Sun, Daquan Yu, Ran He, Fengwei Dai, Xiaofeng Sun, Lixi Wan
Institute of Microelectronics Chinese Academy of Sciences, China

A-15
A Study of Novel Wafer Level LED Package Based on TSV Technology
Dong Chen, Li Zhang, Ye Xie, KH Tan, CM Lai
Jiangyin Changdian Advanced Packaging CO., LTD, China

A-17
Design and Optimization of a TSV 3D Packaged Pressure Sensor for High Temperature and Dynamic Measurement
Zhenhua Liu , Xian Huang, Zhiyuan Zhu, Jing Chen, Yufeng Jin
Peking University, China

A-22
Implement of a 3D Stacked Module Using Edge-interconnect
Xiongbo Zhao, Penglong Jiang, Liangliang Liu
National Key Laboratory of Science and Technology on Aerospace Intelligent Control, China

A-24
A collaborative design from schematic to layout: based on MCP technology
Maoyun Pan, Fengman Liu, Liqiang Cao, Ziguan Zhou, Yang Li
Institute of Microelectronics of Chinese Academy of Sciences, China

A-26
System Integration for Miniature Node of Wireless Sensor Network (WSN)
Gaowei Xu, Enliang Song, Xiao Chen, Shuangfu Wang, Chunsheng Zhu, Jiaotuo Ye and Le Luo
Chinese Academy of Sciences, Shanghai, China

A-27
Optical Vertical Interconnect and Integration Based on Silicon Carrier
Fengman Liu, Yanbiao Chu, Baoxia Li, Jian Song, Haidong Wang, Tianmin Du, Binbin Yang, Lixi Wan
Institute of Microelectronics of Chinese Academy of Sciences, China

A-29
THz Filters Embedded in LTCC Multi-layer Substrate
Xiaoqing Zhang, Min Miao, Zhensong Li, Yuexia Zhang,Yanzhu Lv, Yating Yao
Beijing Information Science and Technology University., China

A-31
Wafer level Tungsten-Glass Bonding with Photosensitive BCB
Yi SHAN, Nannan LI, Yunhui ZHU, Yiming ZHANG, Suhui CHEN, Jin LUO, Jia HU, Jing CHEN, Yufeng JIN
Peking University, China

A-33
Metal Wafer Bonding for 3D Interconnects and Advanced Packaging
V. Dragoi, E. Pabo, T. Wagenleitner, C. Flötgen, B. Rebhan, and K. Corn
EV Group, DI E. Thallner Str. 1, 4782-St. Florian/Inn, Austria

A-34
Simulation-based Investigation in Effects of Design Parameters on Electrical Characters for a TSV-bump Combination
Runiu Fang, Xin Sun, Min Miao, Yufeng Jin
Peking University, China

A-38
Research On Microsystem Interposer Designer Software With Through Silicon Via
Yanzhu Lv,Min Miao, Xiaofei Wang, Huifen Liu, Xin Sun, Zhensong Li,Yuexia Zhang, Xiaoqing Zhang
Beijing Information Science and Technology University, China

A-38
Research On Microsystem Interposer Designer Software With Through Silicon Via
Yanzhu Lv,Min Miao, Xiaofei Wang, Huifen Liu, Xin Sun, Zhensong Li,Yuexia Zhang, Xiaoqing Zhang
Beijing Information Science and Technology University, China

A-44
Dual-Band Bandpass Filter Design Using Composite Right/Left-Handed Materials
Wang liuping , Wan lixi , Cao liqiang
Institute Of Microelectronics Chinese Academy Of Sciences, China

Area 2 (Session B) Packaging Materials & Processes

B-02
HSOP Package Mold Process Development
Jinmei Liu, Deguo Sun, Junhua Luo, Jinzhong Yao
Freescale Semiconductor (China) Ltd., China

B-03
Interfacial reaction of heat-sink during vacuum and reflow soldering in Space power electronics
Yarong Chen, Meng Yang, Binbin Zhang, and Rong An
Beijing spacecrafts, China

B-05
The comparative study on interfacial IMCs growth of three Cu/SnAgCu/Cu solder joints with Bi and Cr additions during thermal aging
Guokui Ju, Wenzhen Bi, Fei Lin, Yongjiu Han, Xicheng Wei
Shanghai University, China

B-06
Fabrication of interconnected silver flakes for conductive adhesives through dopamine-induced surface functionalization
Yunxia Jin, Jun Yang, Yuanrong Cheng, Fei Xiao
Fudan University, China

B-07
TiO2 Nanoparticles Functionalized Sn/3.0Ag/0.5Cu Lead-free Solder
Manman Rui, Xiuzhen Lu, Si Chen, Lilei Ye and Johan Liu
Shanghai University, China

B-09
A New Thermally Conductive Thermoplastic Die Attach Film
Yajun Duan, Lilei Ye, Huiwang Cui, Johan Liu
Shanghai University, China

B-12
Effects of Sb Addition on Grain Ripening Growth at Interface of Sn-Ag-Cu-xSb/Cu in Wetting Reactions
Y. Tang, Y. C. Pang, J. X. Zhan, G. Y. Li
South China University of Technology, China

B-13
Low Temperature Bonding Method using Cu Micro Cones
Qin Lu, Zhuo Chen, Anmin Hu, Ming Li, Dali Mao
Shanghai Jiao Tong University, China

B-14
Effect of Functionalization of Multi-walled Carbon Nanotubes with 4'-Allyloxy-biphenyl-4-ol on Electrical Conductivity and Mechanical Properties of Silicon Resin Nanocomposites
Xue Gao, Dayong Gui, Wentao Zeng, Weiling Chen, Jianhong Liu
Shenzhen University, China

B-17
Synthesis and Characterization of a Novel Addition Silicone Resin for High Power LED Packaging
Chuanxin He, Wentao Zeng, Xue Gao, Haijuan Zhao, Dayong Gui, Jianhong Liu
Shenzhen University, China

B-21
Carbon Aerogel /Polyaniline Composite as Supercapacitors Packaging Applications
Fengyin Chen, Dayong Gui, Sheng Ding, Yifeng Zhu, Jianhong Liu
Shenzhen University, China

B-22
Electroless plating copper cones on leadframe to improve the adhesion with epoxy molding compound
Wenjing Zhang, Qin Lu, Tao Hang, Ming Li, Dali Mao
Shanghai Jiao Tong University, China

B-23
Benzoxazine-Modified Aluminum Polymer High Dielectric Composites
Yuanrong Cheng, Tianke Qi, Yunxia Jin, Dunying Deng, Fei Xiao
Fudan University, China

B-24
Failure Analysis of the Contamination on the Pins of the SOT Packages
Mao Ru, Yuesheng Li, Fei Xiao, Wenhui Zhu, Jinbing Zhang, Dianlong Liu, Jun Cheng,
Fudan University, China

B-25
The Preparation and Properties of BaTiO3-carbon Nanotube/Polyimide Three-phase Composites by In-situ Polymerization for Flexible Package Circuit
Bo Zhang, Wen Yin, Yuan Lu, Lixi Wan
Institute of Microelectronics Chinese Academy of Sciences, China

B-26
Inverse Analysis of Solder Joint Creep Properties
E. Kamara, H. Lu, C. Bailey
University of Greenwich, 30 Park Row, London, SE10 9LS, UK

Area 3 (Session B) Packaging Materials & Processes

B-27
Wetting of Sn-0.7Cu Solder Alloy on Different Substrates at Different Temperatures
HengGang Yin, Jun Shen, Qin Tang
Chongqing University, China

B-28
Effects of Ultrasonic Vibration on Undercooling and Microstructures of SAC305 Alloy
Hongjun Ji, Qiang Wang, and Mingyu Li
Harbin Institute of Technology, HIT Campus, China

B-29
Influence of Soldering Temperature and Dwelling Time on Morphological Evolution of Cu6Sn5 Intermetallic Compound at the Sn-3.0Ag-0.5Cu/Cu Interface
Guang-Sui Xu, Jing-Bo Zeng, Min-Bo Zhou, Shan-Shan Cao, Xiao Ma, Xin-Ping Zhang
South China University of Technology, China

B-30
Tensile behaviors investigation of SWCNT-Ni with vacancies
Hengyou Liao, Fulong Zhu, Wei Zhang, Youkai Chen, Shao Song, Sheng Liu
Huazhong University of Science & Technology, China

B-31
Influence of segregation and diffusion behavior on electrical properties of embedded Ni- Cr thin film resistor
Lifei Lai, Rong Sun, Xianzhu Fu, Ruxu Du
Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences, China

B-34
Wettability Transition of Nickel Films with Micro-Nano Cones Array
Wenyan Geng, Haozhe Wang, Anmin Hu, Ming Li
School of Materials Science and Engineering, Shanghai Jiao Tong University, China

B-35
Evolution of Curvature under Thermal Cycling in Sandwich Assembly Bonded by Sintered Nano-silver Paste
Yunjiao Cao, Gang Chen, Yunhui Mei, Xin Li, Guo-Quan Lu, Xu Chen
Tianjin University, China

B-37
A Comparative Study of Microstructure during Solidification within Ultrafine Interconnects of Different Sizes and Geometries
Zhiyong Wu, Zhiheng Huang, Dong Wu and Yong Zhang
Sun Yat-sen University, China

B-38
The geometrical effects in a model coupled with microstructural evolution and mechanical behavior for small-scale solder joints
Hua Xiong, Zhiheng Huang, Dong Wu, and Yong Zhang
Sun Yat-sen University, China

B-41
Effect of Dummy Via on the SIV Performance of Narrow-Wide Copper Interconnection
LIN Xiao-ling, LI Meng, XIAO Qing-zhong, Zhang Xiao-wen
China Electronic Product Reliability and Environmental Testing Research Institute, China

B-44
Processing Performance and Microstructure of Sn-Zn Based Solders Modified by Bi and Mixed Rare Earth Elements
Jia-Qiang Huang, Min-Bo Zhou, Chang-Zheng Li, Xiao Ma, Xin-Ping Zhang
South China University of Technology, China

B-45
Study of Critical Factors Influencing the Solidification Undercooling Behavior of Sn-3.0Ag-0.5Cu (SAC) Lead-free Solder and SAC/Cu Joints
Xun-Ping Li Jian-Min Xia, Hong-Bo Qin, Xiao-Qi He, Xin-Ping Zhang
South China University of Technology, China

B-46
The study on the rapidly-solidified Sn-0.7Cu lead-free solders and the interface reactions with Cu substrate
H. T Ma, J. Wang, L. Qu, L. L An, L. Y Gu, M. L Huang
Dalian University of Technology, China

B-48
Synthesis and Characterization of ZnO Nanowires by Solvothermal Method and Fabrication of Nanowire-based ZnO Nanofilms
Yanbiao Chu, Lixi Wan, Xiehuan Wang, Jingwei Zhang
Institute of Microelectronics Chinese Academy of Sciences, China

B-51
Study on the electrodeposition of Fe-Ni UBM films in modified watts bath
Hao Zhang, Li Zhang, Zhenzhen Duan, Chi-Ming Lai, Zhi-Quan Liu
Institute of Metal Research, Chinese Academy of Sciences, China

B-53
Investigation of the optical properties of ZnO/epoxy resin nanocomposite: Application in the LED
Chongnan Peng, Guoping Zhang, Rong Sun
Shenzhen University, China

B-55
In-situ study on the formation and evolution behavior of voids at the interface during soldering process by synchrotron radiation real-time imaging technology
H T Ma,L Qu ,H J Zhao, J Wang, L Y Gu, L L An, M L Huang
Dalian University of Technology, China

B-57
Study of 3-D Staking Assembly Based on the Package Material of PCB
Yu-zhong Lu, Jian-guo Jiang, Xin-quan Lai, Xiu Wang, Zhan-wu Huang
Xidian University, China

B-58
Interfacial Reaction between Sn-9Zn/Sn Double Layers Solder and Cu
H.T. Ma, L.L. An, L. Qu, J. Wang, L.Y. Gu, M.L. Huang
Dalian University of Technology, China

B-59
Investigate the Microstructure Changes in Cu Through-Silicon Vias (TSVs) under Thermal Process
Zhaoqiang Zhang, Junwen Pang, Jun Wang, Chongshen Song, Daquan Yu
Fudan University, China

Area 4 (Session B) Packaging Materials & Processes

B-60
Development of Large Die Assembly Process based on Simulation and Experiments of Underfill Materials Selection
Xiaoyang Liu, Xiaolong Wu, Ran He, Daquan Yu
Jiangnan Institute of Computing Technology, China

B-65
Study on Undercutting of Electroplated Micro-bumps with Different Etchants
Fengwei Dai, Daquan Yu, Wen Yin, Xiangmeng Jing, Lixi Wan
Institute of Microelectronics, Chinese Academy of Sciences, China

B-66
Warpage Resolution for Ball Grid Array (BGA) Package in a Fully Integrated Assembly
Alvin B. Denoyo
Assembly, Package, & Materials Development Cypress Manufacturing Limited, Philippines

B-67
Effect of Cu6Sn5 particles on microstructure formation and mechanical properties of Sn-58Bi solder
Xiaoying Liu, Mingliang Huang, Ning Zhao
Dalian University of Technology, China

B-69
The Effect of Different TSV Electroplating Levelers on the Copper Residual Stress
Ciyan Wu, Xue Feng, Haiyong Cao, Huiqin Ling, Ming Li, Dali Mao
Shanghai Jiao Tong University, China

B-70
Investigation of Competitive Adsorption between Accelerator and Suppressor in TSV Copper Electroplating
Yue Lu, Haiyong Cao, Qi Sun, Huiqin Ling, Ming Li, Jiangyan Sun
Shanghai Jiao Tong University, China

B-76
Effects of cooling rate on microstructure and microhardness of lead-free Sn-3.0Ag-0.5Cu solder
Guoqiang Wei, Lei Wang
South China University of Technology, China

B-77
Size effect of BaTiO3 on the properties of epoxy/BaTiO3 composite film
Suibin Luo, Shuhui Yu, Rong Sun, Xianwen Liang, Maobai Lai
Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences, China

B-82
Parametric Study, Modeling of Etching Process and Application for Tapered Through-Silicon-Via
Shenglin MA1, Xiao ZHONG1, Yuan BIAN1, Xin SUN1, Yunhui ZHU, Jing CHEN, Min MIAO, Yufeng JIN
Peking University, China

B-83
Electrical Characterization of Novel Material for High-density Capacitors
Wenbin Chen, Miao Cai, Bingbing Zhang, Yu Yang, Kailin Pan, Daoguo Yang
Guilin University of Electronic Technology, China

B-84
Copper Filling Process for Small Diameter, High Aspect Ratio Through Silicon Via (TSV)
Tiwei Wei, Jian Cai, Qian Wang, Ziyu Liu, Yinan Li, Tao Wang, Dejun Wang
Tsinghua University, China

B-86
Interfacial Reactions between Cu Single Crystals and Lead-free Solders during Solid-State Aging
Ting Liu, Mingliang Huang, Ning Zhao
Dalian University of Technology, China

B-88
18um Pd- copper Wire Bonding Process Development
Ming-chuan Han , Xue-Song Xu, Liu-Chang Hu, J.Z. Yao, Mei-Jiang Song
Freescale Semiconductor, Inc., Tianjin, China

B-89
Study of Cu wire bonding on NiPdAu pad of fine pitch low k C55nm technology for high temperature automotive application
Liuchang Hu, Xuesong Xu, Jinzhong Yao, Meijiang Song, Mingchuan Han
Freescale Semiconductor, Tianjin, China

B-92
The Effect of Gelatin on the Tin Electrodeposition
Zi-Shou Zhao, Ai-Ping Xian
Institute of Metal Research, Chinese Academy of Sciences, China

B-94
Numerical Simulation Of Reheating System Heat Transfer Coefficient With H63 Brass Alloy
WANG Kaikun, HE Qingluan, LI Xianhui
University of Science and Technology Beijing, China

Area 5 (Session C) Packaging Design & Modeling

C-06
Optimized design of signal crosstalk in high speed PCB
Tian Wenchao, Shan Lei, Wang Wenlong, Zhu Yadi
Xidian University, China

C-07
Design and analysis of the embedded passive components based on organic substrate
Xiujiang Zhao, Shuhui Yu, Rong Sun
Chinese Academy of Sciences and the Chinese University of Hong Kong, China

C-08
Thermal Simulation and Analysis of Intelligent Power Module (IPM) Package
Peisheng Liu, Liangyu Tong, Jinxin Huang, Yujuan Tao, Haijun Shen
Nantong University, China

C-14
Numerical Simulation on Heating Source of 3D Electronic Packaging
WANG Kaikun, HE Qingluan, GAO Qi
University of Science and Technology, Beijing, China

C-15
An Equivalent Model of TSV Silicon Interposer
AN Tong, QIN Fei, WU Wei, YU Daquan, WAN Lixi, WANG Jun
Beijing University of Technology, China

C-17
Effects of Solder Constitutive Models and FE Models on Fatigue Life of Dual-row QFN Package
XIA Guofeng, QIN Fei, ZHU Wenhui, GAO Cha, MA Xiaobo
Beijing University of Technology, China

C-18
Effects of Via Pitch on Silicon Stress in TSV Interposer
AN Tong, QIN Fei, WU Wei, YU Daquan, WAN Lixi, WANG Jun
Beijing University of Technology, China

C-19
Interfacial Stress in Through Silicon Vias
LI Wei, QIN Fei, AN Tong, WU Wei, LIU Chengyan, WAN Lixi, YU Daquan, WANG Jun
Beijing University of Technology, China

C-22
Optimal Thermal Design of a High Power Package Using the Design of Experiment (DOE)
GAO Cha, QIN Fei, ZHU Wenhui, XIA Guofeng, MA Xiaobo
Beijing University of Technology, China

C-23
Comparative Analysis of Reliability between Dual-row and Conventional QFN Packages
XIA Guofeng, QIN Fei, ZHU Wenhui, MA Xiaobo, GAO Cha
Beijing University of Technology, China

C-25
Stability Study of Thick-film Pressure Sensor on Steel Substrate
Zongyang Zhang, Xingguo Cheng, Run Chen, Xiaojie Chen, Sheng Liu
Huazhong University of Science & Technology, China

C-26
The Copper Stud Bump Bonding Process Analysis Based on Thermal-solid Coupled Simulation
Zhang Shanshan, Zhang Jing
School of Mechanical Engineering, China

C-27
The effect of temperature on compressive mechanical behavior of SWCNT-Ni
Youkai Chen, Fulong Zhu, Hengyou Liao , Shao Song, Sheng Liu
Huazhong University of Science & Technology, China

C-29
Study on Characteristics of Thermal Flow Sensor Designed by Different Shape Model
Youngbae Jeon, and Sheng Liu
Huazhong University of Science & Technology, China

C-32
Stress-Strain Analysis of Double-Bump Solder Joints under Temperature Cycling Loading Using Finite Element Modeling
Hegeng Wei , Chunyue Huang , Song Wu, Guangkuo Guo, Tianming Li
Guilin University of Electronic Technology, China

C-34
Simulation Research on Gold Stud Bump Forming
CHENG Lei， ZHOU Dejian, WU Zhaohua, LIU Zhengwei
Xidian University, China

C-36
FEA Study of the Evolution of Wafer Warpage During Reflow Process in WLP
Chunsheng Zhu, Wenguo Ning, Jiaotuo Ye, Gaowei Xu, Le Luo
Shanghai Institute of Microsystem and Information Technology, Chinese Academy of Sciences, China

C-37
Thermal resistance analysis by numerical method for power device packaging
Hao Wu, Ming Chen, Liming Gao, Ming Li
Shanghai Jiao Tong University, China

C-38
The Influences of Coating Alumina on the RF Characteristics of Packaged Surface Acoustic Wave Devices
Zheng-dong Liu and Cheng Zhao
Yangzhou University , China

C-40
Improvement of Light Extraction Efficiency of White LEDs Using Microstructure Array on Phosphor Silicone Layer
Shan Yu, Run Hu, Mingxiang Chen, Sheng Liu
Huazhong University of Science & Technology, China

Area 6 (Session C) Packaging Design & Modeling

C-41
Packaging Optimization for Tire Pressure Monitoring System
Xiaojie Chen, Zongyang Zhang, Yi Leng, Zhang Luo, Sheng Liu
Huazhong University of Science & Technology, China

C-44
A novel shielding structure based on TSV 3D package
Jun Li, Lixi Wan, Liqiang Cao
Institute of Microelectronics Chinese Academy of Sciences, China

C-45
Preparation of Thermal Interface Material Filled with Micro-nano-Composite Particles into the Polymer
Rongrong Kuang, Dayong Gui, Lianggao Wu, Guangfu Zeng, Deqin Si, Jianhong Liu
Shenzhen University, China

C-48
Thermal Analysis and Heat Dissipation Optimization of 3D Packaging with TSV Interposer
He Ma, Daquan Yu , Jun Wang
Institute of Microelectronics Chinese Academy of Sciences, China

C-51
Influence of Thickness of Interfacial IMC Layer and Solder Mask Layer on Mechanical Reliability of Micro-Scale BGA Structure Interconnects
Hong-Bo Qin, Xun-Ping Li, Xing-Ping Zhang
South China University of Technology, China

C-52
Study on the warpage and thermal stress in wire bonding and C4 stacked chip package
Gong Yu-bing & Cen Chuan-sheng
Guilin University of Electronic Technology, China

C-53
The thermal stress analysis in 3D IC integration with TSV interposer
Junwen Pang, Jun Wang
Fudan University, Shanghai, China

C-55
Thermal Simulation for the Packaging Structures of Radio Frequency Power Amplifier Chamber
Yanghai, Daoguo Yang, Yaoping Jia, Ke Jin
Southwest China Electronic Technology Institute Sichuan Chengdu

C-56
The Study of Thermal Mechanical Reliability of Different Copper Stud bump Solder Joints
Zhang Jing, Zhang Shanshan
Anyang Institute of Technology, China

C-57
Design and Analysis of 2D Embedded Passive Devices in Printed Circuit Boards
Jing Zhang，Baoxia Li， Lixiwan， Liqiang Cao
Institute of Microelectronics, Chinese Academy of Sciences, China

C-58
Experimental and Numerical Study of the Size Effect on Microstructure and Mechanical Behavior of Cu/Sn0.7Cu0.05Ni/Cu Joints with Very Small Solder Volume
Wei Li, Min-Bo Zhou, Hong-Bo Qin, Xiao Ma, Xin-Ping Zhang
South China University of Technology, China

C-59
Analysis of Fatigue Life on Solder Joints of Compliant Wafer Level Packaging with MEMS Air-gap
Li Peng, Pan Kai-lin, Wang Shuang-ping
Guilin University of Electronic Technology, China

C-60
Study on Thermal Placement Optimization of 3D High-power Microwave Module
WU Zhaohua
Guilin University of Electronic Technology, China

C-63
Thermal Analysis of DC/DC Power Module Based on Innovative Model with the Application of Active Area Loading
Pan Kai-lin, Liu Ganggang, He Xiaoqi, Zhou Bin
Guilin University of Electronic Technology, China

C-64

A GTLE and FDFD Algorithm for Analysis of Power Integrity in PCBs and Packages

Yunyan Zhou, Lixi Wan, Liqiang Cao

Institute of Microelectronics, Chinese Academy of Sciences, China

C-69

Application of Finite Element Simulation on Package Failure Analysis and Problem Solving

Weidong Huang

Freescale Semiconductor (China) Ltd, Tianjin ,China

C-70

Multi-physics Modeling of LED-based Luminaires under Temperature and Humidity Environment

Hongyu Tang, Daoguo Yang, G.Q. Zhang, Lili Liang, Hongliang Jia, Zhen Zhang

Guilin University of Electronic Technology, China

C-71

Design of RF MEMS phase shifter packaging based on through glass via (TGV) interposer

Xiaofeng Sun, Yu Sun, Jing Zhang, Daquan Yu, Lixi Wan

Institute of Microelectronics, Chinese Academy of Sciences, Beijing, PR China

C-72

Dynamic Analysis of Bare Printed Circuit Board under Impact

Ahmad H Youssef and Xuejun Fan

Department of Mechanical Engineering Lamar University, Beaumont, USA

C-75

Vibration and drop analysis of 3D SiP with Through Silicon Via

Yang He, Zhiyuan Zhu,GuanJiang Wang,Yunhui Zhu, Guangyi Shi, Min Miao, Jing Chen, Yufeng Jin

Shenzhen Graduate School of Peking University, China

C-78

Molecular Dynamics Simulation of the Heat Transfer Coefficient at the Interface between CNTs and Water in the Carbon Nano-Tubes Micro-channel Cooler

Min Huang, Gaoan Qi, Xiaojing Wang, Chunyang Zang, Bing Wu, Jia Wang

Shanghai University, China

C-79

Thermal Design and Analysis of High Power LED with LTCC Packaging

Yang Hai, Daoguo Yang, Dejin Yan, Wanchun Tian

Southwest China Electronic Technology Institute Sichuan Chengdu, China

C-80

The Heat Transfer Performance of the Carbon Nano-Tubes Micro-Channel Cooler in 3-D Stacked Package

Gaoan Qi, Min Huang, Xiaojing Wang, Bing Wu, Chunyang Zang, Dianxiao Wang

Shanghai University, China

POSTER SESSION 2

August 15, Wednesday 14:50AM –15:50AM and 14:50 –15:50

Area 7 (Session D/E)
Section D High Density Substrate & SMT

D-02
On Reflow Soldering Process and Reflow Profile
Xulong Gui, Zongyang Zhong, Ling Xu and Sheng Liu
Huazhong University of Science & Technology, China

D-03
Dissolution Behavior of Cu UBM in BGA Structure Sn-3.0Ag-0.5Cu/Cu Joints during Liquid Isothermal Aging at and above the Solder's Melting Temperature
Min-Bo Zhou, Jing-Bo Zeng, Xiao Ma, Xin-Ping Zhang
South China University of Technology,Guangzhou, China

D-04
Impact of Soldering Terminal Solderability of Component and PCB on Solder Joint Interface
Yuming Wang，Beibei Wang，Jian Cai , Tianxi Wang
[1]Tsinghua-Flextronics SMT Lab, China.

D-05
Study on the optimization and analysis of the Mixed Reflow soldering with lead and lead-free solder in the high density assembly
Huang Yinglei, Wu Zhaohua, Liu Zhengwei
School of Mechanical & Electrical Engineering of Guilin University of Electronic Technology, China

D-08
Research of Reflow Soldering on Al-SiC Composite Material and Thick Film Ceramic Substrates
Ningning Wang, Binbin Zhang, Rong An, Meng Yang
China Academy of Space Technology, China.

D-09
A highlight processing technology for SMT solder joint gray image
Liang Tianshou, Zhou Dejian, Liu Zhengwei
Guilin University of Electronic Technology, China.

D-10
Effect of Sampling Rate on the Accuracy of Strain Gage Measurement during Printed Circuit Board Functional Test
Hongbin Shi, Cuihua Tian1, Rui Zhang, Daquan Yu, and Toshitsugu Ueda
Waseda University, Kitakyushu-shi, Fukuoka, Japan

Session E Advanced Manufacturing Technologies & Packaging Equipment

E-05
Ceramic Column Grid Array: A High-reliability Approach for Area Array Packaging
Yingzhuo Huang, Xueming Jiang, Pengrong Lin, Yusheng Cao, Binhao Lian, Quanbin Yao
Beijing Microelectronics Technology Institute, China

E-06
A new flux clean method of using DI water to replace organic solvent
Tong Zhao, Ting Li, He Q.C, Hans Zhang, Li Xian Ma
FREESCALE Semiconductor (China) Limited, China.

E-08
Study of Factors Influencing Tin Whisker Growth
Jiaojiao Yuan, Xuefang Wang, Zhicheng Lv, Shuai Shi, Yuzhe Wang, Sheng Liu
Huazhong University of Science & Technology, China

E-12
Finite Element analysis of wire clamp for wire bonding
Dengke Fan, Fuliang Wang
Central South University, China

E-13
A Comprehensive Analysis of the Thermal Cycling Reliability of Lead-Free Chip Scale Package Assemblies with Various Reworkable Board-Level Polymeric Reinforcement Strategies
Hongbin Shi, Cuihua Tian, Daquan Yu, Toshitsugu Ueda
Waseda University, Kitakyushu-shi, Fukuoka, Japan

E-15
On the precision synthesis of the bonder in flip-chip equipment
Dawei Zhang, Meifa Huang, Zhiyue Wang, Bing Kuang, Mengmeng Xiao
Guilin University of Electronic Technology, China

E-19
A buffered distributed spray MOCVD reactor design
Shaolin Hu, Zhiyin Gan, Han Yan, Sheng Liu
Huazhong University of Science & Technology, China.

E-24
Fabrication of a glass microfluidic device integrated with ultrasonic resonators
Wenlin Kuai, Jintang Shang, Wenlong Wei, Shunjin Qin, Tingting Wang[1], Jie Chen[1], Li Zhang[3], Lai CM[3]
Southeast University, China.

E-25
Thick Film Resistors on Alumina Substrate as Sensing Elements
Xiaojie Chen, Zongyang Zhang, Sheng Liu
Huazhong University of Science & Technology, China.

E-27
THz Filters Embedded in LTCC Multi-layer Substrate
Xiaoqing Zhang[1], Min Miao[1, 2], Zhensong Li, Yuexia Zhang,Yanzhu Lv，Yating Yao*
Beijing Information Science and Technology University, China

E-29
Mechanism Design and Dynamic Simulation of Die Bonding Machines
Zhanlun Cao, Xiaohong Wu, Jian Gao, Yongjun Jiang, and Xin Chen
Guangdong University of Technology, China

E-30
Optimal design of work stage mounting system of precision packaging equipment
Hui Jing, Cong Li , Fuyun Liu , Bing Kuang
Guilin University of Electronic Technology, China.

E-31
Research on Thermal Field of Giant Magnetostrictive Jetting Dispenser
Pengfei Dan, Can Zhou, Shijun Zhang, Guiling Deng
Central South University, China.

E-32
Design of the temperature control system for the fluid jet-dispenser
Hui Li, Can Zhou, Shijun Zhang, Guiling Deng
Central South University, China.

E-34
Effects of Sulfide on Silver-Plated Lead Frame on Wire Bonding Quality
H.M Zhang, F. Zong, M. Hu, D.H Ye, Q.C He
Freescale Semiconductor (China) Ltd, Tianjin, China

E-35
Structural Optimization Design of Swing Arm Based on HyperWorks
Bing Kuang, Zhaolin Liu, Xiaohua Wu
Guilin University of Electronic Technology, China.

Area 8 (Session F) Quality & Reliability

F-04
Investigation on Surface Contamination caused by human on Phase Shifter Chip
Zhenzhen Rao, Shengxiang Bao, Jianhai Ye, Zhang Xiaowen, Wang Zuwen
University of Electronics Science and Technology of China, China

F-06
Stress Monitoring in Flip Chip Packaging Process
Chengjie Jiang, Fei Xiao, Chuanguo Dou, Heng Yang
Fudan University, China

F-08
A Novel Current Sensor Based on Dual Hall Chips
Xingguo Cheng, Zongyang Zhang, Fuan Li, Sheng Liu
Huazhong University of Science & Technology, China

F-104
Failure mode of SAC305 lead-free solder joint under thermal stress
Chao Huang, Daoguo Yang, Boyi Wu, Lili Liang, Yu Yang
Guilin University of Electronic Technology, China.

F-106
Dissolution of Substrates in Line-type Cu/Sn/Cu and Cu/Sn/Ni Interconnects under Current Stressing
Song Pan, Mingliang Huang, Ning Zhao, Shaoming Zhou and Zhijie Zhang
Dalian University of Technology, China

F-109
Research on LED Temperature Characteristic and Thermal Analysis at Low Temperatures
Yu Guo, Kai-lin Pan, Guo-tao Ren,Shu-jing Chen,Fei Yuan
School of Mechanical and Electrical Engineering
Guilin University of Electronic Technology, China

F-11
Failure Mechanism Diagnosis on Plastic Package Integrated Circuit Basing on Fault Tree Analysis
Yuan Chen, Xiaoqi He, Ping Lai
The Fifth Electronics Research Institute of Ministry of Industry and Information Technology, China.

F-12
Effect of Grain Orientation on Electromigration Degradation in Lead-free Solder Joints
Yanhong Tian, Jingkai Qin, Xiaobin He, Chunqing Wang,
Harbin Institute of Technology, China

F-14
Ant-Algorithm-Annealing-Algorithm-based Optimization Approach for MCM Interconnect Test
Chen Lei
Guilin University of Electronic Technology, China

F-15
MCM Interconnect Test Scheme based on Particle Swarm Optimization Algorithm
Chen Lei
Guilin University of Electronic Technology, China

F-18
Reliability of Fine Pitch Wafer Level Packages
Donglun Yang, Xiaotong Ye, Fei Xiao, Dong Chen, Li Zhang
Fudan University, China

F-19
Failure Analyse of the Welding Point in Flip-Chip BGA Packages in The Drop-Free
*Yuan Guozheng, Bai Chuang, Shu Xuefeng**
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Xidian University, Xi'an, Shaanxi, China

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Tang Haili, Wu Zhaohua, Lui Zhengwei
Guilin University of Electronic Technology, China

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Yu Peng, Fan Zerui, Yao Xiaohu
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Xiang Gao, Run Chen, Cao Li , Sheng Liu
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Long Gui , Shengxiang Bao , Xiaowen Zhang , Zuwen Wang , Chengshi Zhang , Guanghua Shi
University of Electronics Science and Technology of China, China

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Guilin University of Electronic Technology, China

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Li-wei Wang, Hong-wei Luo
The 5th Electronics Research Institute of the Ministry of Industry and Information Technology, China

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Qinghua Zhao, Jinglin Bi, Anmin Hu, Ming Li, Dali Mao
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Ronghong Cui, Yuting He, Wenjun Shu, Hua Ding,Hou Bo
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Yucheng Liu, Tingbi Luo, Anmin Hu, Shangyuan Li, Weizhen Wang, Ming Li
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Zhang Qian　　Hu Kaibo
Electronic Technology Information Research Institute. MIIT, China

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Xun-Ping Li, Hong-Bo Qin, Yun-Fei En, Jian-Min Xia, Xin-Ping Zhang
South China University of Technology, China

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Jing-Bo Zeng, Guang-Sui Xu, Min-Bo Zhou, Xiao Ma, Xin-Ping Zhang
South China University of Technology,Guangzhou, China

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Gong Yu-bing , Xu Jia-bing
Guilin University of Electronic Technology, China

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Fudan University, Shanghai, China

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The 5th Electronics Research Institute of the Ministry of Industry and Information Technology, China

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Yuan Chen, Hui Chen, Xiaowen Zhang, Ping Lai
The 5th Electronics Research Institute of the Ministry of Industry and Information Technology, China

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WU Zhaohua
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Xinxin Wang, Limin Ma, Ya Qi, Jianping Liu, Fu Guo, Li Liu
Beijing University of Technology, China.

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*Chunjin Hang, Jingming Fei, Hong Wang, Chunqing Wang**
Harbin Institute of Technology, China

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*Chunjin Hang, Hong Wang, Jingming Fei, Chunqing Wang**
Harbin Institute of Technology, China

G-08
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Xiaogang Liu, Run Chen, Fei Chen, Sheng Liu
Huazhong University of Science & Technology, China

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Xing Chen, Simin Wang, Xiaogang Liu, Sheng Liu
Huazhong University of Science & Technology, China

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Simin Wang, Xing Chen, Xiaogang Liu, Fei Chen, Bin Cao, Sheng Liu
Huazhong University of Science & Technology, China

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Run Hu, Zhili Zhao, Sheng Liu, and Xiaobing Luo
Huazhong University of Science and Technology, China

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Zhili Zhao, Run Hu, Kai Wang, Fei Chen, Shang Wang and Sheng Liu ,
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Liang Yang, Mingxiang Chen, Shan Yu, Zhicheng Lv, Sheng Liu
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Xing Fu, Huai Zheng, Sheng Liu and Xiaobing Luo
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Shuang Zhao, Kai Wang, Fei Chen, and Sheng Liu
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Pengzhi Lu, Hua Yang, Huaiwen Zhen, Bin Xue, Xiaotong Wang, Linlin Wang, XiaoYan Yi, Lixia Zhao,Junxi Wang, Guohong Wang, Jinmin Li
Institute of Semiconductors, Chinese Academic of Sciences, China

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Hu Guojun
East China Research Institute of Electronic Engineering, China

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The effects of isothermal aging on sandwich structural of p- and n-TE/Ni/SBA/Cu joints
Li Shen, Fu Guo, Nan ZhenRan Zhao
Beijing University of Technology, China

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Hongjun Ji, Junzhao Wang, and Mingyu Li
Shenzhen Graduate School, Harbin Institute of Technology HIT Campus, Shenzhen

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Huijuan Wang, Daquan Yu, Ran He, Liqiang Cao, Lixi Wan
Institute of Microelectronics of Chinese Academy of Sciences, China

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Han Yan, Zhiyin Gan, Sheng Liu
Huazhong University of Science & Technology, China

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Xing Shen ,Bo Wang,Wenfei Zhang, Bing An ,YipingWu
Huazhong University of Science & Technology, China

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Shunjin Qin, Jintang Shang, Hongyan Guo, Li Zhang, Lai CM
Southeast University, China

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Tingting Wang, Jintang Shang, Jingdong Liu
Southeast University, China

CONFERENCE GUIDELINE（温馨提示）

Welcome to ICEPT-HDP 2012. Please read this guideline carefully, we will be more than happy to serve you.
感谢各位嘉宾代表对本次大会的关注与支持，为了更好地为您提供服务，请您留意会务组温馨提示：

1 Please wear your badge at all times
会议期间参会者请佩戴代表证，并凭此参加各项活动

2 Meal time and location during the conference
会议期间用餐时间和地点（代表凭票用餐 Coupon needed）

日期 **(Date)**	时间 **(Time)**	用餐地点 **(Location)**
August 13 Monday	06:30-08:00	早餐：一楼漓江厅 Breakfast: Lijiang Restaurant (1st floor)
	12:30-13:30	午餐：一楼漓江厅 Lunch: Lijiang Restaurant (1st floor)
	18:00-20:00	晚餐：一楼漓江厅 Dinner: Lijiang Restaurant (1st floor)
August 14 Tuesday	06:30-08:00	早餐：一楼漓江厅 Breakfast: Lijiang Restaurant (1st floor)
	12:20-13:30	午餐：一楼漓江厅 Lunch: Lijiang Restaurant (1st floor)
	18:30-20:30	晚宴：一楼漓江厅 Conference Banquet: Lijiang Restaurant (1st floor)
August 15 Wednesday	06:30-08:00	早餐：一楼漓江厅 Breakfast: Lijiang Restaurant (1st floor)
	12:25-13:30	午餐：一楼漓江厅 Lunch: Lijiang Restaurant (1st floor)
	18:30-21:00	晚餐：一楼漓江厅 Dinner: Lijiang Restaurant (1st floor)
August 16 Thursday	06:30-08:00	早餐：一楼漓江厅 Breakfast: Lijiang Restaurant (1st floor)
	12:10-13:40	船上用餐 Lunch: On boat
	18:30-20:00	晚餐：一楼漓江厅 Dinner: Lijiang Restaurant (1st floor)

3 High-speed internet is available and free of charge in the room booked for the conference. Other services like laundry, telephone, etc. are at your own expense, please contact the hotel directly.
会议期间由会务组安排住宿的代表房间上网免费。其它洗衣和电话等服务请跟总服务台联系，费用自理

4 Please take care of your valuables including cell phones, laptops and wallets
请妥善保管好自己随身携带手机、电脑、钱包等贵重物品

5 Location of Tea Break, Exhibition, and Posters: Colden Cassia on the second floor
茶歇、展览、张贴地点：二楼金桂厅

6 For more details, please read the conference programs. Please switch your phone to 'silent' mode during conference time and help keep the auditorium in good order
会议期间的具体安排请查阅会议日程安排，在会场参会的代表，请将手机调成震动状态，请不要大声喧哗，随意走动，请您配合保持良好的会场秩序

7 For visitors who will attend the Lijiang river tour on 16th August, please gather together at the gate of Guilin Bravo Hotel at 7:50 to take the bus to the pier for Yangshuo. The boat will arrive in Yangshuo at around 14:00. After visiting Yangshuo West Street, please gather together at 16:00 to return back to Guilin Bravo Hotel (the bus will arrive Guilin Bravo Hotel at around 18:00). For visitors who want to do additional tours at their own expense, please ask for help through the conference tourist information desk in the lobby.
参加 8 月 16 日漓江旅游的代表早上 7:50 在桂林宾馆酒店大门口集合乘车前往磨盘山码头乘坐内事船游览漓江风光到阳朔，14：00 左右下船后，代表自由活动逛西街，16:00 左右集合乘车返回，18:00 点左右回到酒店；需要自费游的代表，可在乘船抵达阳朔后，自行安排游览项目，具体事宜请联系酒店大堂的会议旅游部

8 The conference ends at 12:00 on the 16th of August. Please check-out before 12:00, otherwise, the hotel will charge for another half-day after 14:00. If you need to stay longer, please ask for help through the conference registration desk in advance to keep your room at the same charge rate. Please mind your departure time to avoid any delay on your trip
退房时间：8 月 16 日 12:00 前，参加漓江游需要退房的代表请在上大巴出发前提前退房（如 14:00 前没退房，酒店将加收入住代表半天房费）；需继续住宿的参会代表请提前向组委会说明，会务组负责和宾馆协调保留房号，但费用自理（按会议价算）；请参会代表注意自己的返程时间，以免晚点！

9 It is about one and half hours from Yangshuo to Guilin, around ￥220-260 for hiring a taxi, ￥15 for taking a coach which departs every 30 mins. For information on leaving for Guilin Liangjiang airport, train station and bus station from Guilin Bravo Hotel, please check the conference website
参加漓江游需要返程的代表请注意：从阳朔去桂林机场大概需要 1 个半小时，乘出租车约 220-260 元。在 阳朔汽车站乘直达快巴回桂林，每 30 分钟一趟，票价 15 元/人，75 分钟车程。从桂林宾馆前往桂林两江机场、火车站、汽车站的方式请参考会议主页上“抵达桂林宾馆方式”

10 Please contact the ticket center in the hotel for booking your return ticket in advance
需要预订返程票的代表请直接跟您所住酒店的票务中心联系，提前预定

11 Guilin Bravo Hotel, Tel: 0773-2893386
酒店联系电话：0773-2893386

12 Contact number during conference
会议现场联系：0773-2232253

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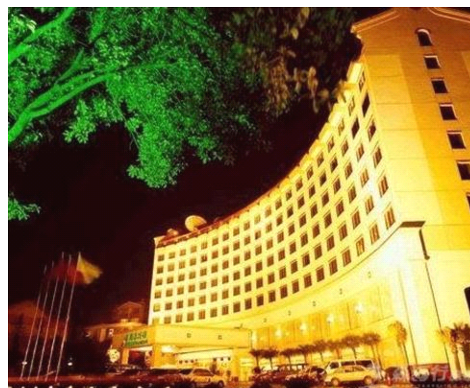
TRANSPORTATION（交通方式）



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桂林宾馆

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Guilin Bravo Hotel Tel: 0773-2898888
桂林宾馆联系电话：0773-2898888
Website: http://www.glbravohotel.com

Airport Transportation

- Take the bus at Guilin Liangjiang International Airport and get off at Civil Aviation Building Station (￥20). Then, take the No. 21 bus and get off at Children's Palace Station (￥1). Walk to Guilin Bravo Hotel (about 190 m). Or take Taxi from Civil Aviation Building Station to the hotel (about ￥15).
- Taking Taxi from Guilin Liangjiang International Airport to the hotel directly.

机场交通

- 从桂林两江国际机场乘坐机场民航大巴到终点站民航大厦下车（票价 20 元），然后换乘 21 路公交车至少年宫站下车（票价 1 元），再步行至桂林宾馆（约 190 米）。或搭出租车从民航大厦到酒店（大约 15 元）。
- 从桂林两江国际机场乘坐出租车到酒店。

Public Transportation

- For guests who arrive at Guilin North Station, please take No. 1 bus and get off at Lequn Crossroad Station (￥1). Then, take No. 22 bus and get off at Children's Palace Station (￥1). Walk to the Guilin Bravo Hotel (about 190 m). For guests who arrive at Guilin Railway Station (Guilin South Station). Go across the street and take No. 22 bus and get off at Children's Palace Station (￥1). Then, walk to the Guilin Bravo Hotel (about 190 m).
- For guests who arrive at Guilin Bus Station. Please go across the street and take No. 22 bus and get off at the Children's Palace Station (￥1). Then, walk to the Guilin Bravo Hotel (about 190 m). Or take Taxi from Railway Station to the hotel directly（about￥15）.

公共交通：

- 乘坐火车的朋友，如果在桂林北站下车，出站后，请乘坐 1 路公交车，在乐群路口站 下车（票价 1 元），再换乘 22 路，在少年宫站下车（票价 1 元），步行至桂林宾馆(约 190 米)。如果在桂林站（南站）下车，出站后，请到马路对面乘 22 路公交车到少年宫站下车（票价 1 元），再步行至桂林宾馆(约 190 米)。也可直接坐计程车至桂林宾馆。
- 乘坐汽车的朋友，出站后，请到马路对面乘公交 22 路到少年宫站下车（票价 1 元），再步行至桂林宾馆(约 190 米)。也可直接坐计程车至桂林宾馆（大约 15 元）。

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TEL：0773—3939263，Contact person：Shen 13117738963，Email：1318526879@qq.com

桂林宾馆附近周边经济型酒店：

联系电话：0773—3939263，联系人：小沈 13117738963，邮箱：1318526879@qq.com

步行路线地图

安华大酒店
联系电话：0773-3558199　3558166
地址：桂林市秀峰区民族路 9 号

从安华大酒店步行至桂林宾馆路线：（步行时间约 6 分钟）

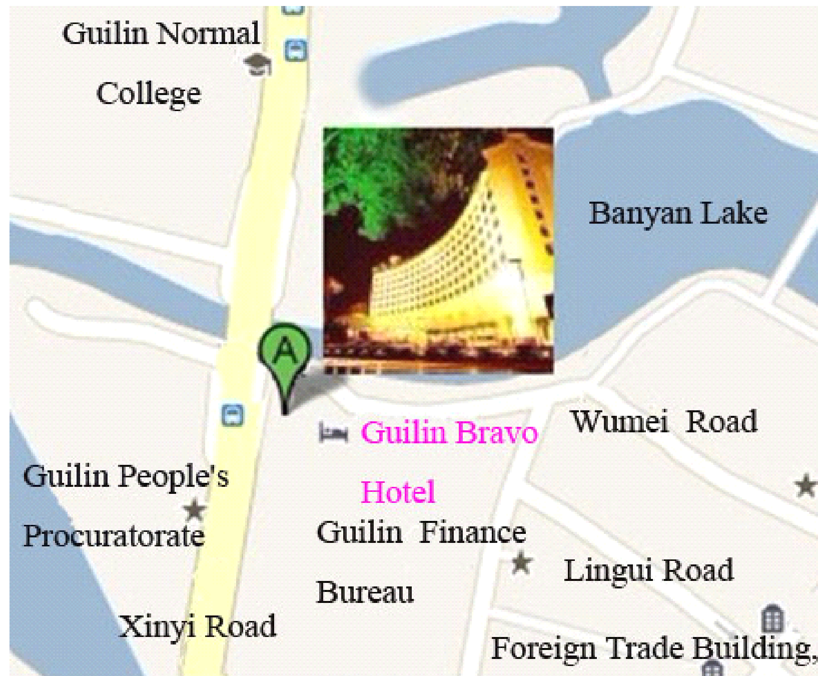
1 从起点向东北方向出发，沿民族路走 10 米，直走上西门桥
2 沿西门桥走 120 米，左转进入信义路
3 沿信义路走 380 米，右转进入榕湖南路
4 沿榕湖南路走 50 米，到达终点

西门大酒店
联系电话：0773-2283588　2283599
地址：桂林市南环路 2 号（西门桥头）

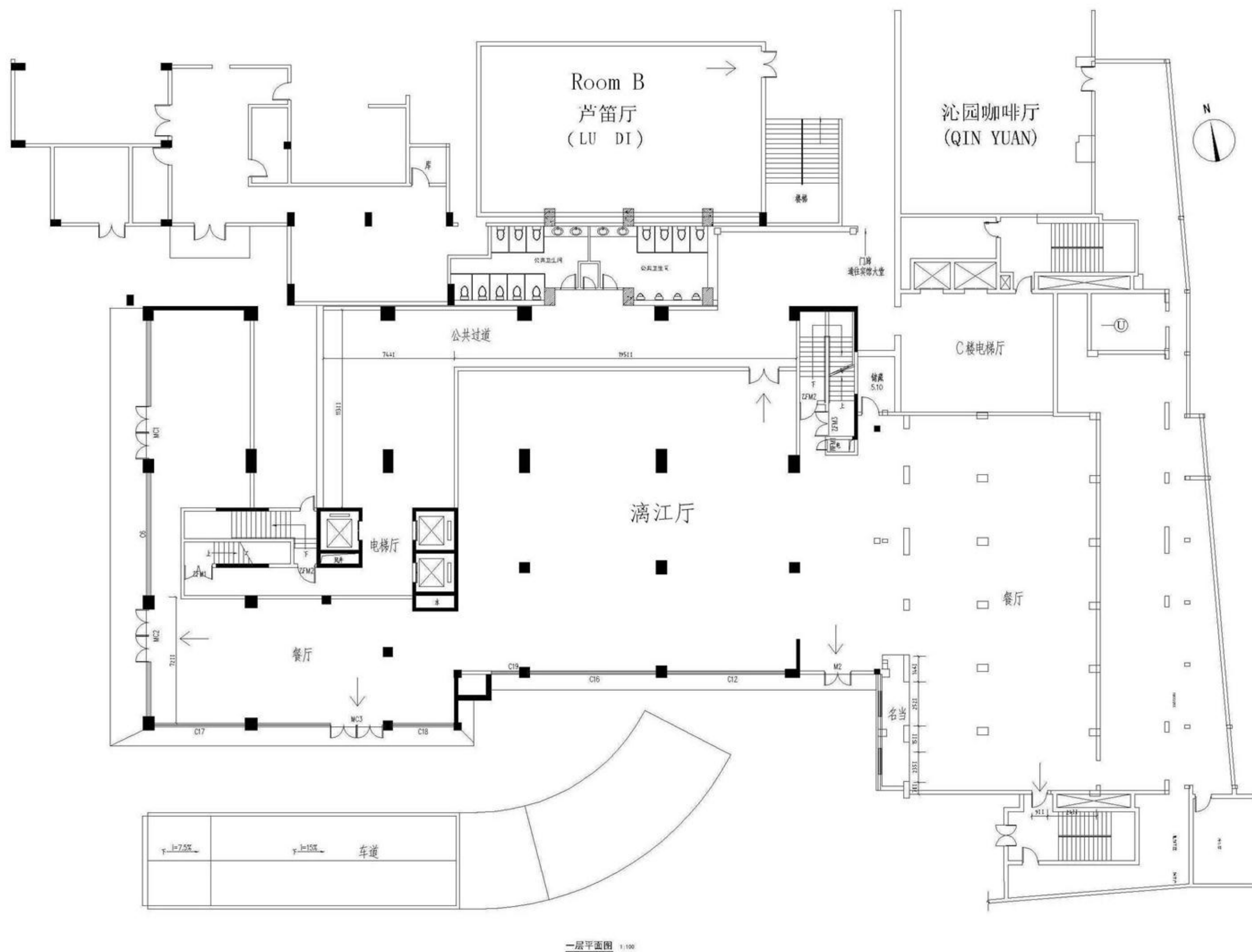
从西门大酒店步行至桂林宾馆路线：（步行时间约 3 分钟）

1 从起点向西北方向出发，沿南环路走 40 米，直走进入信义路
2 沿信义路走 380 米，右转进入榕湖南路
3 沿榕湖南路走 50 米，到达终点

TRANSPORTATION MAP

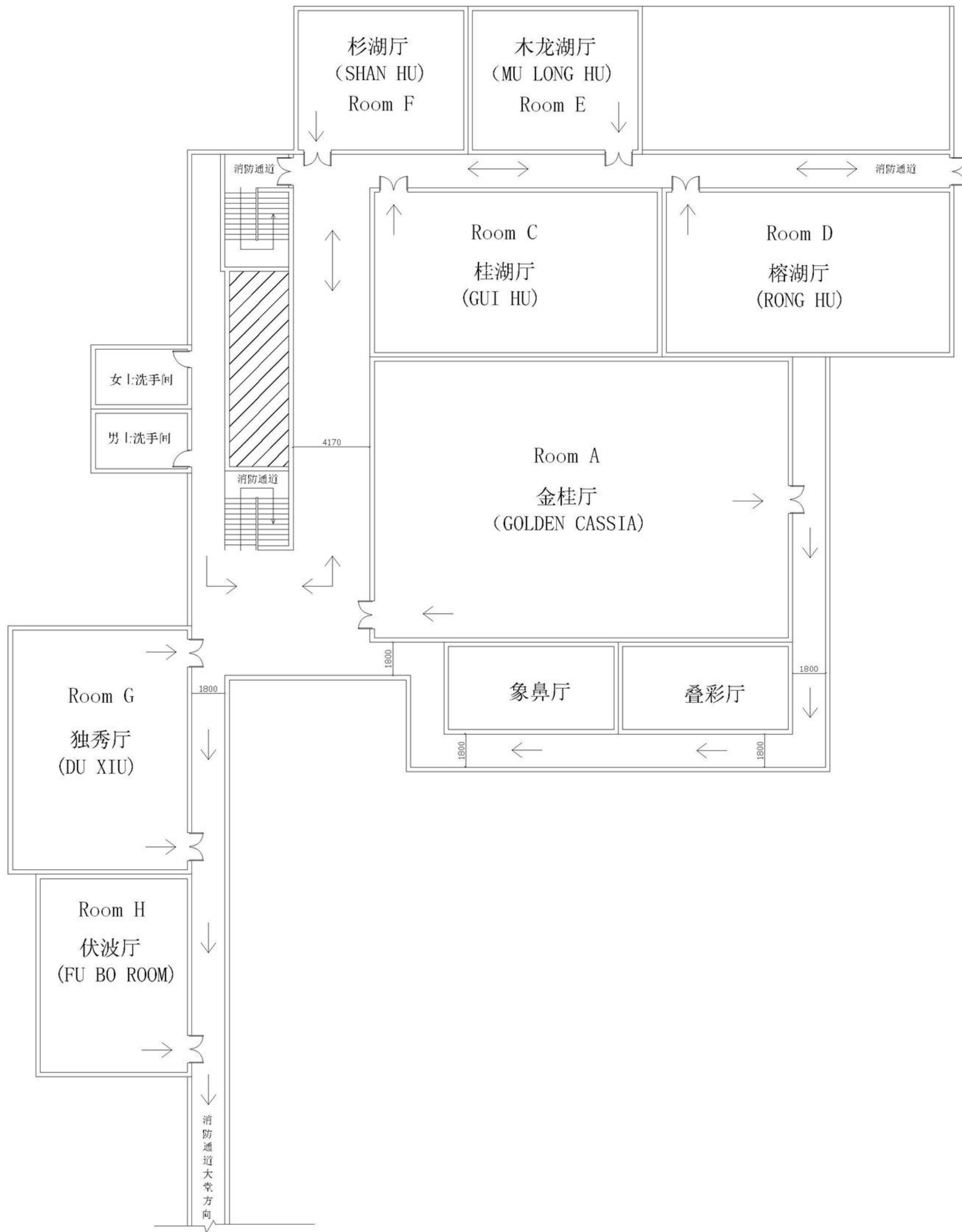


LAYOUT OF CONFERENCE MEETING ROOMS（会场布局 Floor 1）



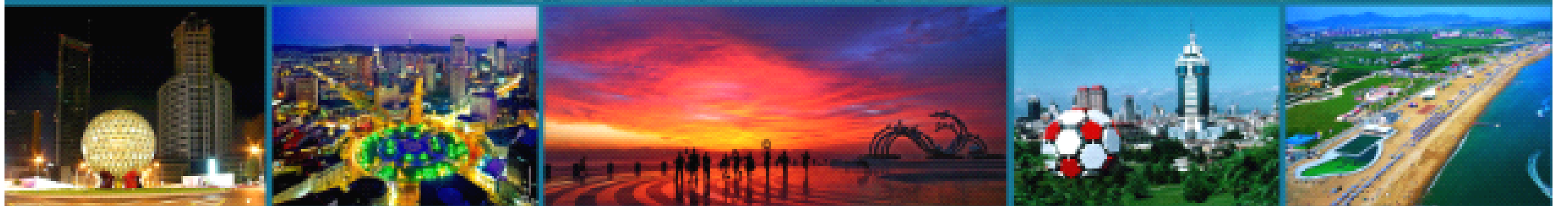
桂林宾馆一楼平面

LAYOUT OF CONFERENCE MEETING ROOMS（会场布局 Floor 2）



桂林宾馆二楼平面

2013 International Conference on Electronic Packaging Technology & High Density Packaging (ICEPT-HDP 2013)
August, 2013, Dalian, China



Located on the southernmost tip of the Liaodong Peninsula, jutting out into the Bohai Sea in the northeast, Dalian is a famous summer resort in China for its pleasant weather, beautiful environment with mountain and sea. The south coastal, Port Arthur, inscription beach and Bingyu Valley are four famous beauty spot of Dalian. The city was declared a Coastal Open City in 1984, with incentives for foreign investment, and is now the third largest port in China. Combined economy, culture and tourism, Dalian is waiting for your visit!