	Room A (605-606)	Room B (607)	Room C (608)	Room D (610)
9:00 10:40	**TA1: 3D-1** **TA1-1** TSV MEOL (Mid-End-Of-Line) and its Assembly / Packaging Technology for 3D/2.5D Solutions Seung Wook Yoon, STATS ChipPAC / Singapore **TA1-2** Through-Package-Via formation technique by laser ablation and reliability of TPVs in glass Yoichiro Sato[1], Kenji Kitaoka[2], Motoshi Ono[2], Mitsuru Watanabe[2], Vijay Sukumaran[3], Kaya Demir[3], Venky Sundaram[3], Rao R Tummala[3], [1]AGC Electronics America, [2]Asahi Glass, [3]Georgia Institute of Technology / USA **TA1-3** Effect of Underfill Properties on Thermomechanical Stress in Fine Pitch 3D-IC Package Akihiro Horibe, Sayuri Kohara, Kuniaki Sueoka, Keiji Matsumoto, Yasumitsu Orii, Fumiaki Yamada, ASET / Japan **TA1-4** High Thermal Conductive Inter Chip Fill Material for 3D-IC Yasuhiro Kawase[1], Makoto Ikemoto[1], Toshiyuki Suzuki[1], Tomohide Murase[1], Hideki Kiritani[1], Takayoshi Hirai[1], Keiji Matsumoto[2], Akihiro Horibe[2], Yasumitsu Orii[2], [1]Mitsubishi Chemical, [2]IBM Japan / Japan	**TB1: Printed-1** **TB1-1** <Session Invited> *(50min.)* Broad Implications Arising from Novel Sintering Process and Conductive Inks for Printed Electronics Stan Farnsworth, NovaCentrix / USA **TB1-2** <Session Invited> *(50min.)* Printed transistors for ambient electronics Takao Someya, The University of Tokyo / Japan	**TC1: RF** **TC1-1** Effect of Periodic Dielectric Material placed over PCB on EM Noise Shielding Yoshiki Kayano, Hiroshi Inoue, Akita University / Japan **TC1-2** Examination of the Reduction Technique of Radiation Noise from the Power Supply Layers in PCB Hitoshi Takakura, Shinichi Sasaki, Saga University / Japan **TC1-3** A Broadband Antenna with Fan-Shaped and Trapezoidal Elements for Ultra Wideband Radio Fukuro Koshiji, Shunsuke Itaya, Yusuke Akiyama, Kokushikan University / Japan **TC1-4** A Bent Unbalanced Dipole Antenna with Semicircular and Trapezoidal Radiators for Ultra Wideband Radio Yusuke Akiyama[1], Fukuro Koshiji[1], Kohji Koshiji[2], [1]Kokushikan University, [2]Tokyo University of Science / Japan	**TD1: MEMS-1** **TD1-1** Parylene deposition aided ionic liquid on Polyethersulfone (PES) membrane for potential use in nanofiltration Gunawan Setia Prihandana, Hikaru Ito, Norihisa Miki, Keio University / Japan **TD1-2** Human position sensing device with high conductive polymer-coated fibers Seiichi Takamatsu[1], Takahiko Imai[1], Takahiro Yamashita[1], Toshihiro Itoh[2], [1]BEANS Laboratory, [2]National institute for advanced industrial science and technology / Japan **TD1-3** Selectively Controlled Alignment of Single Carbon Nanotube Bundles by Dielectrophoresis Takuma Chikamoto[1], Yuichiro Shimada[1], Mitsuo Umetsu[2], Masakazu Sugiyama[3], [1]BEANS PROJECT, [2]The University of Tohoku, [3]The University of Tokyo / Japan **TD1-4** CMOS Neural Networks Controlled MEMS Micro Robot Targeting System on Si Frame Tatsuya Ogiwara, Kazuto Okazaki, Shiho Takahama, Sinpei Yamasaki, Minami Takato, Ken Saito, Fumio Uchikoba, Nihon University / Japan
	Break			
10:50 12:30	**TA2: Taiwan Session-1** **TA2-1** <Session Invited> TBD M J Kao, Industrial Technology Research Institute / Taiwan **TA2-2** Low temperature bonding schemes for 3D chip stacking with fine pitch micro bump interconnections Chau-Jie Zhan, Industrial Technology Research Institute / Taiwan **TA2-3** Thermal Performance of 3D IC Package with Embedded TSVs Ra-Min Tain, Industrial Technology Research Institute / Taiwan **TA2-4** Cu/Ni/SnAg Microbump Bonding Processes for 30µm Pitch Thin-chip-on-chip Package Using a Wafer-level Underfill film Tsung-Fu Yang[1], Kuo-Shu Kao[1], Ren-Chin Cheng[1], Jing-Yao Chang[1], Chang-Chun Lee[2], Chau-Jie Zhan[1], Tai-Hong Chen[1], [1]Industrial Technology Research Institute, [2]Chung Yuan Christian University / Taiwan	**TB2: Printed-2** **TB2-1** <Session Invited> Fabrication of wire bonding pad by ink-jet printing using silver NanoPaste Satoshi Hisanaga, Harima Chemicals / Japan **TB2-2** <Session Invited> Bondability of Copper Wires onto the Laser-Sintered Silver Pad Kazuhiko Yamasaki[1], Sumihiro Takahashi[1], Mamoru Mita[2], Katsuhiro Maekawa[1], [1]Ibaraki University, [2]M&M Research Laboratory / Japan **TB2-3** <Session Invited> Silver nano paste as alternative to high temperature lead solder and example of die attachment using the paste Keiichi Endoh, DOWA Electronics Materials / Japan **TB2-4** <Session Invited> Composition of the nanoparticle for Printed Electoronics Hidekazu Hayama, KRI / Japan	**TC2: Thermal-1** **TC2-1** Energy Efficiency and Thermal Simulations of a Retrofit LED Light Bulb Mika Maaspuro, University of Turku / Finland **TC2-2** Thermal Characterization of a 60 GHz Frontend Phased Array System in Package on Board Wei-Ren Chiou, National Tsing Hua University / Taiwan **TC2-3** Thermal Performance of Various Heat Sinks Lian-Tuu Yeh, Huawei Technologies / USA **TC2-4** Sub-channel-inserted Porous Heat Sink for Cooling Future Power Devices Kazuhisa Yuki, Tokyo University of Science / Japan	**TD2: MEMS-2** **TD2-1** Mechanical and Electrical Characteristics of Direct Bonded Ge / Ge Interface Yuta Sasaki[1], Chenxi Wang[1], Eiji Higurashi[1], Tadatomo Suga[1], Yasuo Doi[1], Iwao Hosako[2], [1]The University of Tokyo, [2]National Institution of Information and Communication Technology / Japan **TD2-2** Surface modification of polyethylene terephthalate (PET) by VUV and VUV/O_3 treatments for flexible capacitive tactile sensors Takashi Kasahara, Waseda University / Japan **TD2-3** Residue-Free Plasma Etching of Polyimide Coatings Benjamin Mimoun[1], Hoa T. M. Pham[2], Vincent Henneken[2], Ronald Dekker[1,2], [1]Delft University of Technology, [2]Philips Research Eindhoven / The Netherlands **TD2-4** New selective plasma treatment solution for streamlining MEMS manufacturing processes Ulrike Schoembs, SUSS MicroTec Lithography / Germany
	Lunch			
13:30 15:10	**TA3: Taiwan Session-2** **TA3-1** Thermal Management of a TSV Interposer with Moore's Law Chips on Both Sides for 3D IC Integration SiP Heng Chieh Chien, Industrial Technology Research Institute / Taiwan **TA3-2** Active Layer of Organic Photovoltaic Devices Based on Conjugated Polymer Blending with PCBM Yi-Jiung Huang, Cho-Liang Chung, Jheng-Jhih Pan, Sheng-Li.Fu, I-Shou University / Taiwan **TA3-3** The study of photovoltaic devices using electrospun conjugated polymer fibers Sheng-Min Hung, Cho-Liang Chung, Yi-Shiang Chen, Sheng-Li.Fu, I-Shou University / Taiwan **TA3-4** Electrical characteristics and reliability performance of a novel MOSFETs-embedded power module for mobile applications Yin-Po Hung, Sheng-Che Hung, Ren-Shin Cheng, Fang-Jun Leu, Jong-Shiou Peng, Chih-Ming Tzeng, Yu-Mei Cheng, Tao-Chih Chang, Tai-Hong Chen, Industrial Technology Research Institute / Taiwan	**TB3: Printed-3** **TB3-1** <Session Invited> Fine pitch copper wiring printed by Super inkjet Kazuhiro Murata[1, 2], Naoki Shirakawa[1], Kazuyuki Masuda[2], [1]Advanced Industrial Science and Technology, [2]SIJTechnology / Japan **TB3-2** <Session Invited> Compact gravure printing equipment Mini Lab Fine for new devices at Research and Development Yasuhisa Hashiguchi, Nihon Denshi Seiki / Japan **TB3-3** <Session Invited> High density screen printing technology Hiroki Sato, Micro-tec / Japan **TB3-4** Development of Copper Materials and Processing for Printed Electronics Kyoko Kuroda, Yasushi Kumashiro, Takaaki Noudou, Hitachi Chemical / Japan	**TC3: MFG-1** **TC3-1** Coating Quality Monitoring System Hiroshi Tsuruda, Koji Nishimura, Toray Engineering / Japan **TC3-2** Effective Zeta Potential to Chracterize Micromachined Glass Surface Yosuke Koga, Keio University / Japan **TC3-3** Selective Formation of the Metal Film by Electroless Plating Process to ITO Daisuke Asakawa, Tadashi Kurashina, Yamato Denki Inc. / Japan **TC3-4** Study on Palladium Removal in the Semi-Additive Process Kumiko Ishikawa, Hideomi Takahashi, Aya Goto, Juichi Tanimoto, Shozo Seino, Ebara-Udylite / Japan	**TD3: DMR-1** **TD3-1** Comparative Study of Dendrites Formation on ImAg and OSP Pad Finishes by Using Water Drop Test Kun Tang, Hong Kong University of Science and Technology / Hong Kong **TD3-2** Simulation of Post-Mold Cure Process in IC Packaging Huy Tien Bui, National Cheng Kung University / Taiwan **TD3-3** Simulation Assisted Physics of Failure based Reliability Assessment Mei-Ling Wu[1], Elviz George[2], and Michael Pecht[2, 3], [1]National Sun Yat-Sen University / Taiwan, [2]University of Maryland / USA, [3]City University of Hong Kong / Hong Kong **TD3-4** Experimental Investigation of Creep Corrosion Masahiro Tsuriya, iNEMI / Japan
	Poster Core Time			
15:40 17:20	**TA4: 3D-2** **TA4-1** <Session Invited> Development of TSV/3D Memory+Logic SiP with 4k-IO Interconnects Hiroaki Ikeda, Shiro Uchiyama, Atsushi Sakai, Harufumi Kobayashi, ASET / Japan **TA4-2** Development of the high producing micro solder flip chip bonding process Daisuke Sakurai[1], Takatoshi Osumi[1], Kazuya Ushirokawa[1], Takashi Nakamura[2], Takatoshi Ishikawa[2], [1]Panasonic, [2]Panasonic Factory Solutions / Japan **TA4-3** Modeling and Optimization on Signal and Power Integrity of Vertical Side-Chip Interconnection Jackson Kong[1], Bok Eng Cheah[1], Ai Heong Tan[1,2], [1]Intel Microelectronics (M), [2]Universiti Sains Malaysia / Malysia **TA4-4** A Built-in Electrical Test Circuit for Detecting Interconnect Open Defects in 3D ICs Tomoaki Konishi, The University of Tokushima / Japan	**TB4: Printed-4** **TB4-1** Preparation of Cu nano-particle in toluene used for conductive ink Song Li, Wuhan University of Technology / China **TB4-2** Design and Packaging of a Flexible RFID Tag with Organic Photovoltaic and Nano Gas Sensors Jingyuan Huang, The Hong Kong University of Science and Technology / Hong Kong (16:30)	**TC4: MFG-2** **TC4-1** Homogenizing Piezoelectric Film and Application to Wafer Level Film Preparation Kazutaka Sueshige[1], Keita Iimura[1], Masaaki Ichiki[1,3,4], Tadatomo Suga[1], Toshihiro Itoh[2,4], [1]The University of Tokyo, [2]National Institute of Advanced Industrial Science and Technology, [3]JST-PRESTO, [4]JST-CREST / Japan **TC4-2** Preparation and Characterization of PZT Thin Films on Releasable Substrate Erika Komine[1], Fumiaki Tomioka[1], Masaaki Ichiki[1,3,4], Tadatomo Suga[1], Toshihiro Itoh[2,4], [1]The University of Tokyo, [2]National Institute of Advanced Industrial Science and Technology, [3]JST-PRESTO, [4]JST-CREST / Japan **TC4-3** Fabrication of Lead-free Dielectric Thin Film on Releasable Substrate Motoyuki Ozaki[1], Toshifumi Hosono[1], Masaaki Ichiki[1,3,4], Tadatomo Suga[1], Toshihiro Itoh[2,4], [1]The University of Tokyo, [2]National Institute of Advanced Industrial Science and Technology, [3]JST-PRESTO, [4]JST-CREST / Japan **TC4-4** Structure and Process for Reducing Magnetic Minor Loop in Multilayer Ceramic Inductor Minami Takato, Aki Kenmochi, Toshiki Fujino, Ken Saito, Fumio Uchikoba, Nihon University / Japan	**TD4: DMR-2** **TD4-1** External Stress Effect to Electromigration on Thermal Annealed and Residue Stress Controlled Aluminum Strip Hsiang-Hung Chang, Kuo-Ning Chiang, National Tsing Hua University / Taiwan **TD4-2** Reliability of Pb-free Solder Fatigue under Thermalmechanical Conditions Yung-Wen Wang, National Sun Yat-Sen University / Taiwan **TD4-3** Quick Assessment Approach of Lead-free Solder Joint Fatigue under Mechanical Bending Jia-Shen Lan, Mei-Ling Wu, National Sun Yat-Sen University / Taiwan (16:55)