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Koichi Takemura, Noriaki Ando, Hiroshi Toyao, Takashi Manako, and Tsuneo Tsukagoshi – NEC Corporation

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M. Sadeghinia, K.M.B Jansen, and L.J. Ernst – Delft University of Technology; G. Schlottig and H. Pape – Infineon Technologies AG

Study on TSV with New Filling Method and Alloy for Advanced 3D-SiP

Akihiro Tsukada, Ryuohi Sato, Yukihiro Sato, Yoshihara Iwata, and Hidenori Murata – Osaka University; Shigenobu Sekine, Ryuji Kimura, and Keijiroh Kishi – Napura Co., Ltd.

Solution-Derived Electrodes and Dielectrics for Low-Cost and High-Capacitance Trench and Through-Silicon-Via (TSV) Capacitors

Yushu Wang, Shu Xiang, P. Markondeya Raj, Himani Sharma, and Rao Tummala – Georgia Institute of Technology; Byron Williams – Texas Instruments

Electrical, Optical, and Fluidic Through-Silicon Vias for Silicon Interposer Applications

Mahavir S. Parekh, Paragkumar A. Thadesar, and Muhannad S. Bakir – Georgia Institute of Technology

Mechanical Characterization of Nickel Nanowires by Using a Customized Atomic Microscope in Scanning Electron Microscope

Emrah Celik, Ibrahim Guven, and Erdogan Madenci – University of Arizona

Variation-Tolerant and Low-Power Clock Network Design for 3D ICs

Xin Zhao, Saibal Mukhopadhyay, and Sung Kyu Lim – Georgia Institute of Technology

Reliability of Fine Pitch Halogen-Free Organic Substrates for Green Electronics

Koushik Ramachandran, Fuhan Liu, Nitesh Kumbhat, Venky Sundaram, and Rao Tummala – Georgia Institute of Technology; Mark Wilson – Dow Chemical Company

High Throughput and Fine Pitch Cu-Cu Interconnection Technology for Multichip Chip-Last Embedding

Abhishek Choudhury, Nitesh Kumbhat, Sadia A. Khan, P. Markondeya Raj, Venky Sundaram, and Rao Tummala – Georgia Institute of Technology; Georg Meyer-Berg – Infineon Technologies AG

LSI Packaging Development for High-End CPU Built into Supercomputer

Joji Fujimori – Fujitsu Semiconductor Limited; Masateru Koide – Fujitsu Advanced Technologies Limited
In-Plane/Out-of-Plane Mixed Probe Techniques to Obtain the RF Characteristics of the SMA Connectors
Kuan-Chung Lu, Tzyy-Sheng Horng, and Lih-Tyng Hwang – National Sun Yat-Sen University

Coupled Electrical and Thermal 3D IC Centric Microfluidic Heat Sink Design and Technology
Yue Zhang, Calvin R. King Jr., Jesal Zaveri, Yoon Jo Kim, Vivek Sahu, Yogendra Joshi, and Muhammad S. Bakir – Georgia Institute of Technology

Nanocomposite for Low Stress Underfill
Ziyn Lin and Kyung-Sik Moon – Georgia Institute of Technology; Ching-Ping Wong – Georgia Institute of Technology, Chinese University of Hong Kong

Self-Assembly Technologies with High-Precision Chip Alignment and Fine-Pitch Microbump Bonding for Advanced Die-to-Wafer 3D Integration

Analysis of CNT Based 3D TSV for Emerging RF Applications
Anurag Gupta, Bruce C. Kim, Sukeshwar Kannan, and Sai Shravan Evana – University of Alabama; Li Li – Cisco Systems, Inc.

Tin-Bismuth Plating for Component Finishes

Impact of Board Configuration and Shock Loading Conditions for Board Level Drop Test
Pradosh Guruprasad and James Pitarresi – Binghamton University; Brian Roggeman – Binghamton University, Universal Instruments Corp.

Enhancement of Dielectric Strength and Processibility of High Dielectric Constant Al Nanocomposite by Organic Molecule Treatment
Zhuo Li, Kyoung-Sik Moon, and Saewon Kim – Georgia Institute of Technology; C.P. Wong – Georgia Institute of Technology, Chinese University of Hong Kong

Low Temperature Cu-Cu Direct Bonding Using Formic Acid Vapor Pretreatment
Wenhua Yang, Hiroyuki Shintani, Masatake Akaike, and Tadatomo Suga – University of Tokyo

Modeling, Optimization and Benchmarking of Chip-to-Chip Electrical Interconnects with Low Loss Air-Clad Dielectrics
Vachan Kumar and Azad Naeemi – Georgia Institute of Technology; Rizwan Bashirullah – University of Florida

Advanced Solder TSV Filling Technology Developed with Vacuum and Wave Soldering
Young-Ki Ko, Chang-Woo Lee, and Sehoon Yoo – Korea Institute of Industrial Technology (KITech); Hiromichi T. Fujii and Yutaka S. Sato – Tohoku University

41: Student Posters
Chairs: Nam Pham – IBM Corporation; and Mark Eblen – Kyocera America, Inc.

Ultra-Compact Dual-Band WLAN Filter Using Independent Band Stop Resonators
Jun H. Park, Seong J. Cheon, and Jae Y. Park – Kwangwoon University; Jeong T. Lim – SGR Tech Co., Ltd.

The Development of Thin Film Barriers for Encapsulating Organic Electronics
Yongjin Kim, Namsu Kim, Hyungchul Kim, and Samuel Graham – Georgia Institute of Technology

Metamaterial-Inspired Absorbers for Terahertz Packaging Applications
Kyoung Youl Park, Jose A. Hejase, Collin S. Meierbachthol, Nophadon Wiwatcharagoses, and Prem Chahal – Michigan State University

Novel ZnO Nanowires/Silicon Hierarchical Structures for Superhydrophobic, Low Reflection, and High Efficiency Solar Cells
Yan Liu, Ziyn Lin, and Kyoung Sik Moon – Georgia Institute of Technology; C.P. Wong – Georgia Institute of Technology, Chinese University of Hong Kong