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寄件者: 日期:

"Y.C. Lee" <kaplanj@asme.org>
2015年10月25日 上午 07:45
"Chang-Chun Lee" <changchunlee@cycu.edu.tw> 收件者: 主旨: Journal of Electronic Packaging: Official E-Newsletter



Note from the Editor:

Welcome to the official e-newsletter of The Journal of Electronic Packaging (JEP).

The newsletter, issued quarterly, will keep you abreast of the latest research developments in our field. Below you will find links to free downloads of review articles, a hand-picked list of papers chosen by Intel engineers, the most recent issue's table of contents, and a news about a US manufacturing institute on flexible hybrid electronics.

Thank you for taking the time to read this newsletter and please don't hesitate to provide feedback by emailing me at my address below.

Sincerely,

YC Lee

Editor, Journal of Electronic Packaging

Leeyc@Colorado.edu

JEP Review Articles!

- · Overview and Outlook of 3D IC Packaging, 3D IC Integration, and 3D Si Integration, John Lau (ASM Pacific Technology)
- Two-Phase Thermal Ground Planes: Technology Development and Parametric Results, Avram Bar-Cohen (DARPA), Kaiser Matin (System Planning Co.), Nicholas Jankowski (U.S. Army Research Laboratory), Darin Sharar (General Technical Services LLC)
- A Brief Overview of Recent Developments in Thermal Management and Energy Optimization in Data Centers, Sami Alkharabsheh, Bahgat Sammakia (Binghamton University), Alfonso Ortega (Villanova University), Dereje Agonafer (University of Texas at Arlington), Yogendra Joshi (Georgia Institute of Technology)
- Nano Thermal Interface Materials: Technology Review and Recent Results, Kaiser Matin (System Planning Co.), Avram Bar-Cohen (DARPA), Sreekant Narumanchi (National Renewable Energy Laboratory)
- A Review of Two-Phase Forced Cooling in Three-Dimensional Stacked Electronics: Technology Integration, Craig Green, Peter Kottke, Xuefei Han, Casey Woodrum, Thomas Sarvey, Pouya Asrar, Xuchen Zhang, Yogendra Joshi, Andrei Fedorov, Suresh Sitaraman and Muhannad Bakir. (Georgia Institute of Technology)

ASME Electronic and Photonic Division (EPPD)

Editor, Y. C. Lee, **University of Colorado Boulder** JEP Home Page, **Editorial Board**

Events

ASME 2015 International Mechanical Engineering Congress & Exposition, November 13-19, 2015, Houston, TX.

The Intersociety Conference on Thermal and Thermomechanical Phenomena in Electronic Systems, May 31- June 3, 2016 •Cosmopolitan Hotel, Las Vegas, NV, USA

Send an email to us if you would like to post your events in future newsletters.

Journal of Electronic Packaging - Associate Editors

Mehmet Arik, PhD Ozyegin University

Mehdi Asheghi, PhD Stanford University

Satish Chaparala, PhD Corning Inc.

Paul Conway, PhD Loughborough University

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Free Downloads of JEP Review Articles

Free Downloads: There are two options to download these articles for FREE: 1) Option A: Click here to email a request to assmejep@gmail.com; 2) Option B: Sign up to join a free ASME JEP Group established online. The group participants can visit the group site and check for the latest papers including free downloads of selected articles and participate in different on-line activities.

Additional review articles are also to be published in 2016. <u>Click here to see the list</u>. Leaders in the field are invited to publish review articles on hot, emerging and fundamental topics.

Intel's Picks - Selected Papers

The following are selected articles from recent issues of the Journal of Electronic Packaging which is of significant relevance to industry. The JEP Editorial Board extends its appreciation to Chandra Mohan M. Jha, Nachiket R. Raravikar, and Eric J. Li of Intel Corporation who selected these papers as a service to our readers.

- 1. Thermal Cycling Study of Quilt Packaging, M. Ashraf Khan, Quanling Zheng, David Kopp, Wayne Buckhanan, Jason M. Kulick, Patrick Fay, Alfred M. Kriman and Gary H. Bernstein, Journal of Electronic Packaging, vol. 137, issue 2.
- 2. On chip power generation using ultrathin thermoelectric generators Owen Sullivan, Man Prakash Gupta, Saibal Mukhopadhyay and Satish Kumar, Journal of Electronic Packaging, vol 137, issue 1
- 3. <u>Design of Thermoelectric modules for high heat flux cooling</u> Ram Ranjan, Joseph E. Turney, Charles E. Lents and Virginia H. Faustino, Journal of Electronic Packaging, vol 136, issue 4
- 4. Enhanced electrical and thermal interconnects by the self-assembly of nanoparticle necks utilizing capillary bridging Thomas Brunschwiler, Gerd Schlottig, Songbo Ni, Yu Liu, Javier V. Goicochea, Jonas Zürcher and Heiko Wolf, Journal of Electronic Packaging, vol 136, issue 4
- 5. Effect of through-silicon-via joule heating on device performance for low-powered mobile applications by Fahad Mirza ,Gaurang Naware, Ankur Jain and Dereje Agonafer, Journal of Electronic Packaging, Vol. 136, issue 4
- 6. <u>Four-Wire Bridge Measurements of Silicon van der Pauw Stress Sensors</u>, Richard C. Jaeger, Mohammad Motalab, Safina Hussain and Jeffrey C. Suhling, Journal of Electronic Packaging, vol 136, issue 4.
- 7. Reliability-based design guidance of three-dimensional integrated circuits packaging using thermal compression bonding and dummy Cu/Ni/SnAg microbumps Chang-Chun Lee and Po Ting Lin, Journal of Electronic Packaging, Vol. 136, issue 3
- 8. <u>High-Frequency and Low-Temperature Thermosonic Bonding of Lead-Free Microsolder Ball on Silver Pad Without Flux</u>, Fuliang Wang, Junhui Li and Lei Han, Journal of Electronic Packaging, vol 136, issue 3.

Journal of Electronic Packaging

Click here for the September 2015 Table of Contents

Paper Review in 14 Weeks

Yes, we have established a system that will make sure the review of every paper submitted to the journal will be completed in 14 weeks. If the author does not receive our decision (accept as is, revisions required, or not acceptable), feel free to contact the Editor. You are welcome to <u>submit your manuscript</u>.

Pradip Dutta, PhD Indian Institute of Science

Ashish Gupta, PhD Intel Corp.

Toru Ikeda, PhD Kagoshima University

Madhusudan Iyengar, PhD Google, Inc.

Yi-Shao Lai, PhD Advanced Semiconductor Engineering (ASE), Inc.

Shi-Wei Ricky Lee, PhD The Hong Kong University of Science and Technology (HKUST)

Xiaobing Luo, PhD Huazhong Univ. of Sci.& Tec.

Seungbae (SB) Park, PhD State University of New York at Binghamton

Mark D. Poliks, PhD State University of New York at Binghamton

Jeffrey C. Suhling, PhD Auburn University

Tse Eric Wong, PhD Raytheon Company

Journal of Electronic Packaging - Guest Editors

Felix Chen, PhD Microsoft Corp.

Tong Cui, PhD Qualcomm Corp.

Shidong Li, PhD MAS Inc.

Susan Lu, PhD State University of New York at Binghamton

Gongan Xie, PhD Northwestern Polytechnical University

Ronggui Yang, PhD University of Colorado

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Latest News:

FlexTech Alliance Receives \$75 Million Department of Defense Award to Create and Manage a Flexible Hybrid Electronics Manufacturing Facility

On August 28, 2015, the U.S. Department of Defense (DoD) awarded FlexTech Alliance to establish and manage a Manufacturing Innovation Institute (MII) for Flexible Hybrid Electronics (FHE MII). The new institute is seventh institute of the US National Network for Manufacturing Innovation program (NNMI). Flexible hybrid electronics enables the integration of electronic, sensing, communications, and power devices on non-traditional flexible substrates. The electronic assembly/packaging is one of the main aspects to be addressed. FHE has the potential to benefit the electronic wearable devices market, medical health monitoring systems, and Internet of Things.

The award is for \$75 million in federal funding over five years with matching of more than \$96 million from the City of San Jose, private companies, universities, several U.S. states, and not-for-profit organizations. FlexTech Alliance is a San Jose-based hub and node approach to create the FHE MII, which comprises 96 companies, 11 laboratories and non-profits, 42 universities, and 14 state and regional organizations. The Institute will distribute R&D funds via competitively-bid project calls. Industry-generated technology roadmaps will drive project calls, timelines and investments. Additionally, education and training activities in FHE manufacturing will expand the available workforce through **Flex School** partnerships with community colleges, teaching and research universities, trade associations, and professional societies

For more information, visit http://www.fhemii.com/.

About Journal of Electronic Packaging

The Journal of Electronic Packaging publishes papers that address 1) thermal management, applied mechanics and technologies for microsystems packaging; 2) critical issues in systems integration; 3) emerging packaging technologies and materials with micro/nano structures; and 4) general small scale systems. The journal is to serve researchers and engineers working in academic and industrial settings. Originality, scientific merit and high engineering relevance are the major criteria for the acceptance of a submitted paper. In addition, leaders in the field are <u>invited to publish review articles</u> on hot, emerging and fundamental topics. Send an email to <u>leeyc@colorado.edu</u> for any feedback or comments.

ASME JOURNALS

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kws=22d ub/ldvp hvvdiilruj2xBla@76:869:1fq6;hd;3d7;i34h8:4eh9f9h8;867;fd) q@W) @ dobfxvwrp hvbvbb vv) r@5::585

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