

**CIRCUITS RUMP SESSION**  
Thursday, June 19  
8:00 p.m. – 10:00 p.m.

Organizers: B. Nikolic, University of California, Berkeley  
T. Sekiguchi, Hitachi, Ltd.

**R1: Photons vs. Electrons – Which Will Win and When? (The Ongoing Race for Short-Distance High-Speed Data Connectivity)**

Honolulu I

Organizers: J. Savoj, Qualcomm  
M. Fukaiishi, NEC

Moderator: J. Wieser, National Semiconductor

This session discusses the utilization of copper and optical interconnects for high-speed chip-to-chip interfaces, along with the emergence of new disruptive technologies. The panel focuses on high-speed short-range and medium-range data connectivity and issues regarding the design of transceivers for these systems, as well as the roadmap of IOs for future high-performance/low-power/small-form-factor systems.

*Panelists:*

|                                  |                         |
|----------------------------------|-------------------------|
| M. Horowitz, Stanford University | I. Young, Intel         |
| J. D'Ambrosia, Force10 Networks  | S. Kasturia, Teranetics |
| H. Tamura, Fujitsu Japan         | Y. Ohtomo, NTT Japan    |

**R2: The Future of Silicon Storage – Can Solid State Technologies Take Center Stage?**

Honolulu II

Organizers: A. Bhavnagarwala, IBM  
S. Ohshima, Toshiba

Moderator: A. Bhavnagarwala, IBM

With the market for storage class memories projected to exceed 500 ExaBytes\* by 2012, and NAND Flash and DDR based solid state drives (SSD) already making inroads into the enterprise sector of storage and into niche applications, will the continued scaling of SSD cost enable silicon to take center stage in storage? Or, would Hard Disk Drives, with Heat Assisted Magnetic Recording and Bit Patterned Media - projected to exceed densities of 50 Terabits/in<sup>2</sup>, continue to dominate as the technology of choice? A panel of experts from across the industry will present their vision of opportunities and limitations of emerging and incumbent storage technologies that can potentially satisfy the mass storage market created by the proliferation of digital content. (\*Gartner)

*Panelists:*

|                            |                        |
|----------------------------|------------------------|
| C. Lam, IBM                | K. Tsuchiya, Toshiba   |
| K. Quader, SanDisk         | K. Kim, Samsung        |
| M. Kryder, Carnegie Mellon | H.-S.P. Wong, Stanford |
| S. Lai, Ovonyx             |                        |