

WMED Program – April 14, 2006

Tutorials			
	<i>(Firs/Pines Room)</i>		<i>(Willows Room)</i>
9:15-11:00	Current Reliability and Failure Analysis Issues for High Volume Memory Products Christopher L. Henderson; President, Semitracks, Inc.	3D Memory Packaging Technologies & Trends Nozad Karim; VP, App. Engrg. & Characterization, Amkor Technology	
11:00-12:30	Lunch on your own in Downtown Boise		
Invited Speakers			
12:30-12:45	Welcome <i>(Firs/Pines Room)</i>		
12:45-1:30	Keynote: Future Directions of Non-Volatile Memory Technologies Al Fazio; Director, Memory Technology Development, Intel Corporation		
1:30-2:15	Preserving Low-k Dielectrics During Photoresist and Etch Residue Removal Dennis Hess; William W. LaRoche, Jr. Chair, School of Chemical & Biomolecular Engineering, Georgia Tech		
2:15-2:30	Break		
2:30-3:15	Lest We Never Forget: A Historical Perspective of Space Data Recorders; A Prediction for the Future Karl Strauss; Senior Engineer, Flight Avionics Systems, Jet Propulsion Laboratory		
3:15-4:00	Physics Based Modeling and Design of Chips, Devices, and Nanostructures: Present and Future Neil Goldsman; Professor, Department of Electrical Engineering, Univ. of Maryland at College Park		
4:00-4:15	Break		
	Circuit Design <i>(Willows Room)</i>	MEMS, Devices, and Sensors <i>(Cottonwoods Room)</i>	Processing and Reliability <i>(Firs/Pines Room)</i>
4:15-4:30	Indirect Feedback Compensation of CMOS Op-Amps , Saxena, <i>et al.</i> , BSU	Polymer Based Thin Film Coils as a Power Module of Wireless Neural Interfaces , S. Kim, <i>et al.</i> , U Utah/TU Berlin	Space Efficient ESD Methodology for Reliable High Volt Applications , Naughton, <i>et al.</i> , AMIS
4:30-4:45	A CMOS Low Voltage Down-Converter Mixer for Sub 1V Applications , Vahidfar, <i>et al.</i> , U Tehran	Design and Fabrication of a MEMS Capacitive Chemical Sensor System , Saxena, <i>et al.</i> , BSU	Time-Dependent Dielectric Breakdown of a Recessed Channel DRAM Access Device , Owens, <i>et al.</i> , Micron Technology
4:45-5:00	Shared Multiplier Design of a Digital Filter on a High-Temperature FPGA Module , Houle, <i>et al.</i> , U Idaho/Sandia	A High Sensitive Piezoresistive Sensor for Stress Measurements in Packaged Semiconductor Die , Mian, <i>et al.</i> , MT State/Auburn	Preliminary Study of NOR Digital Response to Single pMOSFET Dielectric Degradation , Gorseth, <i>et al.</i> , BSU/SEMATECH

5:00-5:15	40 Gbps SiGe Pattern Generator IC with Variable Clock Skew and Output Levels , Zahller, <i>et al.</i> , WSU	Resistance Switching in $\text{Sn}_x\text{Mn}_y\text{Te}_z$-Based Devices , Herring, <i>et al.</i> , Micron Technology/BSU	Ultra-Low-Power Dynamic-Threshold Digital Circuits in the FlexFET Independently-Double-Gated SOI CMOS Technology , Parke, <i>et al.</i> , BSU/American Semiconductor
5:15-5:30	High Speed Digital Input Buffer Circuits , Duvvada, <i>et al.</i> , BSU	Metal/Semiconductor Contacts for Organic Molecules , Kapoor, <i>et al.</i> , U Utah	Secondary Ion Mass Spectrometry Analysis of Wafer Contamination Resulting from Gloved Hands , Morinville, <i>et al.</i> , Micron Technology
Poster Session & Hors-d'Oeuvres (<i>Vestibule and Cottonwoods Room</i>)			
5:30-6:00	Comparative Study of TaN-TiN and TiN Gate Stacks for Thermally Stable PFETs , Ramaswamy, <i>et al.</i> , Micron Technology	Thermal Noise Limits in Nanoscale Electronics , Mudrow, <i>et al.</i> , OSU	Micro-Sensor for Monitoring Oils , Marx, <i>et al.</i> , BSU
5:30-6:00	Dependence of Si_3N_4 Film Properties on Precursor Chemistry , Gonzalez, <i>et al.</i> , Micron Technology	A Novel Triple Mode LNA Designed in CMOS 0.18μm Technology for Multi Standard Receivers , Vahidfar, <i>et al.</i> , U Tehran/U Pavia	Integrated Silicon Nanowire Diodes , Jackson, <i>et al.</i> , U Utah
5:30-6:00	Photo Sensitivities in a 0.35μm 18V PDMOS Technology , Williams, <i>et al.</i> , AMIS	Power Dissipation and Temperature Variations in Nanoscale Devices , Wanalerlak, <i>et al.</i> , OSU	Design of a MEMS Capacitive Chemical Sensor Based on Polymer Swelling , Plum, <i>et al.</i> , BSU
5:30-6:00	Silicon Solar Cells Using Backside Contacts With Through-Wafer Interconnects , Erbe, <i>et al.</i> , BSU	CMOS Imager Pixel Design for Space Applications , Elgin, <i>et al.</i> , BSU	Introduction to Modeling an Imaging System with Human Detection of Artifacts , Sukumar, <i>et al.</i> , Micron Technology/U Idaho
5:30-6:00	Preliminary Investigation of a High Dielectric Constant Material to Replace SiO_2 in Metal Oxide Semiconductor Devices to Improve MOSFET Reliability , Elgin, <i>et al.</i> , BSU	Characterization of Negative Differential Resistance in Chalcogenide Devices Containing Silver , Bregaj, <i>et al.</i> , BSU	
6:00-6:30	Awards & Conference Closing (<i>Firs/Pines Room</i>)		