

**DRAFT AGENDA – Per 7/24/08**

**Symposium on Chemical-Mechanical Planarization  
August 10-13, 2008  
Crown Plaza Resort**

**Sunday, August 10:**

- 12:00 - 5:00 P.M. Hotel Check-in and CAMP Registration
- 5:30 - 7:30 P.M. Cocktail Reception being held in Adirondack Great Room, (No formal dinner provided)

**Monday, August 11:**

- 7:00 - 8:00 A.M. Breakfast – MacKenzie's

**MEETING HELD IN GRAND VIEW B**

- 8:10 A.M. **S.V. Babu: Opening Remarks**

**Session I**

- 8:15 A.M. "Enabling Solutions for 32 nm Node" -- Manabu Tsujimura, Ebara Corporation
- 8:45 A.M. "Challenges in 32/22nm CMP for Logic Technology"  
-- Yongsik Moon, Advanced Micro Devices (AMD)
- 9:10 A.M. "Fundamental Understanding of Chemical Component Interactions in Cu CMP Slurries" -- Mario Brands & Yuzhuo Li, BASF
- 9:35 A.M. "Mechanisms in Copper and Barrier Polishing"  
-- Jason Keleher, Cabot Microelectronics
- 10:00 A.M. Coffee Break

**Session II**

- 10:30 A.M. "Compatibility of Ultra Low-k Dielectrics with Chemical Mechanical Planarization – An Experimental Study" -- Satyavolu S. Papa Rao, D.F. Canaperi, M. Krishnan, S. Gates, S. Hosadurga, S.-T. Chen, S. Cohen, IBM
- 10:55 A.M. "Direct CMP of Highly Porous Low K Dielectrics – a Slurry and Pad Perspective"  
-- Hugh Li, Rohm and Haas Electronic Materials
- 11:20 A.M. "CMP of Copper Contacts with Ruthenium Liner for 32/22 nm"  
-- Don Canaperi, Satyavolu S. Papa Rao, Matthew Smalley, IBM; Paul Feeney, and Craig Mills, Cabot Microelectronics
- 11:45 A.M. "Cu ECMP in a Phosphate Bath: Feature Scale Planarization"  
-- Kristin Shattuck and Alan West, Columbia University
- 12:10 P.M. Lunch – MacKenzie's

## Monday, August 11 continued:

### Session III

- 3:45 P.M.            "In situ CMP Electrochemical Study of Ru Barrier Slurries"  
-- Anne Miller & Jinshan Huo, Fujimi Corporation
- 4:10 P.M.            "Ceria-Based Polishes for LCD Substrates" -- David Merricks, Ferro
- 4:35 P.M.            "Study on Slurry Flow for Large Quadrilateral Quartz Glass Plate Polishing"  
-- Keiichi Kimura, Kyushu Institute of Technology
- 5:00 P.M.            "Process Intensification Applications for Semiconductor Industry"  
-- Roshan Jachuck, Clarkson
- 5:25 – 7:00 P.M.    **Poster Session/ Open Bar – Grand View A**
- 7:00 P.M.            Dinner – Olympic Room
- After Dinner Speaker: Joe Steigerwald, Intel, TBD

## Tuesday, August 12:

- 7:00 - 8:00 A.M.    Breakfast – MacKenzie's

### Session IV

- 8:10 A.M.            "High Rate CMP for Thick Film Cu Layer" -- Masaru Kinoshita, Nitta Haas
- 8:40 A.M.            "Design and Material Considerations in Next Generation Pad Technology"  
-- Rajeev Bajaj, SemiQuest, Inc.
- 9:05 A.M.            "Pad Effects in Barrier CMP" -- Jai Kasthurirangan, Cabot Microelectronics
- 9:30 A.M.            "Characterization of Thermoset and Thermoplastic Polyurethane Pads, and Various Grooving Methods for Oxide Chemical Mechanical Planarization Applications" -- Yasa Sampurno, Univ. of Arizona; Leonard Borucki, Araca, Inc. Yun Zhuang, Univ. of Arizona & Araca, Inc.; Sudhanshu Misra & Karey Holland, Neopad Technologies; Duane Boning, Massachusetts Institute of Technology and Ara Philipossian, University of Arizona and Araca, Inc
- 9:55 AM             Coffee Break

### Session V

- 10:25 A.M.            Synchronous, In Situ Measurements of Coefficient of Friction, Wafer Orientation, and Material Removal Rate During CMP" -- James Vlahakis, Caprice Gray, Chris Rogers, Vincent Manno, & Robert White, Tufts University, Don Hooper, Intel Corporation, Albuquerque, NM; Mansour Moinpour, Intel Corporation, Santa Clara, CA; Sriram Anjur, Cabot Microelectronics; Ara Philipossian, University of Arizona
- 10:50 A.M.            "Tribological and Flow Distribution Effects on PVA Brush based Post-CMP Cleaning" -- Rakesh Singh, David Stockbower, & Chris Wargo, Entegris
- 11:15 A.M.            "Defectivity in CMP due to Scratch Generation"  
-- Pavan Karra and A. Chandra, Iowa State University

**Tuesday, August 12, continued:**

11:40 A.M.            "Characterization of ILD Scratches" -- Jin-Goo Park Hanyang University

12:05 P.M.            Lunch – MacKenzie's

**Session VI**

3:45 P.M.            "Reduction of Dishing in Polysilicon MEMS Patterns by Selectivity Controlled CMP"  
-- Haedo Jeong, Pusan National University

4:10 P.M.            "Reduction of Wafer Bevel Induced Defect by Edge Polish"  
-- Yohei Yamada, Hitachi, Ltd.

4:35 P.M.            "Self Limiting Planarizing CMP Process for Silicon Oxide Dielectrics with an Aluminum BEOL" -- William America, NXP

5:00 P.M.            "Effect of Retaining Ring Slot Design on Slurry Flow during CMP"  
-- Xiaomin Wei , Roy Dittler, & Jiang Cheng, University of Arizona; Yun Zhuang & Ara Philipossian, University of Arizona & Araca, Inc.; Christopher Wargo & Ralph Stankowski, Entegris

6:00 - 7:00 P.M.      Reception at Lake Placid Club

7:00 P.M.            Dinner at Lake Placid Club

**Wednesday, August 13:**

7:00 - 8:00 A.M.      Breakfast – MacKenzie's

**Session VII**

8:05 A.M.            "CMP Pad Surface Characterization for CMP Mechanism Investigation"  
-- Hiroyuki Miyauchi, JSR Corporation

8:30 A.M.            "Topograph-Sensitive: Bottom-up Growth of Ru and Cu for Filling Nano-features Using Supercritical CO2 Fluids" -- Eiichi Kondoh, University of Yamanishi

8:55 A.M.            "Optimization of CMP Conditioner Design for Non-porous CMP Pads and its Application to High Volume Manufacturing Processes" -- Ji Chul Yang<sup>1,2</sup>, Taesung Kim<sup>2</sup>, <sup>1</sup> Samsung Electronics , Memory Fab. Center and <sup>2</sup>Sungkyunkwan University, and Taewook Hwang and Thomas Puthanangady, Saint-Gobain Abrasives

9:20 A.M.            "The Effect of Conditioner Design on Pad Texture"  
-- David Slutz, Morgan Advanced Ceramics

9:45 A.M.            Coffee Break

**Wednesday, August 13 Continued:**

**Session VIII**

- 10:10 AM            “The Effect of Conditioners of the Removal Rates of Oxide and Nitride for an STI Process Using an Oxide Slurry and a High Selectivity Slurry”  
-- Gene Davis, Texas Instruments and David Slutz, Morgan Advanced Ceramics
- 10:35 A.M.        “Achieving Highly Tunable Selectivity for Polishing Poly Si, Silicon Nitride and Oxide Films”—Pradeep Dandu and S.V. Babu, Clarkson
- 11:00 A.M.        “Development of 1<sup>st</sup> Step NiP CMP Slurry for Hard Disk Drive Applications”  
-- Shyam Venkataraman, Clarkson
- 11:30 A.M.        Closing Remarks, S.V. Babu, CAMP
- Lunch - MacKenzie's