26th CMP Users Meeting

Fraunhofer Institute for Silicon Technology ISIT

Fraunhoferstr. 1, Itzehoe, Germany, 15.04.2011

Organized by VDE/VDI-GMM Gesellschaft für Mikroelektronik, Mikro- und Feinwerktechnik
(VDE/VDI-GMM Society for Microelectronics, Micro and Precision Engineering)

Agenda

8:30 Welcome
Gerfried Zwicker
Fraunhofer Institute for Silicon Technology ISIT, Itzehoe, Germany

8:35 Introduction to Fraunhofer ISIT
Prof. Wolfgang Benecke
Fraunhofer Institute for Silicon Technology ISIT, Itzehoe, Germany

CMP Slurries and Processes
Session Chair: Martin Kulawski, Advaplan, Espoo, Finland

09:00 L: Advanced Formulations for Front-End Applications
Bastian Noller, Michael Lauter, Christophe Gillot, Robert Reichardt and Yuzhuo Li
BASF SE, Ludwigshafen, Germany

09:25 L: Environmental and Health Risks Due to CMP of III/V Materials
Patrick Ong
imec, Leuven, Belgium

09:50 S: Glass CMP Using Innovative Chamber Type Polishing Machine with High-Pressure Gasses and Manganese Oxide Slurries
Toshiro Doi, Tsutomu Yamasaki, Syuhei Kurokawa, and Osamu Ohnishi
Kyushu University, Fukuoka, Japan

10:05 S: Characteristics of Silicon CMP with Developed Simultaneous Double-Side CMP Machine
Osamu Ohnishi, Toshiro Doi, Syuhei Kurokawa, Tsutomu Yamazaki, Kei Kitamura and Tao Yin
Kyushu University, Fukuoka, Japan

10:20 Coffee break

CMP Simulation, Process Control, and Miscellaneous
Session Chair: Gerfried Zwicker, Fraunhofer ISIT, Itzehoe, Germany

11:00 L: Interrelation between Conditioning, Pad Roughness and Removal Rate in CMP
Boris Vasilev[1], Sascha Bott[1], Roland Rzehak[2], Peter Kücher[1] and Johann W. Bartha[3]
[1]Fraunhofer CNT, Dresden, Germany, [2]Forschungszentrum Rossendorf, Germany, [3]Technical University Dresden, Germany

11:25 L: A New Method for Thinning of Chips for MEMS
Srecko Cvetkovic and L. Rissing
Leibniz University Hannover, Germany

11:50 L: Green CMP Conditioner – Saint Gobain Flipper F2X Double Sided CMP Conditioner
Taewook Hwang and Rama Vedantham
Saint Gobain Abrasives, Worcester, Mass., USA

12:15 L: In-Line Monitoring of a CoWP Cap Layer Using Stand-Alone Spectroscopic Ellipsometry
Ronny Haupt[1], Leander Haensel[1], Sven Heinickel[2] and Markus Nopper[2]
[1]KLA-Tencor, Dresden, Germany, [2]Global Foundries, Dresden, Germany

12:45 Lunch, Refreshments, Coffee
Time for Discussions

14:00 End of Meeting

Optional: Lab Tour Fraunhofer ISIT and Vishay Clean Room