SEMI® International MEMS Steering Group – General Meeting

Flat Panel Display
Business and Technical Education Programs
International Standards
Publications
Worldwide Offices
Workforce Development
Industry Research & Statistics
Advocacy
Environment, Health & Safety

Expositions

Expositions

Expositions

Executive Conferences

April 2004
Robert Scace
Klaros Corporation

SEMICON Europa 2004



NA MEMS Standards Activity

Committee co-chairs:

Michael Huff, MEMS Exchange Dan Chilcott, Delphi Win Baylies, BayTech (vice chair)

• Meetings:

Austin 15 October La Jolla 15 March



NA MEMS Standards Activity - 2

Task Forces:

MEMS Fluidics Interface TF

Mark Crockett, Applied Materials; Bai Xu, Albany Univ.

Wafer-bonding Target TF

Win Baylies, BayTech

MEMS Test WG

Dan Chilcott, Delphi; Win Baylies, BayTech

MEMS Packaging WG

Charlie Cuneo, Unitek Benchmark

Process Steps WG

(no leader at preset)

Wafer Specifications for MEMS Applications TF Graham Fisher, MEMC



NA MEMS Standards Activity - 3

Wafer Specs for MEMS TF (Silicon Wafer Committee)

Wafer Survey

Executed 1Q-2Q03

Conclusions July 03:

No CMOS-like single driver for wafer specs

Several unique segment needs identified

Report placed on Web URL, anyone??

Discussed in Japan, Taiwan, Korea

SNARFS

Doc. 3769 Guide for Specifying Wafers for MEMS-Related Bonding Applications

Doc. 3908 Guide for Specifying Wafers for Direct Bonding Applications



NA MEMS Standards Activity - 4

Fluidic Interface WG

Excellent proposal from Applied Materials

SNARF prepared for Guide for Generic Fluidic I/O Design and Fabrication

TFOF approved by MEMS Committee

Wafer-Bond Target TF

SNARF for Guide for Specifying On-Wafer Bonding Targets suggested design provided by leading MEMS maker TFOF approved by MEMS Committee

 Substantial discussion in MEMS Committee on standards needed for external data communications to/from MEMS devices Study team established



Europe MEMS Standards Activity

- Committee co-chairs:
 - Viorel Dragoi, EVG
 - Andres Lagos, Colibrys
- Status:
 - 9 meetings, last one in Nijmegen
 - 4 task forces:
 - Wafer Backside Exclusion Frame Size for Wafer Handling
 - Universal Alignment Targets for Wafer Bonding
 - MEMS Terminology
 - MEMS Tray and Carriers (to be confirmed)



Japan MEMS Standards Activity

- Dr. Kuniki Ohwada and Mr. Kazunori Kato will lead Japanese standards activity
 - Dr. Ohwada (ISEL) has much experience in MEMS standardization.
 - A member of IEC SC 47E
 - Mr. Kato (AiT) has contributed to SEMI Standards activities for over 10 years.
 - Division Chair of Test / Packaging Division
 - Committee Chair of Packaging Committee



Japan Standards activity plan

- Plan to hold "MEMS standardization workshop" within 2004
 - Survey of existing MEMS related standards
 - Collect requests for MEMS related standards

