

Call for Papers

International MEMS/MST Industry Forum

“Taking MEMS to the next level”

7 – 8 October 2013 / Dresden, Germany

Micro-electromechanical systems — MEMS — continue to be a bright spot among semiconductors.

The MEMS market is not immune to the current economic slowdown, but resists macroeconomic effects better than the rest of the semiconductor industry. MEMS revenue grew 6% in 2012, an enviable rate compared to the -2.3% decline in 2012 for the total semiconductor component industry according to IHS. Looking forward, the MEMS market will rapidly resume its double digit growth – expanding more than twice as fast as the rest of the former. How can MEMS sensors sustain their exceptional development? When will this industry exceed the \$10 billion mark? How can MEMS help fulfill trillion sensor market prophecy, as is currently envisioned by MEMS evangelists? The International MEMS/MST Industry Forum will examine how to take MEMS sensors to the next level.

The conference will review current and future applications of MEMS in session 1 and 4. Smartphones and tablets are not the only fuel for growth, as automotive mandates are currently boosting the market for sensors. Over the next 5 years, MEMS will become increasingly important in medical applications supporting mobile health, assisted living and new therapeutics schemes. Finally we should think of industrial processing, smart buildings and more generally the emerging concept of “the internet of things” as further propellants for the market.

Session 2 examines viable production concepts and business models supporting growth. IDMs may rule today, but the future trend is fabless. Is the necessary foundry infrastructure in place? Will standards emerge as the industry matures? How can one address the needs of the higher value but smaller volume applications?

Finally, session 3 discusses material and process requirements that are needed to bring MEMS technology to the next level. Also, what impact do combo sensors have on processes, from front-end to testing? The vision of “sensory swarms” calls for miniaturized low-power sensor nodes. How can 3D integration, TSVs and monolithic integration help? In a larger definition of MEMS, which new manufacturing technologies and substrates are needed to develop next-generation sensors to monitor the environment e.g. UV, humidity, gases, etc?

The MEMS forum is an exceptional platform for exhibitors and visitors to explore the MEMS industry supply chain. For a unique look at manufacturing challenges and new technologies in MEMS, don't miss this event.

Session 1: MEMS Innovative Applications

Emerging use-cases which are driving new MEMS technologies

- Consumer electronics / mobile devices
- Automotive
- Biomedical / life sciences applications
- Healthcare
- Industrial applications
- Optical MEMS
- Energy saving/harvesting
- Internet of things

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Session 2: Business Models: Foundry, Fabless, IDM

Viable production concepts for MEMS products

- IDM and fabless production with foundries
- Leverage of standardization in MEMS technologies
- Strategies for medium volume, high added value and emerging products
- CMOS fabs for MEMS

Session 3: Manufacturing technology and quality

New materials and processes for MEMS, front-end, back-end and testing

- 3D and TSV processes
- Monolithic CMOS integration
- Other sensors beyond MEMS
- Quality control of MEMS technical processes
- Sealing and capping technologies (metal wafer bonding, vacuum sealing, etc.)
- Chip and WLP technologies, thin wafers and packages
- High throughput testing
- Advanced substrates

Session 4: MEMS Market

Entering a New Growth Cycle!

- MEMS application markets, forecasts and outlook

Instructions to submit an abstract – To submit your abstract please click [here](#).

General guidelines:

- Please submit your abstracts and biography via internet until **24 May 2013**. Abstracts submitted via fax, e-mail, post, or other methods will generally not be accepted.
- The conference language is English.
- The abstract should have between 1.000 and 2.000 characters (Starting with descriptive paragraph identifying issue addressed and solution).
- Abstract changes and corrections will be accepted until the 24 May 2013.

Your presentation may not be included in the review process unless the information is complete.

Evaluation criteria include significance, usefulness for the manufacturing world and clarity and accuracy as a paper. Abstracts will be peer-reviewed and selected relative to the points above. We encourage application related presentations, i.e. on joint projects between users and suppliers. Papers are to be non-commercial and focus on the technical/economical merits of a process rather than the individual company's product benefits.

Deadline: Submit your abstracts and biography until 24 May 2013.

Changes: After your first registration your data are saved. Changes can be made any time until **24 May 2013**.

Notification: Selected presenters will be notified by **17 June 2013**.

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