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Call for Papers

Advanced Packaging Conference (APC)

Electronics Packaging and Test for Future Mobility

14-15 November 2017 / Munich Germany
Co-located with productronica

Automotive industry is one of the strong economic domains in Europe. With the advancement of technology towards automated and finally autonomous driving, we see an increasing number of electronic safety features, driver assistance systems, more sophisticated Engine Control Units, large number of communication features and infotainment systems in the car. They all depend on the availability of reliable, powerful electronic systems. Modern cars are becoming more and more “Microelectronics on wheels”. Electronics packaging, smart system integration, Sensors/ MEMS fusion in the systems and the test of the components and systems are important success factors for such electronic systems for future mobility.

As packaging, assembly and test in general, electronic systems for future mobility are targeting to find solutions for those key critical aspects of packaging: Performance, Form-Factor and Cost. But electronic systems for future mobility require on top reliability and zero defect yield targets significantly higher than specified for consumer and mobile communication application, which are driving advanced packaging development. However, years after introduction of new advanced packaging technologies, typically after a certain level of maturity and wider acceptance was achieved, other markets such as industrial, medical and healthcare, automotive and even military and aerospace applications tend to re-use those technologies, adapted to their typically higher requirements. Why do they do so? Because they are under the same continuously increasing pressure to address that critical triad of packaging: Performance, Form-Factor and Cost.

The major differences compared to consumer packaging can be found in the performance and reliability requirements. To address those, Chip-Package-Interaction needs to be better understood. The experts of Semiconductor Wafer FABs and IDMs (Frontends) and Packaging, Assembly and Test in OSATs, Test Houses and IDMs (Backends) need to move closer together, new high sophisticated functional materials need to be developed and tested for higher system robustness, new more powerful inspection methods are needed to ensure the quality level required, and flexible multi-temperature test concepts need to be developed. Those are the challenges of electronics packaging and test for future mobility, and at this year’s Advanced Packaging Conference, we want to present the latest advances in this field. If your company is active in electronics packaging and test for future mobility, we invite you to submit an abstract.

Papers should cover packaging, assembly and test process, and volume manufacturing challenges for:

Packaging/ Assembly:

- Packaging for automotive, autonomous driving and other harsh environments;
- Chip embedding Packaging Technologies;
- Wafer-Level Packaging;
- Merge of Frontend- and Backend technologies, Chip-Package-Interaction;
- Parallel processing solutions, scalability and manufacturing on large format;
- Self-assembly and self-alignment features;
- MEMS and Sensor integration;
- Thin wafer/ panel handling;
- Interconnect technologies for improved performance and reliability;
- The role of material, and material development for higher reliability;
- Process development and control;
- Quality and reliability assurance;
- Metrology and inspection methods;
- Failure modes and analysis.

Wafer/ Package Test:

- Wafer-Level Package handling and test;
- Alignment for small contact pitches;
- Overcoming packaging limits to enable test at high parallelism;
- Validation of interconnects at multiple temperatures (room, hot and cold);
- Validation of interconnects at high power (high voltage and/or current);
- Validation of interconnects at microwave frequencies.

Instructions to submit an abstract – To submit your abstract please click here.

General guidelines:

- Please submit your abstracts, biography and a photo via internet until **28 April 2017**. 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 400 and 500 words (not more than 2000 characters), starting with descriptive paragraph identifying issue addressed and the solution. Please focus on the news instead of describing state-of-the-art.
- Abstract modifications, changes and corrections will be accepted until the 28 April 2017.

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 28 April 2017.**
Changes:	After your first registration your data are saved and can be modified until **28 April 2017**.
Notification:	**Selected presenters will be notified by 17 July 2017.**

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