

3D Integration

Applications, Technology, Architecture, Design, Automation, and Test

Grenoble, France

Friday March 22, 2013 http://www.date-conference.com/date13/conference/workshop-w5

The Design, Automation, and Test in Europe conference and exhibition is the main European event bringing together designers and design automation users, researchers and vendors, as well as specialists in hardware and software design, test and manufacturing of electronic circuits and systems. The conference includes plenary invited papers, regular papers, panels, hot-topic sessions, tutorials and workshops, two special focus days, and a track for executives. Friday Workshops are focusing on emerging research and application topics. At DATE 2013, one of the Friday Workshops is devoted to **3D Integration**. This one-day event consists of a plenary keynote, regular and poster presentations, and a panel session.

WORKSHOP DESCRIPTION

3D Integration is a promising technology for extending Moore's momentum in the next decennium, offering heterogeneous technology integration, higher transistor density, faster interconnects, and potentially lower cost and time-to-market. To produce 3D chips, new capabilities are needed: process technology, architectures, design methods, tools, and manufacturing test solutions. The goal of this Workshop is to bring together researchers, practitioners, and others interested in this exciting and rapidly evolving field, in order to update each other on the latest state-of-the-art, exchange ideas, and discuss future challenges. The workshop took place in conjunction with DATE 2009, DATE 2010, DATE 2011 and DATE 2012.

TOPIC AREAS

You are invited to participate and submit your contributions to the DATE 2013 Friday Workshop on **3D Integration**. The areas of interest include (but are not limited to) the following topics:

- 3D technologies: chip-on-chip, micro-bumping, contactless, and through-silicon-vias interconnect
- TSV formation, perm./temp. wafer (de-)bonding .
- 3D architectures and design space exploration
- 3D combinations of logic, memory, analog, RF
- Application, product, or test chip case studies
- 3D design methods and EDA tools

- Signal and power integrity, and ESD in 3D
- Thermo(-mechanical) analysis and -aware design
- Chip-package co-design for 3D
- Test, design-for-test, and debug techniques for 3D
- Wafer test access, KGD test, thin-wafer handling
- Economic benefit/cost trade-off studies
- Standardization initiatives

SUBMISSION INSTRUCTIONS

Submissions are invited in the form of (extended) abstracts not exceeding two pages. Submissions must be sent in as PDF file via the Welcome paper submission system: http://welcome.molesystems.com/DATE13-3D-WS/2013/. All submissions will be evaluated for selection with respect to their suitability for the workshop, originality, and technical soundness. Selected submissions can be accepted for regular or poster presentation. At the workshop, an Electronic Workshop Digest will be made available to all workshop participants, which will include all material that authors are willing to provide: abstract, paper, slides, poster, etc.

> Paper Submission deadline Notification of Acceptance Camera-Ready Material due date

November 25, 2012 December 10, 2012

February 22, 2013

MORE INFORMATION

Qiang Xu - General Co-Chair The Chinese University of Hong Kong Room 1008, Ho Sin Hang Building, Shatin, N.T., Hong Kong E-mail: qxu@cse.cuhk.edu.hk

Saqib Khursheed - General Co-Chair University of Southampton Room 4221, Building 59, School of ECS. SO17 1BJ, Southampton, UK E-mail: ssk@ecs.soton.ac.uk

Terrence Mak – Program Co-Chair The Chinese University of Hong Kong Room 1007, Ho Sin Hang Building,

Shatin, N.T., Hong Kong

E-mail: stmak@cse.cuhk.edu.hk

Said Hamdioui – Program Co-Chair Delft University of Technology Building 36, Rm. HB15.060 Mekelweg 4, 2628 CD Delft The Netherlands E-mail: s.hamdioui@tudelft.nl