Conference program

Vienna, Austria, 26–27 March 2014
Smart systems integrationapon

REGISTER NOW AT
www.smartsystemsintegration.com/registration

Co-organiser:
Fraunhofer

Part of the activities cat.

In cooperation with:
mesago
Conference program
Wednesday, 26 March 2014

Opening Session
Chairmen: Prof. Dr. Thomas Goswami, Fraunhofer IAN, DE, Dr. Graeme Lunt, Siemens, EPSS, DE

08:45 hrs
Welcome
Prof. Dr. Thomas Goswami, Conference chair, Fraunhofer IAN, DE

09:30 hrs
Keynote I
Smart Systems Integration in WI2020 and Beyond
Khalil Romani, European Commission, IE

10:20 hrs
Coffee break & exhibition
The special session by EPSS, the poster presentations and the exhibition are free of charge to all participants, exhibitors and registered visitors.

Parallel Sessions

Advanced micro and nano technologies
Chairmen: Prof. Dr. P.-J. Feldmann, ETH University of Technology, NL; Dr. Andreas Pleiter, CSEM Centre Switzerland, CH

10:45 hrs
Energy-efficient magnetic-actuated switches for low-power and wireless applications
Dr. Ralf Stoltie, Sentasys GmbH, DE

11:00 hrs
Progress in manufacturing of GaN HEMT devices exceeding the GHz frequency range for mmWave applications
Alexandra Muller, IMT Bacharach, FR, DE

11:25 hrs
Plasma-assisted MicroPump with Active Damping (PMPAD)
Dr. Axel Schumacher, HSG IMT, DE

12:00 hrs
Towards Nanoscience: Silicon Monoelectronic Integration in a MEMS Device by Electromagnetic Actuation
Stefan Wagnerdorff, Vienna University of Technology, AT

12:25 hrs
Lunch break & exhibition

3D integration and interconnect technologies I
Chairmen: Efthymis Panousis, CEA-Leti, FR, M. Alipaz, Wolf, Fraunhofer IWM, DE

10:45 hrs
Failure Mechanisms in the 3D Integration of MEMS and ASIC via Au-capped Cu
David Becouly, Robert Bosch GmbH, DE

11:00 hrs
Waterbonding Technologies for 3D-Integration Marco Baum, Fraunhofer IWM, DE

11:15 hrs
Monolithically integrated temporary bonded thin wafers
Dr. Thomas Uhlemann, EV Group, AT

12:00 hrs
Highly aligned 3D wafer bonding into Through Silicon Via (TSV) Reliable interface up to 15:1
Kai Uhwenger, Fraunhofer IWM: SEMATECH, DE

12:15 hrs
Strengthening the Smart System Integration Ecosystem by reaching out to regional actors across Europe
EPSS session I
Chairmen: Efthymis Panousis, CEA-Leti, FR, M. Alipaz, Wolf, Fraunhofer IWM, DE

10:45 hrs
Smart System Integration is now an established technology based on the trend, practical and applied across a wide range of sectors. However, there are still a large number of industrial actors, very often SMEs, who are not familiar with the current developments and thus they face difficulties. The focus of this panel will be to identify and discuss the challenges and opportunities of the Smart System Integration Ecosystem and ways to strengthen it.

We will present the results of the EXPRESS campaign on understanding the barriers for and assessing the health status of the Ecosystem in Europe that is being launched at the next meeting. This campaign will involve stakeholders to engage with the aim to better meet the needs of all actors and strengthen the ecosystem as a whole.