

WORKSHOP “VARIABILITY – FROM EQUIPMENT TO CIRCUIT LEVEL”

Welcome and Orientation

Conference Sponsors:



EC FP7 PROJECT SUPERTHEME

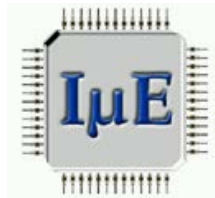
Circuit Stability Under Process Variability and Electro-Thermal-Mechanical Coupling

- Funded by EC within FP7
- Duration 10/2012 – 12/2015
- Overall funding 3.3 M€
- Consortium of
 - 6 companies
 - 3 research institutes/universities



This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no 318458.

PARTNERS OF *SUPERTHEME*



WORKSHOP AGENDA

- This orientation
- Industrial keynote on importance of variability
- Overview on SUPERTHEME project
- Four technical presentations from SUPERTHEME
- One presentation each from related projects
MORDRED and MORV
- Final discussion

WORKSHOP AGENDA

- 8:45 – 9:00 Welcome and orientation, J. Lorenz, Fraunhofer IISB
- 9:00 – 9:30 Variability at all levels – a challenge for the semiconductor industry, A. Juge, ST
- 9:30 – 10:00 Overview of the SUPERTHEME project, J. Lorenz, Fraunhofer IISB
- 10:00 – 10:30 Defects responsible for BTI in CMOS devices: MORDRED perspective, A. Shluger, UCL
- 10:30 – 11:00 Variability-aware process simulation in SUPERTHEME, E. Bär, Fraunhofer IISB
- 11:00 – 11:30 Coffee break
- 11:30 – 12:00 Variability-aware device simulation in SUPERTHEME, A. Asenov, GU/GSS
- 12:00 – 12:30 Hierarchical modeling of reliability and time-dependent variability in the MORV project, B. Kaczer, IMEC
- 12:30 – 14:00 Lunch
- 14:00 – 14:30 Covering variability from unit process up to circuit level for mixed-signal circuits, R. Minixhofer, ams
- 14:30 – 15:00 Variability-aware SPICE modeling and circuit simulation in SUPERTHEME, C. Millar, GSS
- 15:00 – 15:30 Open discussion and concluding remarks