



NEXUS

Methodology Working Group

Reliability & Test – Milan, 28th Nov

Technical Focus

Advances in Reliability & Test, Key Projects
Future Networks, projects and collaboration

Steering Group

Andrew Richardson – Lancaster University
Pascal Nouet – LIRMM
Benedetto Vigna – ST
Chris Reeves – QinetiQ
Patric Salomon – Communications

Sponsors





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Mission

- Non-competitive forum for exchange of best practice
- Advisory body for stimulating uptake of best practice.
- Collaborative forum for development of strategic initiatives
- Access node for generic reliability and test resources.





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Objectives

- Provide a venue where industry can share knowledge in reliability and test problems
- Provide a venue where industry can discuss future trends and priorities
- Provide an environment where industry can network and understand the reliability and test requirements of new project proposals to FP7 in particular.
- Provide a central contact point for international links in the area of MNT reliability and test (MIG, MANCEF etc.)
- Provide a central point for the development of major new European initiatives.





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From Stresa and Toulouse 2006

Building on the debates!

"Progress in the understanding and modelling of failure and degradation is now urgently required"

"Reliability verification, acceleration ageing was still based on the microelectronics industry despite the acceleration factors in MEMS being very different."

"Low cost, high throughput test strategies required"

"Access to Skills and Facilities to support Reliability Analysis and Embedded Test Development"

"Design for Reliability" and FMEA based techniques need to be integrated into Design Methodologies and Flows





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Morning Session Advances in Reliability & Test, Key Projects

09.30 Keynote: Reliability Challenges for MEMS Integration
(*Benedetto Vigna, ST Microelectronics*)

10:00 Reliability Flagship Project in NoE PATENT-DfMM
(*Ingrid De Wolf, IMEC*)

10:30 Coffee break

11:00 Reliability aspects of silicon MEMS for automotive applications
(*Jörg Bagdahn, Fraunhofer-IWMH and Roland Müller-Fiedler, Bosch*)

11:30 MEMS Reliability Challenges in EURELNET
(*Yves Ousten, IXL*)

12:00 Map of activities – discussion





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Afternoon : Future Networks, projects and collaboration

13.30 : Caneus Pilot Project “Reliability” output and future business model (*Philippe Perdue, CNES*)

14:00 Parameter Identification of Pressure Sensors at Wafer Level, (*Steffen Michael, Melexis*)

14:15 MEMS Test Challenges: Applications, solutions and future visions, (*MEMUNITY*)

14:30 Briefing on Breakout Sessions

14:45 Focus Groups:
Failure mechanisms, Modelling and Fault Simulation
Accelerated Testing, Test Strategies and Reliability
indicators

Collaboration / Business models for future initiatives

15:30 Coffee break

16:00 Focus group reports

16:30 Discussion on actions and way forward

