DETAILS: Design Technology for Analogue IP-based RF-Front-End Solutions in Highly Integrated Communication-Systems

Customers of future terminals for applications such as mobile internet services expect reliable solutions with a high practical value at low cost. Therefore, existing RF design technology lacks in efficiency, especially, when entering new integration dimensions in new nano-scale process technologies. With support of the BMBF in its 'Mobile Internet' initiative, leading EDA-providers, process foundries, RF design houses, system providers and research institutes have formed a community of interest and cooperate closely to find an inter-domain solution for this challenging task.

The main objective of the project DETAILS is the development of an optimized RF-System design technology for future communication systems for cellular and non-cellular access. Within the wide field of design technology especially for mobile multimedia transceiver design the following areas will be established or improved:

- Methodology and work flows
- Behavioral modeling at all design levels (system and process level are most emerging)
- Application flexibility of RF-building blocks
- Design conversion rules from BiCMOS to CMOS
- System Verification
- Testability, Calibration
- Interface to process technology
- Application defined process development
Project coordination:

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Project partners:

- Atmel Germany GmbH
- Cadence Design Systems GmbH
- Infineon Technologies AG
- Melexis GmbH
- Nokia GmbH

Research partners:

- Institut für Mikroelektronik- und Mechatronik-Systeme gemeinnützige GmbH

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Website:

https://www.edacentrum.de/details/

Used Abbreviations

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