



Research and Training Action for System-on-Chip Design REASON IST-2000-30193



COORDINATOR

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PARTICIPANTS

- Institute of Electron Technology, Warsaw, Poland,
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- Technical University of Lodz, Lodz, Poland,
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- Universite Joseph Fourier-Grenoble 1, Grenoble, France,
- Eindhoven University of Technology, Eindhoven, Netherland,
- Institute of Informatics, SAS, Bratislava, Slovakia,
- Technical Univeristy of Sofia, Sofia, Bulgaria,
- Lviv Polytechnic National University, Lviv, Ukraine,
- Belorussian State University of Informatics and Radioelectronics, Minsk, Belarus,
- Technical University of Liberec, Liberec, Czech Republic,
- Kaunas University of Technology, Kaunas, Lithuania,
- Belorussian State University, Minsk, Belarus,
- University of Ljubljana, Ljubljana, Slovenia,
- Riga Technical University, Riga, Latvia,
- Rutherford Appleton Laboratory, Chilton Didcot, United Kingdom.

OUR ROLE IN THE PROJECT

- Arrangements of courses (IC and System Design, Micromechanics)
- Participation in tutorials and Special Conference Sessions
- Participation in educational chips design.

RESULTS (1st year of activity)

ITE in particular

- Presentation of the Institute`s experience in the cooperation with SME`s and research institutions - potential and real customers of the ASIC`s (Kick-off meeting of REASON project - Cracow, 15-16.02.02, MIXDES'02 Conference).
- Presentation of the MEMS and MOEMS activity during ASDAM MEMS Tutorial - Smolenice, 12.10.02
- Development of three courses on: IP&IC&SoC high level design and microsystem processing and modelling:
 - Practical aspects of digital IP cores design based on VHDL at behavioral and RT level.
 - Silicon MEMS Technology.
 - Modelling of micromechanical structures.

PROJECT DESCRIPTION

The main goal of this project is to facilitate integration of the academic and research institutions of CEE working in this field of microelectronics in the mainstream R&D activities going on in the EU countries. To achieve this goal, a project aims at raising the level of education and research as well as the number of highly-skilled researchers and designers in the field of microelectronic design in CEE countries, in order to facilitate cooperation in research and development with European R&D institutions and industry, to reduce the microelectronic skills shortage in Europe and to minimise the consequences of this shortage.

The future of microelectronic design in Europe, including Central/Eastern Europe depends on the quantity and quality of candidates for related studies at universities. Unfortunately, it is observed all over Europe that interest in science and technology among schoolchildren and high school students dropped dramatically. Careers in another fields are considered more attractive. Therefore, it is important to demonstrate to the European youth the beauty of engineering profession and in particular to raise interest in technical studies devoted to electrical engineering, including microelectronic design.

For development of successful cooperation the following conditions must be met:

- The level of competencies and skills of researchers from Central/Eastern Europe must be high enough to allow participation in advanced and challenging research projects targeted at solving the problems faced by European electronic industry.
- State-of-the-art research infrastructure must be available and maintained in Central/Eastern Europe.
- The potential research partners from EU countries must be aware of competencies and achievements of their colleagues from Central/Eastern Europe.
- In the case of participation of SMEs, additional condition is their awareness of the IST programme and ability to absorb new technologies.

In the frame of the REASON project the following activities will run:

- organization of special sessions during different conferences
- organization of seminars, courses and other events
- design of the educational chips for university students.