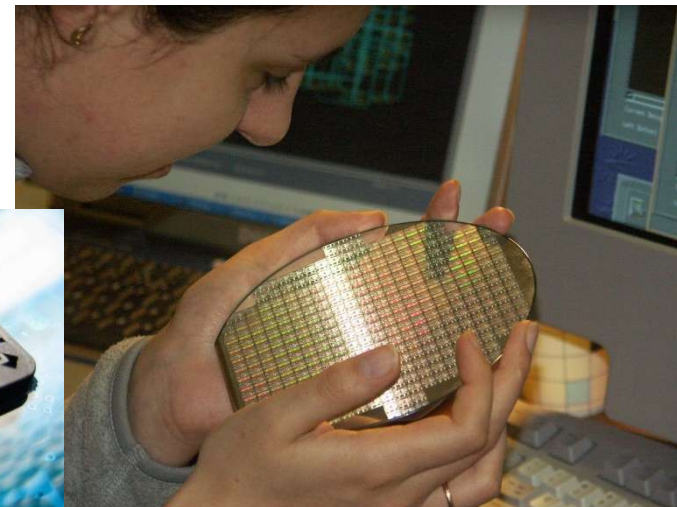
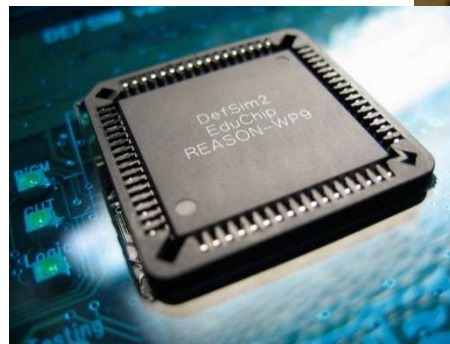
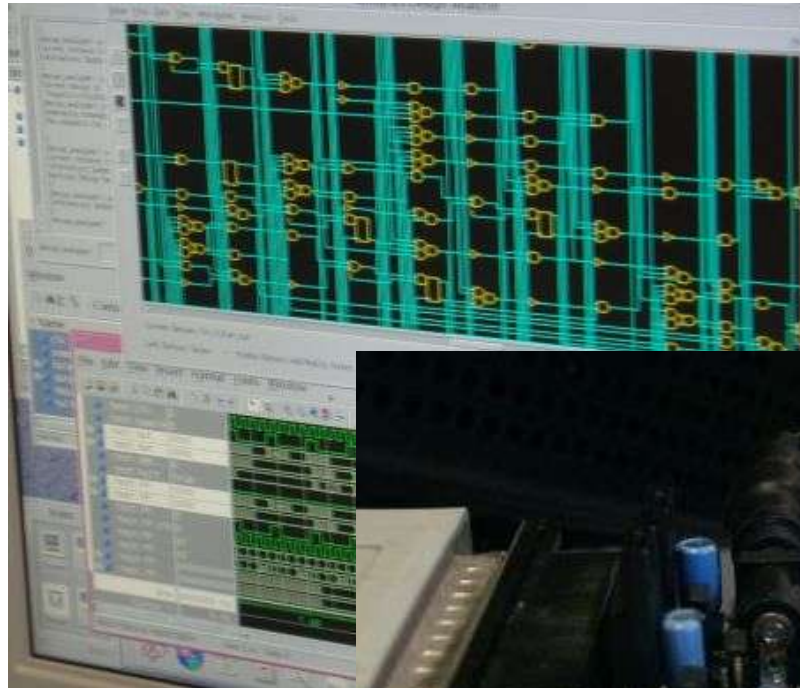


What are our topics?

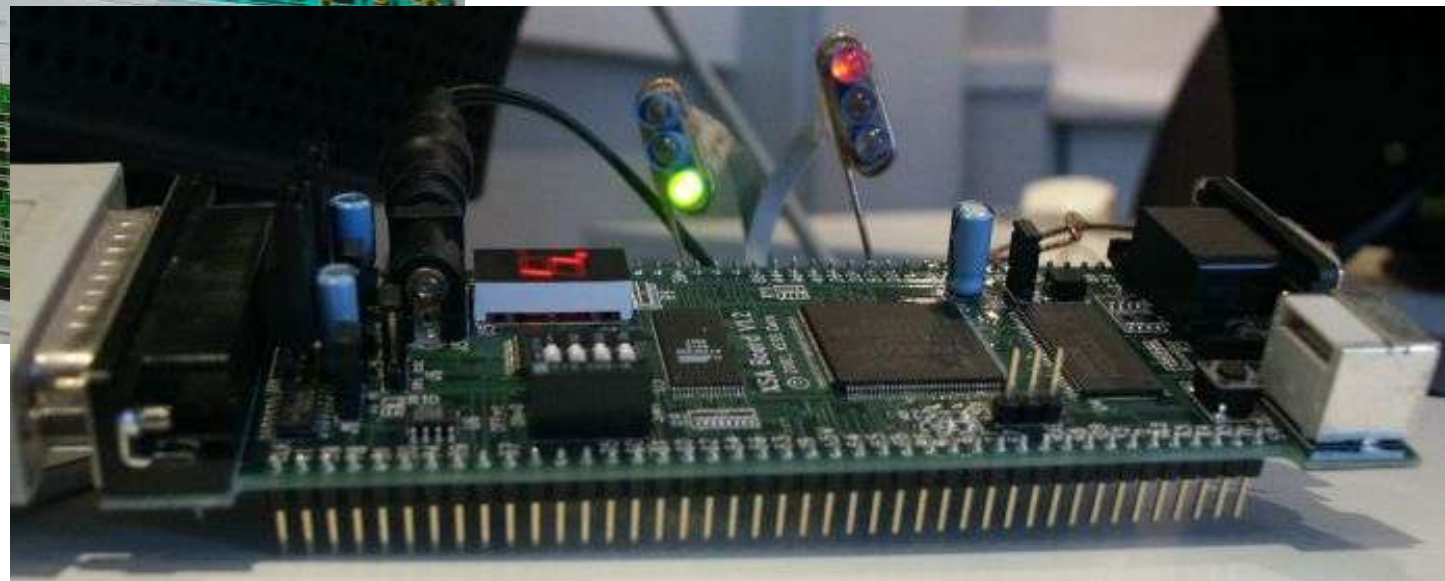
- ✓ Department of Computer Engineering
- ✓ Hardware and software
 - System-on-Chip & Network-on-Chip
 - Hardware and software codesign
 - Reliability, diagnostics ja test of systems
 - Web-based applications
 - Quality of software processes
 - etc.



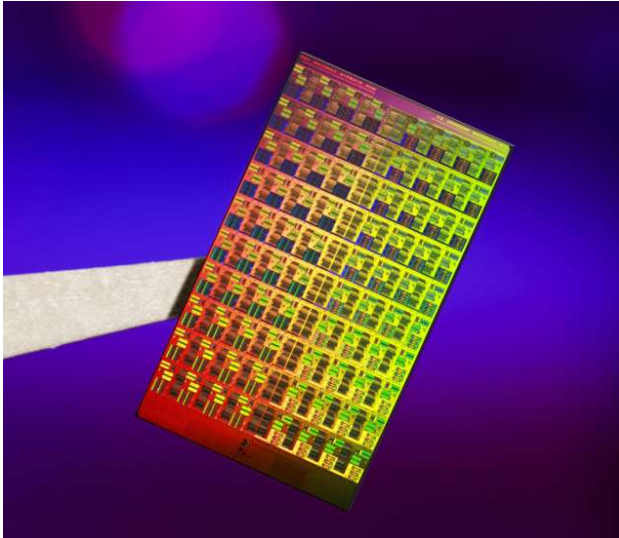
Hardware synthesis



- ✓ FPGA development tools & environments – Xilinx, Digilent, ...



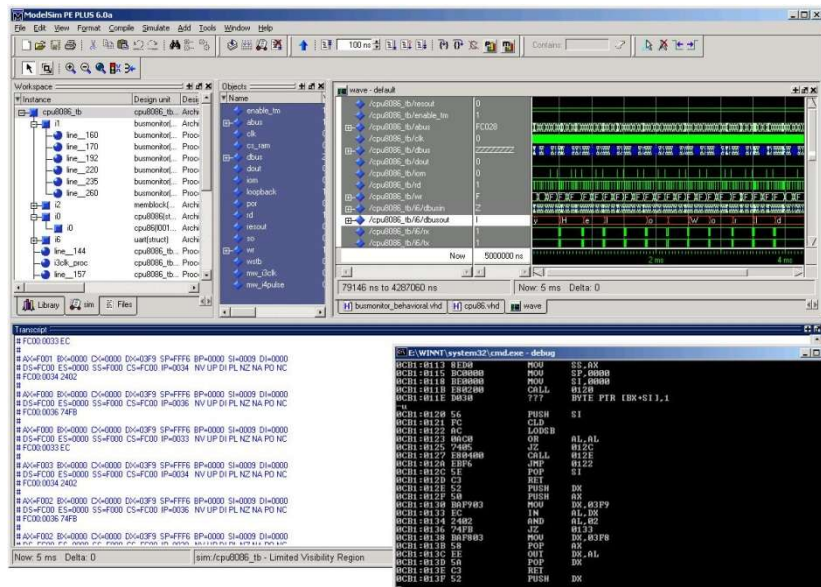
SoC-s and NoC-s



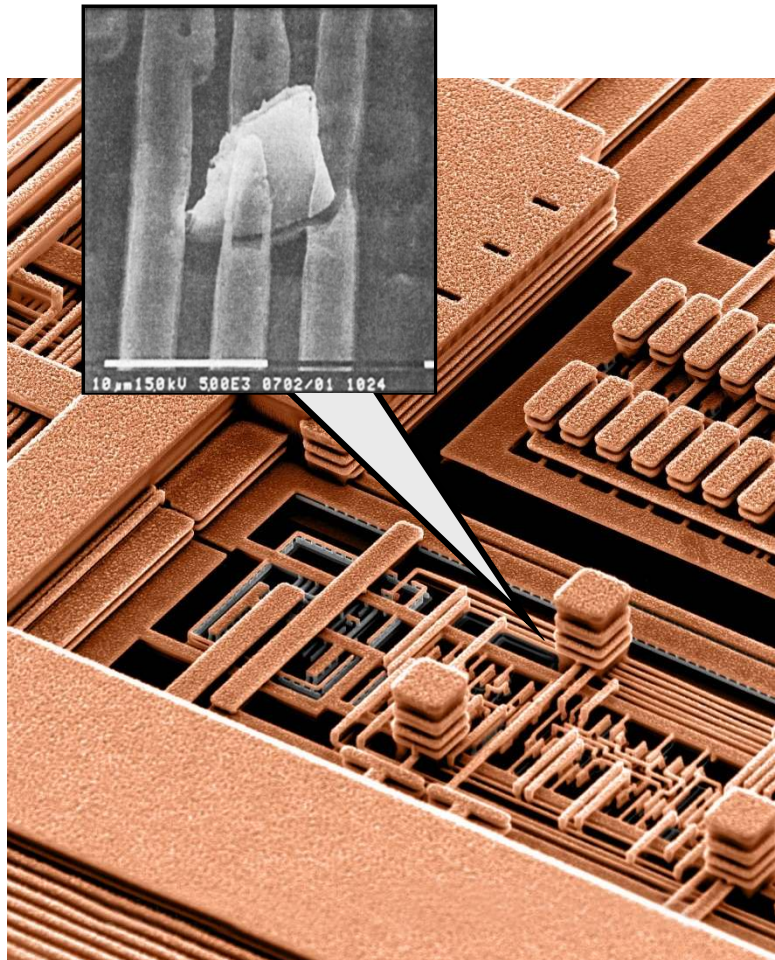
Intel – 8x10 NoC

- ✓ Our activities:
 - modelling
 - design
 - analysis
 - optimization

- ✓ CAD software from the main vendors:
 - Synopsys,
 - Mentor Graphics,
 - Cadence,
 - etc.

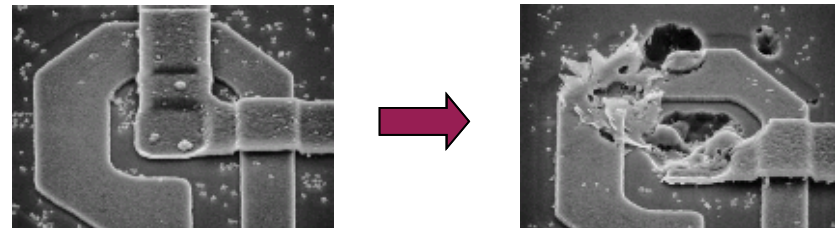


Testing



© IBM

- ✓ Production errors
 - particles (dust)
 - bad layout
 - bad materials
 - ...
- ✓ Life cycle errors
 - aging
 - particles (radiation)
 - ...



Systems optimization



- ✓ Faster
- ✓ Better
- ✓ More powerful
- ✓ More energy efficient

- ✓ Massive calculations, huge memory consumption, ...

- ✓ Software design & analysis

Useful links

- ✓ DCE web-page – www.ati.ttu.ee

- ✓ Thesis topics and supervisors
 - Study information -> Thesis topics
 - <http://ati.ttu.ee/index.php?page=10183>

- ✓ How to write a good theses
 - Study information -> Graduation theses
 - <http://ati.ttu.ee/index.php?page=10184>

- ✓ Thesis from previous years
 - Study information -> Defended thesis
 - <http://ati.ttu.ee/index.php?page=10184>