



Who we are



Embedded Systems and Applications

Koch



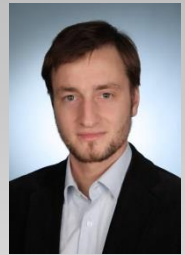
Engel

- Design of application-specific embedded system architectures
- Optimized tool-flows for high-level design of reconfigurable hardware
- Application-specific hardware-acceleration for high-performance energy-efficient computing



Reliability and System Integration

Mayer



Siebel

- Systematic design methodologies
- System-reliability analysis
- Rapid-prototyping
- Hardware-in-the-loop simulations
- Structural Health Monitoring Systems

Well-established cooperation structures > 6 yrs.

Systematic design and validation of heterogeneous CPS

- Guarantee compliance with complex constraints
- Make different CPS implementations comparable

Heterogeneous System Design

- Communication / computation hierarchy
- Mapping of algorithms
- Estimate latency, throughput, energy, ...

Design

define test-scenarios

early assessment

Hardware-in-the-Loop

- Reproducibility
- Boundary conditions
- Incremental validation
- Measure latency, throughput, energy, ...

Validation



Industrial partners defining / evaluating test cases

- Complex architectures (heterogeneous / concurrent processing)
- Complex evaluation (benefit from HIL-testing)

