

# Selection and Implementation of a HW/SW Co-Design Environment

## Task

This thesis will give a short introduction into different hardware/software-CoDesign approaches. You will present different languages and tools. Further on, you will take a closer look at the hw/sw-CoDesign using SystemC and carry out a comparison with a classical design. In this context, you shall implement an exemplary step-motor controller which is executed on a combination of microcontroller and CPLD.

HW/SW-CoDesign is meant in terms of the collective design of:

- SW for a CPU/microcontroller
- Structure of a PLD (CPLD/FPGA)
- a corresponding interface

## Student

- Xiaoqiang Zhang

## Tutor

- Dr.-Ing. Falk Salewski

From:  
<https://embedded.rwth-aachen.de/> - Informatik 11 - Embedded Software

Permanent link:  
[https://embedded.rwth-aachen.de/doku.php?id=en:lehre:abschlussarbeiten:auswahl\\_und\\_realisierung\\_einer\\_hw\\_sw\\_codesign\\_umgebung](https://embedded.rwth-aachen.de/doku.php?id=en:lehre:abschlussarbeiten:auswahl_und_realisierung_einer_hw_sw_codesign_umgebung)

Last update: 2009/06/12 09:30

