

# Bachelor Thesis

## Implementation of an ADC measurement on an FPGA

### Situation and motivation

For an FPGA board (Zedboard), which is used for measurement tasks, the communication between ADC and FPGA has to be implemented via a SPI interface. The FPGA and the corresponding board with the ADC are already available. The corresponding communication shall be realized and afterwards the functionality shall be tested. The realization of the communication shall be done with Matlab/Simulink.

### Tasks within the scope of the work

- Measurement of an analog signal by an ADC
- Programming and testing of the communication

### Approach/Methodology/Task

- FPGA board and ADC board already exist and have to communicate via SPI
- Planning and execution of the integration into the FPGA using Matlab/Simulink
- Commissioning and documentation
- Testing on real measured voltages/currents by using suitable converters (optional)

### Organizational Issues

Start Immediately!

### Contact Person/Supervisor

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