

# Lecture 7

## Topics

The topics for this lecture with programmable electronics are:

- Simulation
- Good practice in a HDL and hardware
- Timing
- Implementation of advanced framework

## Hardware

You can borrow the required hardware from us, one pr group.

- Zynq platform: DIPFORTy1 "Soft Propeller" TE0722<sup>1</sup> from Trenz electronics.
- Programmer: XMOD FTDI JTAG Adapter<sup>2</sup> from Trenz electronics.
- FTDI 3.3 V cable

## Preparation

### Unity link and TosNet

(Mandatory)

Read and understand "Generic Addressable Bus Link.pdf"

(Supplementary)

Unity.pdf

Clawar2010\_final\_simon.pdf

Tosnet\_teaching\_final.pdf

### DAC

(Mandatory)

Read and understand "sigma\_delta.pdf"

If needed find you own materials for PWM

## Assignment

Will be uploaded to dropbox before the lecture.

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<sup>1</sup> <https://shop.trenz-electronic.de/en/TE0722-02-DIPFORTy1-Soft-Propeller-with-Xilinx-Zynq-7010-and-16-MByte-Flash?c=348>

<sup>2</sup> <https://shop.trenz-electronic.de/en/TE0790-02-XMOD-FTDI-JTAG-Adapter-Xilinx-compatible?c=318>