

ELEN0037

Microelectronics

Tutorials

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With special thanks to Vincent Pierlot

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Tutorial 0: Contact, Schedule, Tutorials, Lab and Project
Presentation

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Schedule

Date	Lectures	Tutorials
Feb. 9	Lecture 1	Lecture 2, part I
Feb. 16	Lecture 2, Part II	Tutorial on L1, L2
Feb. 23	Lecture 3, part I	Tutorial on VHDL/ Project presentation
Mar. 2	Lecture 3, part II	Tutorial on VHDL/ Project presentation
Mar. 9	Lecture 4	Tutorial on L2, L3
Mar. 16	Suspended	Suspended
Mar. 23	Lecture 5	Tutorial on L4
Mar. 30	Lecture 6	Tutorial on VHDL/ Project presentation
Apr. 6	Easter vacation	Easter vacation
Apr. 13	Easter vacation	Easter vacation
Apr. 20	Lecture 7	Tutorial on L5
Apr. 27	Lecture 8	Tutorial on L6
May. 4	Tutorial on L7	Tutorial on L8

Tutorials

Resolution of adapted/modified examples and problems picked among the first and second edition of the textbook:

“Analog Integrated Circuit Design”, Johns and Martin.

⇒ The goal being to review and explain the underlying theory through practical examples.

Lab and Project

Lab: the goal of the laboratory is to make you familiarize with the VHDL and the necessary software (Quartus II) used to create your VHDL project, as well as the **DE0-Nano** Development and Education Board. The lab will consist in using the VGA custom output to drive a display screen in 800×600 .

Project: you'll have to realize one VHDL design, implemented on the **DE0-Nano** Development Board, based on the VGA output and the on-board accelerometer (or any other/additional sensors of your choice).

Lab and Project

DE0-Nano Development and Education Board:

