

Electronics and Data Acquisition

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- Characteristic impedance concept, analysis of a transmission line both in time and frequency domains, standing waves. Notes on the S matrix
- Digital electronics: combinatorial and sequential logic, examples of combinatorial and sequential modules and. Design of simple automata. Programmable circuits (technological aspects)
- Analog-Digital and Digital-Analog conversion. Time measurements: Time to Digital Converters. Architectures of data acquisition systems. Field Programmable Gate Array (FPGA): architectures and programming using Verilog-HDL language
- Exercise in the laboratory with the use of FPGA