
Programmable devices A

Finalità

The course provides fundamentals of digital system computer-aided design and fast prototyping. It will include practical design experiences using suitable CAD tools.

Programma

Architecture and design of an embedded digital system.

A survey of the main devices used in digital systems.

Programmable logic FPGA: technology and features.

The hardware description languages: the VHDL.

The CAD design flow: synthesis and verification methodology.

FPGA oriented methods of VHDL design.

Attività d'esercitazione

The course will include CAD tools sessions and the implementation of a simple digital system design.

Modalità d'esame

The examination is divided into an oral and a short written session.

Testi consigliati

The VHDL Cookbook - on the "Download" section of the site: <http://ee.unipr.it/~gmatrell/mypage/>