

Institute of Microelectronics of Barcelona IMB-CNM (CSIC)

Digital designer of a 4 bit CPU

The IMB-CNM is the largest institute in Spain dedicated to the research and development of Micro and Nano Technology and microsystems and with unique capabilities in silicon technology. It belongs to CSIC since its foundation in 1985 and is distinguished with the AEI María de Maeztu Unit of Excellence accreditation.

The main activities of IMB-CNM are basic and applied research and development, education and training in micro and nanotechnologies, components and systems. Its mission is to improve knowledge and contribute to the implementation of solutions based on these technologies in new products to solve societal challenges.

In this project the candidate will design a 4 bit CPU to use in a calculator. The design will be using digital flow. The design will be based on an organic and flexible technology from Pragmatic. The standard cells are provided by the foundry. The tasks to perform will encompass all the digital flow. Writing the verilog description of the CPU. Finally, performing the synthesis and the place and route.

Key Responsibilities

- Design and documentation of the CPU
- Writing the verilog for the 4 bit CPU
- Synthesis and place and route

Required skills

- Knowledge of verilog
- Digital design

Experience

- Generic microelectronic design subject
- Preferably digital design subject

Job conditions

- TFM or work placement internship
- Flexible hours

How to apply

Applications should be submitted to rrhh@imb-cnm.csic.es and roger.sole@csic.es stating the job title as the Subject of the message. The mail should include a cover letter and an updated CV.

Sending CVs to the above address implies consent to the Legal Advice | IMB CNM (csic.es). This offer can be found on:

<https://www.imb-cnm.csic.es/en/about-center/careers/open-positions>.

More information on IMB-CNM: <https://www.imb-cnm.csic.es/en/>