

Institute of Microelectronics of Barcelona IMB-CNM (CSIC)

Design of a Receiver at 5Gbps on 65 nm CMOS for RISC-V Systems-on-Chip

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.

This work will design a 5-Gbps Receiver circuit as a mixed-signal IP block in 65-nm 1.2-V CMOS technology for chip-to-chip communication. Design efforts will be focused not only on low-power operation and compact area but also on technology/supply scalability.

Key Responsibilities

- Develop the complete 5Gbps receiver architecture
- Design critical analogue and mixed blocks on a competitive technology.

Required skills

- Previous knowledge of electronics and knowledge of topics as CMOS technology, MOS device modeling and analog and digital CMOS design

Experience

- Having coursed the Microelectronic design subject

Job conditions

- Flexible hours
- TFG/TFM or work placemanship

How to apply

Applications should be submitted to rrhh@imb-cnm.csic.es and miquel.redon@imb-cnm.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>.

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