

Microelectronics researcher at IMSE-CNM

The Institute of Microelectronics of Seville (IMSE-CNM) is looking for highly motivated microelectronics researcher for a project run by the University of Seville.

We expect

- Must be fluent in English (spoken and written) and have proactive communication skills.
- Knowledge and/or experience relating to the design of analogue circuits. In particular, ideally, analogue integrated circuits in CMOS technologies.
- Knowledge and/or experience in the use of circuit simulators at the electrical level.
- Knowledge and/or experience in the design of digital circuits, at the level of hardware description languages. Ideally, experience in the design (synthesis, layout and verification) of semi-custom digital circuits.
- Previous experience and/or knowledge with CAD environments for the design of mixed-signal integrated circuits in mixed-signal integrated circuits, in particular with the CADENCE tools environment.

CADENCE tools:

- Knowledge and experience in hardware description languages (VHDL, Verilog). Design, simulation, and synthesis with cell libraries.
- Experience in interphase and conventional digital communications protocols.

Tasks:

- Collaboration in the design of a mixed-signal ASIC for conditioning and acquiring signals from a thermal impedance sensor in the frequency domain, and its controller and digital interphase.
- Collaboration in the design and verification by electrical simulation of the basic analogue blocks and the subsystem. and of the complete analogue subsystem. Layout of the analogue part and new verification.
- Collaboration in the design and verification, at hardware description language level, of the digital controller and the communications interface. Verification of the complete integrated circuit by means of mixed simulation. Layout and verification of the complete system.

Duration: 16 months, starting in september 2024.

Salary: 1935.45€ (monthly gross salary).

You can apply until 25 June. For more information:

Ref: INV-PRTR-06-2024-I-116

https://investigacion.us.es/ndocs/contratos_proyectos/junio2024/Anexos_convocatorias_PRTR_06_2024.repo rt.pdf

