

# Analog IC Design Intern

## Company description

EM Microelectronic is one of the most innovative semiconductor companies, developing and manufacturing the world's leading technology platforms across everything ultra-low power, from low-power wireless ICs, to RFID, MCUs, sensor interfaces and energy harvesting.

EM's innovation and market leadership has been recognized through a number of industry awards, including the prestigious Frost & Sullivan "New product Innovation", the RFID Journal Live "Best product of the year award", and our Bluetooth™ low-energy ICs are found in several products awarded at CES this year.

The Wireless and Sensing Business Unit specializes in development of state-of-the-art, low power, RF system-on-chips (SOCs). To strengthen our team, we are currently looking for an analog IC design intern based at our headquarters in Marin/Switzerland working on our next generation RF SOCs used in consumer, industrial, medical, and automotive applications.

## Job description

As an analog intern you will work under the direction of our analog IC design leader to develop circuits critical to ultra-low power SOCs. Our market-leading ICs make consumers' daily lives easier to navigate in connected smart products, healthcare, automotive and other applications.

As an analog IC design intern, you will learn and work on modern CAD tools to design and implement state-of-the-art low-power analog circuits in advanced process nodes such as bandgaps, LDOs, oscillators, and/or other power management functions. Your responsibilities will include:

- Analysis and comparison of different circuit topologies for a given set of specifications
- Schematic design and simulation of the required circuit over PVT corners
- Layout of the circuit with the support of EM layout engineers
- Extraction of layout parasitics and resimulation over PVT to ensure the circuit meets the required specifications, and modify the design as needed
- Document and present your design in a design review to a group of EM engineers
- Characterize your circuit or others, with the support of EM validation engineers

## Profile

Background requirements:

- Enrolled in a Master or PhD program in IC design
- A bachelors degree in Electrical Engineering with strong grades

## Professional Requirements

Demonstrated interest in analog circuit design:

- Relevant school project with a report on results
- Performing work or research for University professor or another IC design company
- Other related extra curricular activities including student membership in the IEEE or other professional organizations

The following skills are expected:

- Strong interest in learning for a career in analog IC design
- Independent learner with good research skills
- Demonstrated project success while working in a team environment

### **Languages**

English native or fluent oral and written

Any other language (especially French or German) would be an asset

### **Contact**

Human Resources