

IC Design Student Internships (Master Thesis)

IMASENIC has opened several internships positions for Master students in fields like Electronics Engineering, Telecommunications Engineering or Physics to work in the design of analog and mixed-signal IC circuits. The students can present the work done at the company as **Master Thesis**, if desired.

Location: IMASENIC premises in Pl. Tetuan 40-41, Barcelona

Preferred start date: June 2019

Duration: 6 months

List of projects offered

Development of PLL circuit for image sensor ICs

Fast and high-resolution digital-output image sensors require very high-bandwidth output serial data streams. The student will design and layout a new Phase-Locked Loop (PLL) block to generate on-chip clocks of up to 1.2GHz to drive internal data serializers of image sensors. The student will use a CMOS 180nm or CMOS 110nm technology for this design.

Design of advanced bandgap and digital-output temperature sensor for image sensor ICs

Advanced image sensors require precise analog electronic circuits and temperature monitors for their operation. This project will involve the design and layout of a new advanced bandgap reference block (with voltage and current outputs) and a digital-output temperature sensor. The student will use a CMOS 180nm or CMOS 110nm technology for this design.

Layout of advanced analog IC blocks for image sensors ICs

The development of advanced custom CMOS image sensor requires carefully-crafted layout of analog circuits. In this project the student will implement the layout of analog/mixed-signal IC blocks such as LVDS receivers/transmitters, pixel-row drivers, bias-current generation/distribution networks, top-level of image sensor, etc.

What we offer

IMASENIC is an innovative image sensor company based in Barcelona. We develop custom CMOS image sensors for customers in the scientific, bio-medical, industrial and automotive markets. We offer a friendly, dynamic and technically-challenging work environment. You will work with a small but growing team of engineers with decades of experience in electronics and IC design.

The student will receive a stipend from IMASENIC.

How to apply

Please send your CV completed with a motivation letter to info@imasenic.com

For any question, please also write to info@imasenic.com or phone +34 935466100.