



Senior Analog CMOS Layout Designer

This is a full time, permanent position (CDI) in Paris, France.

Who we are

Axorus wants to become the “Intel of Bionics”: provide a wide range of technologies for implants to treat neural diseases. Our first product will be a retinal implant.

We work at the crossroads of electronics and neurobiology, with the goal of helping people live in better health. We have partnerships with medical doctors, biologists, and electronics scientists.

We are a startup and expect to grow significantly in the upcoming years. As an early employee, you will find yourself in a dynamic and fast-paced environment where you have a strong voice, and will get to tackle challenging and meaningful projects.

We offer a competitive salary and benefits.

What you will do

You will design prototypes of Axorus’ retinal implant.

The main building block of this implant is an electronic “neuron”: a CMOS analog circuit that mimics the action potentials (spikes) of a biological neuron. To obtain a functional retina prototype, we design chips that are first manufactured in a foundry, then post-processed in a clean room environment.

- You will be responsible for the full process (CMOS 180nm, Cadence Virtuoso design platform) : design, simulation, layout, verification, interactions with the foundry, and some post-silicon testing.
- You will interact with the post-processing engineers and, depending on need and your own preferences, take part in some post-processing steps.
- You might supervise, and train if needed, a small number of designers.

The prototype that you will have designed and validated will then be tested on biological models and, later, during clinical trials. For human testing, the artificial retina will have to meet medical implant standards.

Who you are

- ✓ You have a MSc or an Engineering degree in Analog IC Electronics or a similar field, and master the physics of transistors, capacitors, photodiodes & amplifiers. Highly experienced technicians/BSc may also apply.
- ✓ You have experience with Cadence design flow and Calibre tools.
- ✓ You have at least 5 years experience in analog or mixed CMOS design, ideally from pre-silicon simulation to post-silicon validation.

Soft skills

- ✓ You are curious, resourceful and result-driven.
 - ✓ You are excited to work with and learn from electrical, biology and materials engineers.
- + Experience in design of medical implants & regulatory implications of ISO13485 specifications is a plus.

If you are interested, send us your resume (CV) at jobs@axorus.com