Senior Analog ASIC Design Engineer
Job Offer

The Company

3Brain is a Swiss deep tech company working on cell-electronic interfaces that link biological networks to computers via custom-made semiconductor microchips. Our mission is to empower life scientists to probe intelligent networks, accelerate biomedical discoveries for the benefit of patients, and create a future more exciting than the present. Our interdisciplinary team of scientists and engineers are constantly pushing the boundaries of engineering for life's complexities. We are ambitious, fast-growing and love to explore. The company's cutting-edge products are used in laboratories and pharma companies worldwide. 3Brain is headquartered in Switzerland nearby Zurich, has a Discovery Unit and production site in Genova, Italy, and an operational unit in the US.

More info: **http://www.3brain.com/about.html**.

Job description

3Brain is looking for a full-time Senior Analog ASIC Design Engineer for its Swiss office to strengthen its R&D team and contribute to the next generations of our CMOS-based biological sensor platforms. The candidate will join a group of mixed-signal and digital ASIC engineers and will focus on designing, optimizing, and validating high-performance analog and mixed-signal circuits tailored for large-scale sensor arrays.

Main responsibilities:

- Design of analog /mixed-signal circuit blocks for CMOS biosensor products
- Implementation and validation of analog circuits using modern CAD tools.
- Development of transistor-level schematics, simulations, corner and Monte-Carlo analyses, modelling, and layout.
- Extraction, verification, and optimization of circuits to meet performance, area, and power requirements.
- Documentation of design methods, specifications, architecture decisions, and verification results.

- Collaboration with digital, packaging, and system teams to ensure full-chip integration and system-level performance.

Required Qualifications

- 5+ years of professional experience in analog or mixed-signal ASIC design.
- BSc/MSc/PhD in Electrical Engineering, Microelectronics, or related field.
- Core Expertise: Analog IC design fundamentals; Low-noise and low-power analog front-end design; Stability, noise, mismatch, and linearity analysis; Device-level simulation and modelling; Analog layout best practices
- Proficiency with analog design workflows (i.e. schematics, state-of-the-art SPICE simulations, extraction tools, post-layout simulation, etc.)
- Good knowledge of scripting (Python, MATLAB, or SKILL).
- Fluency in English.
- Strong team spirit, initiative, and ability to work independently in a multicultural environment.
- Applicant must be authorized to work in Switzerland without employer sponsorship (e.g., EU/EFTA citizen, Swiss C permit, or family member of an EU/EFTA citizen with a work-authorized residence card).

Additional Qualifications

- Experience with mixed-signal integration and top-level verification.
- Experience with ADC/DAC architectures and characterization.
- Experience with physical verification (LVS/DRC, electromigration).
- Knowledge of CMOS sensor interfaces or biomedical instrumentation is a strong plus.
- Understanding of digital design basics and ability to collaborate with digital teams.

What We Offer

- A dynamic and stimulating work environment driven by a desire to build transformational technologies to help others.
- A young, fast-growing company with plenty of opportunities for personal growth and development.
- Working place: **Pfäffikon SZ, Switzerland**. It's a beautiful lakeside village just outside of Zurich, the country's main cultural, financial and business center.

To apply send your CV and short motivation letter to **hr@3brain.com**, subject: Senior Analog ASIC Design Engineer.