



Senior Analog IC Design Engineer

Sicoya is a technology leader in silicon photonics-based interconnect solutions with headquarter in Berlin, Germany. We offer cointegrated semiconductor chips for next generation data centers using our in-house PIC and EIC design capabilities and large-volume CMOS foundries as manufacturing partners. The team consists of highly professional design engineers and managers with many years of experience in bringing state-of-the-art products to the market.

As an **Analog IC Design Engineer** at Sicoya, you will work in a highly international environment and dive into a unique challenge, as you are involved in the design and the development of the next generation of electro-optical transceivers chips. The main task is to develop monolithically integrated electronic circuits which closely interoperate with integrated photonic devices. This comprises precision analog circuit design for PVT independent biasing, high-speed circuits, electrical and electro-optical control loops including nested loops, targeting line rates of 200 Gb/s and 400 Gb/s. The design activities require close collaboration with photonic design team in co-design of electrical and optical components, for achieving challenging system level performance requirements across technology corners.

Start: asap

Employment: Full time

Experience: 5+ years of industry experience

Your tasks:

- Design Analog Circuits in BiCMOS for OpAmps, Regulators, PVT independent biasing, high-speed circuits, control loops including nested loops (DC offset cancellation, Receive Signal Strength Indicator, Loss of Modulation, Loss of Signal, Squelch, AGC), analog based digital gates, analog muxes and be able to build a chip-level schematic hierarchy in Cadence environment.
- Design of auxiliary circuits to interface analog ICs with I2C or SPI type digital control interfaces (using IP-blocks e.g. ADC).
- Leverage your familiarity with layout techniques for device matching, current density and low parasitics. Check LVS/DRC of your circuits.
- Support IC Design verification methodology to meet spec compliance matrix.
- Design temperature independent biasing blocks using bandgap references.
- Develop testing strategy for your circuits and sync up with test team.
- Support IC to qualification and production. Support Customer request for technical support.
- Follow and define design methodologies and design environments.

Required profile:

- M.Sc. in electrical-engineering or equivalent
- Experience in integrated circuit design and expert in I/O interfaces
- Extensive experience with a variety of EIC design tools like the Cadence Design Framework
- Detailed knowledge of chip-level electronic design flows for DFM-maturity with a strong commitment to product quality and reliability
- Knowledge regarding state-of-the-art BiCMOS process technologies is a plus
- Proactive problem-solving skills
- Team player that thrives in a dynamic working environment
- Strong technical and verbal/written communication skills
- Professional working proficiency in English is mandatory, and knowledge of German would be an asset



What we offer:

- High degree of personal responsibility within a flat company hierarchy
- Ambitious internationally expanding team
- Various future career opportunities for every career level
- An inspiring working environment with flexible working hours, lounge area, free beverages
- Fascinating opportunity in an international high-tech environment in Berlin

Are you interested in working with us? Then we may just be waiting to hear from you. Please send us your CV and a motivation letter by email to: jobs@sicoya.com

Sicoya is an equal opportunity employer. All qualified applicants will receive consideration for employment without regard to gender, race, color, ethnicity, national origin, religion or belief, sexual orientation, disability or age.