



TUSK IC

Senior Analog ASIC designer

Work environment

Tusk IC is a fabless millimeter wave (mmWave) IC design company, located in Antwerp, Belgium. Founded in 2018 as a spin-off from the KU Leuven, it is a growing start-up at the leading edge of mmWave technology. We have an international team and value collaboration, clear communication and technical excellence.

With 5G, Satellite communication, imaging and self-driving cars all relying on mmWave to break through, Tusk IC provides state-of-the-art design solutions for integrated circuits from 3GHz to 300GHz and beyond in CMOS and SiGe technologies.

Come join us and surf the mmWaves!

Position description

A crucial and challenging aspect of RF/mmWave IC design is the analog blocks in and around the RF path! A small noise source in a biasing circuit can get upconverted to 100GHz, so clean voltage supplies and current references are essential for these high-performing systems. Wideband, ultra-programmable BB amplifiers as well as the high-resolution detectors for calibration loops and self-testing capabilities are areas where analog-mmWave co-design are a necessity for the mmWave FEM of tomorrow.

As senior analog ASIC designer, your focus will be to strengthen and complement our existing team of designers. You will work on R&D and implementation of state-of-the-art ASICs for the next generation of 5G, Satcom and radar products, including feasibility study, design, layout, simulation, test planning and measurement.

Clear communication during client interactions is essential. Our clients are leading companies in 5G, imaging and automotive domains.

What will be your responsibilities and challenges?

- Spec definition and system-level design of analog and mixed-signal modules and circuits
- Circuit design, layout and verification of building blocks with a focus on analog blocks such as, auxiliary analog blocks (LDO, current reference, bandgaps, ATB, calibration loop etc.), baseband circuits (filters, buffers etc.)
- Top-level simulations, layout, DRC and LVS
- Clear and concise reporting, interaction with customers
- Dealing with ambiguity, able to make effective decisions based on limited information
- Come up with creative solutions to new problems
- Prepared to take on ad-hoc tasks

Your required competences and qualifications

- BSc (Hons) or higher degree (MSc/PhD) in EE with a focus on analog ASIC design
- **Proven track record with ASIC design for production (PVT variation, reliability, DFM)**
- **5+ years of industry experience in analog IC design in advanced CMOS and/or SOI and/or SiGe**
- Experience with full design cycle: specs to measured silicon
- Knowledge and experience with leading IC design tools: Cadence, Synopsys and/or MentorGraphics
- Experience in transistor-level layout extraction and verification (PEX), DRC and LVS
- Eager to learn and willingness to adopt new tools and design techniques
- Clear communication skills
- Fluent in English (written and spoken)

Competences that will make you stand out

- Lab experience
- Proficient in a scientific scripting or programming language (e.g. Matlab, Python)

What we offer

- Dynamic and exciting start-up environment!
- Art-Nouveau office in Antwerp and satellite office in Leuven, both in vibrant cities and conveniently located close to train stations.
- Contribute to revolutionary products such as automotive radar, 5G and mmWave sensors
- Competitive salary & benefits
- Incredible colleagues to learn from and have fun with
- Gourmet coffee, carefully selected by our local coffee aficionado

Contact information:

careers@tusk-ic.com

www.tusk-ic.com