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## RF/mm Wave Design Engineer

### Key words

IC • RF • mmWave • Innovation • 5G • 6G • 60GHz • Wireless • Automotive radar • CMOS • SOI • Next Generation Radio • Layout • Measurements • EM

### About Incize

Incize, a Belgian company based in Louvain-la-Neuve, offers characterization, modeling and process services of devices and materials used for RF, mmWave and harsh environment applications (cryogenics, radiation). Incize is also a leading actor in R&D projects with international partners to develop new technologies. In particular, Incize is the leader in the development of processes to improve the RF properties of Si substrates, with a worldwide expertise recognized by foundries and fabless companies.

### About the job

Incize recruits a self-driven and motivated professional to start-up the RF/mmWave IC design within the company. You will be responsible for the development of state-of-the-art IC design in CMOS SOI including innovative technological features to improve performances. You will have a strong decision-making impact on both the technical orientations and the design environment (EDA, infrastructure, processes).

As a member of Incize, you will operate in a multidisciplinary R&D environment that combines high-level expertises in process engineering, TCAD and characterization (small-signal and large-signal) that foster the emergence of the innovative solutions required by the next generations of RF and mmWave products.

In addition to the essential fundamental technical knowledge, the successful candidate will demonstrate an enterprising spirit, with the ability to start from scratch, adjust strategy according to the circumstances while being focused on the objectives and stakes.

### Tasks/Mission

- IC design of LNA, PA, Switches, VCO, etc., including schematic simulation, EM analysis (2/3D), layout and verification.
- Conduct state-of-the-art overview and select the appropriate circuit architecture.
- Build the appropriate device models (active/passive).
- Collaborate closely with the electrical characterization team for on-wafer measurements, including DC/AC, S-parameters, large-signal and noise.

- Collaborate closely with the process development team in order to improve the device models, identify the technological parameters limiting the performances and propose design solutions.
- Deliver technical reports.

## Qualification and expertise

- MSc and/or PhD in electrical engineering with a focus on IC design (Analog or RF/mmWave) in advanced CMOS. SOI is an asset.
- Knowledge of leading IC design tools: Cadence (Spectre, Virtuoso) and ADS.
- Scripting language (e.g. Python/Matlab, skill), Unix/Linux.
- Experience in testing laboratory.
- Communication skills within a multicultural environment.
- Professional English.

## Extra qualifications

- System level knowledge of RF & mmWave front-end modules.
- Advanced CMOS reliability knowledge (aging, electro-migration, thermal effect).
- Device/interconnection modeling with 2D/3D tools, layout extraction.

## What we offer

- Competitive salary.
- Comfortable work environment in an international team.
- Opportunities to learn from experts in the field.

## Location

Louvain-la-Neuve, Belgium

## How to apply

Please send your CV, a list of publications and a cover letter to [jobs@incize.com](mailto:jobs@incize.com) with the subject line `job_RFDE_2023_lastname`. References to be provided upon request.