



## FPGA Engineer

### About Caeleste

Caeleste is a dynamic & innovative company with a proven track record in design & supply of beyond state-of-art custom-designed high-end CMOS image sensors. The company differentiates through its capability of handling the most advanced projects, covering solutions in high performance imagers in close collaboration with its customers for space, scientific, medical and industrial applications. Thanks to the in-house expertise on high-speed, sub-electron noise, ultra-high dynamic range and extreme radiation-hard designs, Caeleste ensures an end-to-end quality focus on the entire product flow: from architecture, design, prototyping, test & characterization up to production and test for customer deliveries.

We are looking for an FPGA Engineer to join our R&D team. He/she will be responsible for the FPGA-based hardware platforms used for the characterization and testing of our image sensor prototypes and products.

### About your job as FPGA Engineer

You will work on the design of FPGA-based hardware platforms used to validate & characterize novel CMOS image sensors. With increasing complexity of the image sensors beyond state-of-the-art limits, your FPGA platforms need to cover even more challenging methods to guarantee the functional sign-off of our image sensor prototypes and products.

Your responsibilities cover a broad scope ranging from FPGA architecture, VHDL-based design & simulation, generation of builds, hands-on bring-up of new hardware platforms in close collaboration with board and software engineers, assist in debug & characterization of new CMOS image sensor prototypes (and production runs) on your hardware platforms.

Although the prime focus is an FPGA-based design environment, your thorough upfront analysis, documented and first-time-right approach is critical for a quality focused collaboration in a team of experts that depend on your crucial contributions in a project driven organization. You will have a significant amount of autonomy and will take up impactful responsibilities in the team.

### Job specific requirements:

- Master in (Micro-)Electronics Engineering, Physics or equivalent experience
- Hands-on experience with FPGA technology & (Xilinx) tool flow, VHDL design, HW-SW co-simulation, on-board bring-up and debug, while interacting with image sensor experts
- Hands-on experience with electronic test & measurement equipment
- Understanding of digital and analog electronics, at board and (CMOS) chip level
- Capable of working with C# software and Python scripting or other languages
- Creativity, an analytical mind and pragmatic problem-solving skills
- Excellent communication skills in English writing, presenting and customer interaction
- Accountable & committed quality-focused team player

### Additional skills that are of interest:

- Background in test & measurement of analog & digital semiconductors
  - Background of high speed interface protocols, ADC technology & memory standards is plus
  - Background in Silicon processing and CMOS technology
  - Background in Optics and Solid-state Physics
  - Experience in image sensors, their applications, camera or instrument design is a plus
  - Experience in electro-optical characterization or evaluation of image sensors is a plus
- For all your questions, please contact Ewa Burzynska or [jobs@caeleste.be](mailto:jobs@caeleste.be)