

Logic Circuit Design and Simulation Engineer

Report to: Chief Technology Officer (CTO)

Locations: London UK

Salary: Competitive, depending on qualifications and experience

Job type: Full time, fixed contract with prospect for permanent position

Job description:

The Engineer - Logic Circuit Design and Simulation will join a small dynamic team that aims to develop future memory technology. The logic design engineer will liaise with the device fabrication team to understand the features of this technology and apply those features into the logic circuitry design.

The Engineer - Logic Circuit Design and Simulation will participate in the definition, design, verification, and documentation for digital logic systems on integrated circuits. This includes developing architecture, module interfaces, and design approaches used in creating logic designs, register transfer level (RTL) models, and simulating functional units and subsystems included in the development of complex multidimensional designs.

Key responsibilities:

- **RTL coding:** Development, assessment, and refinement of RTL design to target power, performance, area, and timing goals
- **Validation:** Support a test-bench development and simulation for functional and performance verification
- **Performance exploration and correlation:** Explore high performance strategies and validate that the RTL design meets targeted performance
- **Design delivery:** Work with cross-functional engineering team to implement and validate physical design on the aspects of timing, area, reliability, testability, and power

Job requirements:

- The candidate should possess a Bachelor or Master of Science degree in Computer Science, Electrical & Electronic Engineering, Material Science, or others, with 5+ years of directly relevant experience
- At least 5 years' experience of non-volatile memory chip design (FeRAM, MRAM, PCM, ReRAM, or Flash), embedded and/or standalone memory chips
- Thorough knowledge of chip architecture and logic circuit design
- Knowledge of Verilog and/or VHDL, experience with simulators and waveform debugging tools
- Knowledge of logic design principles along with timing and power implications
Understanding of low power design techniques
- Understanding of high-performance techniques and trade-offs
- Hands on experience in logic synthesis and integrating RTL driven logic into the full chip

- Hands on experience in integrating acquired IP blocks into a synthesized design
- Experience in C or C++ programming and other programming languages such as Perl or Python
- Ability to generate library models (.lib) for embedded macro use
- Ability to generate memory built-in self-test (BIST) models for use with MBIST tools
- Experience with memory BIST generation and usage for embedded macros
- Ability to generate Verilog models for use by customers in their simulation environment
- Strong understanding of statistical analysis, strong analytical and problem-solving skills
- Ability to plan, coordinate and take responsibility for effective and on-time completion of project activities
- Self-motivated and creative with a passion for achieving success and excellence
- Strong interpersonal and communication skills with infectious enthusiasm and tenacity
- Excellent organizational and team working skills

Company:

The company is a semiconductor start-up developing emerging non-volatile memory (NVM) technologies with proprietary intellectual property. Headquartered in London, UK, they are a spin-off company from world leading institution Imperial College London. The company's ambition is to commercialise scientific innovation and they are looking to add experienced experts to join the team in London to develop their memory technology. Apply to become a part of a future leader in semiconductor chip technology and join a dynamic fast-paced working environment with an ambitious and success-focused team.

If you feel you are a suitable candidate and would like to work for this reputable company, then please do not hesitate in applying.