FPGA Development Engineer

(All Levels including Senior)

Job Summary

Novocomms Limited ("NVC") – Birmingham (Potentially London)

NVC is looking for full-time FPGA Development Engineer (Ref: 2024FDE02) with ability, experience and knowledge in the definition, design, development, and testing of FPGA in our new beam steering wireless systems. This role is requried to work closely with most of our technical teams.

Duties & Responsibilities

- Translate system requirements into specific FPGA designs, focusing on reliability, maintainability, and efficiency.
- Leverage VHDL for the creation of FPGA designs, aiming for optimal performance and maintainability.
- Integrate FPGA designs with hardware boards, ensuring seamless functionality.
- Innovate in the realms of polarization synthesis and cross-polarization optimization to enhance beam steering capabilities.
- Optimize FPGA resources, timing, and power consumption for peak performance.
- Develop and implement communication waveforms for robust data transmission.
- Design and execute comprehensive testing and verification strategies to ensure FPGA reliability and performance.
- Support system integration and testing, addressing challenges in development, manufacturing, and operational phases.
- Generate and manage reusable FPGA intellectual property (IP), contributing to the company's innovation pipeline.

Essential Knowledge & Skills:

- Advanced degree (BEng/MSc, PhD preferred) in Computer Science, Engineering, Wireless Systems, or a related field, coupled with a minimum of 5 years of FPGA experience.
- Proficiency in VHDL/Verilog, with a solid foundation in FPGA development processes. Experience with Xilinx devices (including Zynq) and tools like Vivado is highly valued.
- Demonstrated ability in DSP implementations using MATLAB, Simulink, Xilinx HLS, and Vitis. RFSoC experience is a plus.
- Expertise in test bench creation and simulation, preferably with Siemens' QuestaSim.
- Proficiency in source control and project management tools (Git, SVN, Jira, BitBucket).
- Comprehensive understanding of FPGA design, including digital architecture, memory interfaces, high-speed interfaces, and digital signal processing.
- Knowledge of RF and wireless communication principles is advantageous

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Essential Attributes:

- Excellent written and oral communication skills
- Excellent interpersonal skills
- Exceptionally self-motivated and directed
- Ability to prioritize, schedule, and execute activities to efficiently accomplish tasks
- Ability to multitask and manage more than one project at the time

Salary: Exceptional compensation package up to £85k per annum depends on experience), including competitive salary, share options, pension and bonus.

Location: NVC has its current R&D headquarters in Birmingham; NVC is considering opening an office in London.

Closing Date: 29/02/2024; **Number of Positions:** 1; **Experience** – 5 year minimum of FPGA development

To apply for this position please send your CV with a covering letter explaining how do you meet selection the criteria to: HRUK@novocomms.com. You will only hear from us if you have been shortlisted.

About the Company

Novocomms Limited (NVC) was founded to deliver innovative new technology coming from British academia in the field of antenna design. The team have designed, developed and patented a pioneering antenna technology. The market for this highly scalable technology is the global digital wireless appliance market. NVC's remarkable innovation has led to the creation of a significant number of patent applications, both filed and in process.

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