OPEN POSITION: Senior FPGA Developer

ALCAN is a high-growth tech company working towards a future where every moving vehicle (cars, ships, trains, planes) has broadband connection by using ALCAN's ground-breaking liquid crystal based smart antennas. ALCAN's patented technology enables ultra-thin, lightweight flat panel antennas which can track satellites fully electronically without any moving parts.

We are looking for enthusiastic individuals who want to be a part of this exciting change and work towards developing these antennas to make a global impact by enabling communication easier for every human being.

We have an open full-time position for a **Senior FPGA Developer** in Istanbul / Turkey.

ALCAN offers a comprehensive benefits package, including private healthcare coverage, relocation assistance and competitive salary.

JOB DESCRIPTION

The **Senior FPGA Developer** will join the Electronics team to apply electrical engineering knowledge and skills for designing and developing the Antenna Control Unit (ACU) for ALCAN's smart antenna. The development of ACU includes design, implementation and test of boards for various environmental sensors (including their calibration), intelligent voltage supply circuitry for tuning and embedded programming for different microcontroller architectures. In addition to ACU activities, the Electronics team supports or develops turnkey solutions (e.g. circuit boards) for controlling various test rigs utilized mainly for antenna measurements.

Responsibilities of this position are:

- The design, upgrade and maintenance of digital acquisition electronics based on field programmable logic-based devices (FPGA);
- Responsibility for design support tasks including requirements analysis, generation of specific flow-down specifications from system level requirements, interface definition, development of test plans and procedures for FPGA integration, and creation of all relevant design description documentation and comment records to ensure the delivery of a quality finished product.
- Hardware debugging skills & experienced in operation of Signal Generator, Logic Analyzer, Digital Oscilloscope and Embedded FPGA Debugging tools
- Interface with HW/SW engineers to test and verify electrical interfaces and protocols between the FPGA and embedded system devices

Education and Experience

- BSEE, Computer Engineering or any other related technical field of study, MSEE preferred
- A minimum of 5 years' experience of successful FPGA code development
- Fundamental understanding of digital board level electrical interfaces, including ADCs, DACs, DSPs, High Speed SERDES, Flash and SDRAM.

- Previous experience in Xilinx Vivado Design Suite or Intel® Quartus®, familiarity with Tcl, Verilog or VHDL, C/C++, Python. Experience in Matlab/Simulink/System Generator Design flow are all desired but not required.
- Experience with soft microprocessor core e.g. MircoBlaze or Nios/Nios II (or similar)
- Experience with schematic entry and layout tools
- Expertise in the use of standard electronic laboratory equipment, such as oscilloscopes, logic analyzers, etc.
- Strong communication, presentation, and writing skills

Key Competencies

- Working in teams: building and maintaining constructive and effective work relationships
- Demonstrating openness to new ideas and situations
- Being willing to work on different projects simultaneously
- Ability to think out-of-box, and adaptability to new technical areas
- Analyze the trade-offs between performance, manufacturability, cost and user experience
- Take initiative to further enhance ACU performance with innovation and new technologies
- Prototyping new ideas
- Write detailed electrical engineering specifications for system, IC, PCB, Firmware, and Software design
- Confidentiality

Please send us relevant documents via e-mail: kariyer@alcansystems.com