

Title: Lead Signal Processing and FPGA Design Engineer

Company Description

Escape Communications designs, produces and sells complex wireless communications products and systems into the telecommunications equipment and satellite communications industries. We are located in the South Bay area, a few short miles from Los Angeles County beaches. Escape is a small company, where employees get the opportunity to wear many hats and learn many disciplines. We are growing, and we are looking for exceptional, motivated individuals to grow with us. We are currently looking for engineers with expertise in communications signal processing and software development.

Escape Communications develops state-of-the-art signal processing platforms for terrestrial microwave, millimeterwave and SATCOM wireless radio links. These platforms employ highly flexible architectures, with configurable modulation modes ranging from FSK to 4096QAM, and configurable bit rates ranging up to 10 gigabits per second and beyond. Advanced features include cross-polarization interference canceling, diversity combining, adaptive modulation & coding, and advanced forward error correction. Flexible Mux and Demux functions allow the combining of multiple line interface types and channels within a single radio link. Our military SATCOM terminal platform products employ complex protected frequency hopped, time permuted TDMA waveforms. Applications include cellular backhaul, broadband wireless access backhaul, high capacity last mile, private networks, as well as commercial and military satellite communications.

Job Description

Escape is seeking a talented and motivated individual to be a key contributor in signal processing development and implementation on our radio modem products. Responsibilities include:

- Design and implementation of FPGA-based digital signal processing systems
- Development of self-checking unit/system-level test benches
- Troubleshooting and resolving design issues
- Team leadership, to include work planning and assignment, as well as code review

Qualifications

The position requires RTL design experience (VHDL preferred, Verilog OK). The following skillsets are also required:

- Understanding of FPGA design flow (synthesis, place & route, etc)
- Experience with full development cycle of FPGA design
- Understanding of hardware architecture
- Strong understanding of software and hardware interaction
- Ability to read and understand schematic designs
- Basic working knowledge of lab equipment such as oscilloscopes, spectrum analyzers, signal sources, power supplies
- Excellent verbal and written skills to interact with design teams
- Minimum 5 to 7 years' experience working with FPGAs

The following skillsets are desired, although not strictly required:

- Xilinx and Altera Tool Suites
- Use of Subversion for codebase control in team environment

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- MATLAB/Simulink modeling of communications systems
- High level language programming (C, C++)
- Experience with script languages (Python, Perl, Ruby, etc.)

A bachelor's degree in EE or CS is required; a master's degree is strongly preferred. Preference will be given to applicants with prior relevant experience.

Successful applicant must be a U.S. person (citizen or green card holder).

Escape Communications offers a relaxed work environment and a generous benefits package, including health benefits, flexible vacation time, a 401K retirement plan, and an incentive stock options plan for qualified applicants.

Escape Communications is an equal opportunity employer.