

Title: Digital FPGA Design Engineer

Company Description

Great people working together in a relaxed, positive environment, solving challenging engineering problems, developing world-class products

Escape Communications designs, produces and sells complex wireless communications products and systems into the telecommunications and SATCOM equipment industries, in both commercial and military markets. 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 play a critical role in the development and delivery of world-class products to companies across the globe. 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 FPGA implementation and embedded software development.

Job Description

Escape Communications develops state-of-the-art signal processing platforms for satellite communications systems, as well as terrestrial microwave and millimeterwave 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, adaptive modulation & coding, and advanced forward error correction. Our military SATCOM terminal platform products employ complex protected frequency hopped, time permuted TDMA waveforms. Applications include protected military satellite communications, high capacity commercial satellite communications, cellular backhaul, broadband wireless access backhaul, high capacity last mile, and private networks.

Escape is seeking talented and motivated individuals to be key contributors in signal processing development and FPGA 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

Qualifications

The position requires the following:

- 2+ year experience in RTL module implementation with VHDL (preferred) or Verilog
- Familiar with static timing analysis
- Basic understanding of FPGA design flow (synthesis, place & route, timing closure, etc.)
- Ability to read and understand printed circuit board schematic designs
- Basic working knowledge of lab equipment such as oscilloscopes, spectrum analyzers, signal sources, power supplies
- Self-motivated individual, willing to learn, and interested in working in a team environment

The following skillsets are desired, although not strictly required:

- Experience with Universal Verification Methodology (UVM) verification processes
- Familiar with CDC & Lint
- Experience with Intel (Altera)/Xilinx FPGA design and development environments

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- Experience with AMBA/Avalon architectures, embedded processors, and IP cores
- Experience with Python, Labview, or MATLAB for data collection and analysis

A bachelor's degree in electrical engineering or computer engineering is required as a minimum; a master's degree is strongly preferred. PhD holders are also welcome. Preference will be given to applicants with prior relevant experience.

Successful applicant must be able to provide proof of authorization to work full-time in the US without visa sponsorship.

Benefits

Escape Communications offers a relaxed work environment and a generous benefits package, including health benefits, long-term disability insurance, flexible vacation time, a 401K retirement plan, an optional 9/80 work week, and a stock options plan for qualified applicants.

Escape Communications is an equal opportunity employer.