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## FPGA/ASIC FIRMWARE DESIGN ENGINEERING POSITION

in Cincinnati, OH

### Job Description

We are looking for skilled, motivated, and talented people to join our growing team to push the limits of the latest technology and create novel solutions with real-world applications.

The FPGA/ASIC Firmware Engineer is expected to design, architect, and implement waveforms and digital signal processing (DSP) algorithms using VHDL or Verilog targeting software defined radio (SDR) hardware. Firmware development is applied to high complexity and high throughput implementations with a focus on VHDL, code re-use, fixed-point modeling, low power design, system integration, test automation, FPGA/ASIC IP Core development and product test/support while leveraging advancements in systems-on-chip (SoCs), synthesis tools and SDR hardware. We are looking for individuals who have demonstrated abilities in innovative thinking and versatility in their jobs with experience in the following: FPGA/ASIC architecture design, simulation and verification, MATLAB or C/C++ familiarity and proposal, report and system/product specification development. The individual will work within a team environment to achieve high efficiency in solving our customer's formidable challenges and meeting our customer's requirements objectives.

### Roles and Responsibilities

- Demonstrated leadership skills/experience in digital design engineering, HDL coding, implementation of waveforms/modems and digital signal processing, performance/test analysis and technical team leadership
- Implementation of waveforms/algorithms in VHDL (preferred) or Verilog
- Experienced with lab and field testing, test equipment such as signal generators, spectrum analyzers, and digital logic analyzers
- Familiarity with signal processing systems, terrestrial/airborne/satellite transmitter and receiver design including acquisition, tracking and demodulation, MATLAB, C/C++, synthesis, verification/acceptance testing
- Individuals with a background developing solutions for military/DoD customers is plus
- Provide concise explanation and design documentation of developed firmware implementation to enable team members to support system integration
- Identification, development and implementation of FPGA/ASIC IP Cores
- Deliver effective briefings and to work efficiently in a multidisciplinary team environment
- Travel to support events such as customer site support, training seminar, proposals
- Proactively ensure a safe work environment and adhere to GIRD Systems policies and procedures

### Qualifications

Minimum Requirements:

- **\*\*\*US citizenship is required\*\*\***
- Bachelor's degree or Master's degree, preferable with work experience, in Electrical/Computer Engineering specializing in wireless communications/DSP, system design and new product development
- **Must be proficient in VHDL or Verilog.**

### Company Description

GIRD Systems, Inc., is a rapidly-growing Cincinnati-based company that specializes in cutting-edge research and development and is a leader in signal processing, RF/digital wireless communications,

RADAR, EW, geolocation and navigation, and software defined radio. We design, develop and deliver mission-focused technological solutions and software/hardware products, leveraging the state-of-the-art in software, FPGA/ASIC, digital hardware and RF engineering, system engineering and system integration, toward bringing our signal processing and communications innovations to life. These solutions address critical needs in software defined radio, tactical radio, mission operations and open processing architectures. Our work includes solving some of the most difficult problems facing U.S. Government agencies as well as commercial customers and developing products to meet our customers' needs. Please visit our website at [www.girdsystems.com](http://www.girdsystems.com) for details.

Our success is a product of our exceptional engineering team and our culture focuses on driving innovation and rewarding excellence. We seek highly motivated, innovative and forward-thinking individuals to grow with the company.

GIRD Systems provides our employees with competitive compensation packages and a full range of benefits, including vacation/holiday, medical, dental, IRA match and tuition assistance. We have a casual working environment with flexible working hours and a culture that emphasizes innovation, teamwork, agility, process and quality. Being a small company, our employees have the opportunity to participate on a variety of projects and make an immediate impact to the success of the project and the company. Our employees are paid overtime for working over 40 hours when needed and all health insurance premiums are paid. We offer a generous profit-sharing plan and encourage employees to bring new product ideas for consideration, not to mention free snacks in the kitchen. Our employees are the key to our success and we seek to hire only the best.

GIRD Systems is committed to hiring and retaining a diverse workforce. We are an equal opportunity employer and all qualified applicants will receive consideration for employment without regard to race, color, age, religion, sex, national origin, disability status, protected veteran status or any other characteristic protected by law.

**Contact**

Please send resumes to [resumes@girdsystems.com](mailto:resumes@girdsystems.com)