

# Electrical Engineer IV

Middleburg Heights, OH

*ZIN Technologies, Inc. is a federal contractor. Pursuant to Executive Order 14042, Federal contractors and subcontractors with a covered contract will be required to conform to the workplace safety protocols which include COVID-19 vaccination of covered contractor employees, except in limited circumstances where an employee is legally entitled to an accommodation (i.e. disability, sincerely held religious beliefs, etc.).*

## Description

ZIN is seeking an electrical engineer with digital electronics design experience.

## Responsibilities:

- Developing unit, module, and/or functional level requirements derived from system level requirements.
- Developing associated architectures, implementing logic designs (such as FPGAs), performing detailed analysis, and unit-level testing in a laboratory setting.
- Familiar with latest technology trends in the area of microprocessor technology, static and dynamic memory, vendor-specific FPGA design tools, and board-level interfaces.
- Work in the product development team environment with system, mechanical, and software engineers.
- Generate Printed Wiring Board (PWB) layout constraint guidelines, oversee the layout and fabrication of the design

## Requirements

- **U.S. CITIZENSHIP OR VALID GREEN CARD HOLDER REQUIRED**
- **Proof of COVID-19 vaccination, except in limited circumstances where there is a legal entitlement to an accommodation (i.e. disability, sincerely held religious beliefs, etc.)**
- Bachelor's degree in Electrical Engineering
- 8+ years of experience in Digital hardware design and testing, or 6 years with a related Master's degree
- Experience with Synthesis and Simulation Design Tools to create HDL designs implemented in modern FPGAs.
- Experience creating board-level designs from schematic to layout generation that incorporate microprocessors, digital high-speed transceivers, volatile and non-volatile memories, programmable components, parts lists, and design review packages for complex electronics
- Hands-on experience in testing of products using logic analyzer, high-speed oscilloscopes, signal generators, and FPGA debugging tools
- Experience with interfaces and bus standards such as: VME, PCI, PCIe, VPX, and Gb Ethernet
- Experience with High-speed data converter (ADCs & DACs) integration into signal processing applications
- Knowledge of FPGA signal processing techniques such as Direct-Digital Synthesis, FIR Filter design, Beamforming, and Channel Equalization
- Knowledge of FPGA design implementation with VHDL design language

- This position may require occasional business-related travel.

## **Preferences**

## **About Us**

ZIN Technologies, Inc. is a federal contractor and an award-winning AS 9100 registered small, disadvantaged business (SDB) headquartered in Northeast Ohio. Established in 1957, ZIN is a leader in providing advanced engineering services and product development solutions for NASA, DoD and private industry.

ZIN provides full lifecycle development of aerospace systems including design, development, engineering, integration, test, evaluation, orbital operations, systems modeling, simulation, verification, and validation. The flight hardware lifecycle spans concept definition, design, development, fabrication, verification, integration, launch, operations, and data processing.

We offer expertise in multi-discipline engineering, system and product development, production, and research and technology development. ZIN'S engineering capabilities include systems, mechanical, electrical, fluids, propulsion, structural, thermal, integration and test.

ZIN has a strong heritage in the areas of Space Operations including payload operations, space communications, navigation and network reconfigurable testbed. ZIN supports exploration systems (ORION, SLS, ISS, commercial vehicles) and space technologies (advanced communications, power, propulsion, cryogenics).

Our award-winning 250+ person organization consists of scientists, engineers, designers, and technicians. ZIN employs an integrated performance-based management approach, providing experienced people, proven processes and tools and exceptional cost, schedule, and technical performance while identifying and managing program and project risks.

Offering Unsurpassed Product, Process and Service:

- Prime contractor
- Sub-contractor
- Product manufacturer
- Value-added service provider

## **Company Benefits and Programs**

In addition to competitive salaries, ZIN offers excellent benefits to our associates, including medical, vision, and dental insurance; short- and long-term disability; life insurance; paid leave and paid holidays; 401(k) retirement plan (immediate vesting); education and training reimbursement; professional development opportunities; employee assistance program; flexible spending plans; credit union membership; and direct deposit.

**ZIN-Technologies, Inc. is an Equal Employment Opportunity Employer**

Minority/Female/Disabled/Veteran