

## POSITION PROFILE

Position Title: Electrical Engineer III  
Reports To: Engineering Manager

### Key Cultural Competencies:

- Highly ethical, honest, operates from the highest levels of integrity
- Team player, team oriented
- Professional in demeanor and appearance, graceful under pressure
- Values free enterprise, patriotic
- High work ethic
- Lifelong learner, always seeks to grow professionally and personally
- Responsible and accountable
- Organized, attentive to details, strong planner
- Passionate for his/her work, self-motivated
- Good verbal and written communicator
- Positive and energetic, skilled at building relationships, deals effectively with people at all levels
- Dedicated, loyal
- Innovative
- Flexible, embraces change
- Has a strong sense of service for both internal and external customers

### Qualifications:

- US Citizen
- Bachelor's degree or higher in electrical engineering or equivalent.
- 10 years of experience commensurate with level of Electrical Engineer (I-III)
- Experience and competence in some or all of the following areas:
  - Analog Circuit Design
    - DC Power Supplies
    - Batteries and charging Systems
    - AC Inverters
    - Data Acquisition (Signal conditioning, ADC/DAC)
    - Motor Drives
    - Transistor Control and drive circuits (BJT, MOSFET and GaNFET knowledge a plus)
  - High Speed Digital Circuit Design
    - Programming with HDL for FPGAs
    - Programming with C, C++, C# language/dialects for embedded processors
    - Xilinx Virtex 4 and 5 devices
    - Microsemi ProAsic and RTAX knowledge a plus
    - Microcontroller/Microprocessor Designs
    - Communication Interface Design
    - FPGA TestBench Design
    - Strong Verification/Validation Background
  - CAD Tools
    - Schematic Capture and PCB Layout – DxDesign preferred
    - Analog circuit Simulation – Pspice (OrCAD), LTspice preferred
    - FPGA Design – Microsemi Libero/Xilinx ISE/ModelSim preferred
- Systems integration and testing experience.
- Ability to read and understand mechanical drawings, electronic schematics, and software flowcharts
- Familiarity with Microsoft Project and Access preferred.

**Key Results:**

- Create HDL code and/or “C” code that meet or exceed product requirements and specifications
- Create electronic hardware designs that meet or exceed product requirements and specifications
- Generate documentation for the designs created, including but not limited to design analysis and “as built” measurements and results
- Develop product specifications that meet or exceed customer requirements and that are within customer and Company deadlines and budget
- Assure product quality by designing electrical testing methods; testing finished products and system capabilities
- Prepare technically complete Data Reports and Design Review data packages achieving first pass customer approval/acceptance.

**Responsibilities may include, but are not limited to:**

- Evaluate electrical systems, products, components, and applications by designing and conducting research programs; applying knowledge of electricity and materials
- Confirm system's and components' capabilities by designing testing methods; testing properties
- Develop electrical products by studying customer requirements; researching and testing manufacturing and assembly methods and materials
- Maintain product and company reputation by complying with federal and state regulations
- Complete detailed design analysis and documentation to support high level customer product functionality and reliability reviews
- Prepare for, attend and make technical presentations to existing and prospective clients (e.g. design reviews, technical interchange meetings, etc.)
- Systems integration and testing
- Ability to read and understand mechanical drawings, electronic schematics, and software flowcharts
- Provide engineering information by answering questions and requests
- Digital and/or analog circuit design
- HDL programming of FPGA devices
- Programming of embedded processors using C, C++ or C# languages/dialects.
- System and firmware architecture that meet or exceed requirements, specifications, time and budget goals.
- Component research and selection.
- Prepare for, attend and make technical presentations to existing and prospective clients (e.g. design reviews, technical interchange meetings, etc.).
- Interface with other engineering team disciplines.
- Developing efficient and cost-effective, best-value type product designs.
- Others as identified and assigned.

I have read and understand the above profile for my position at Iris Technology Corporation. Additionally, I am aware of the relevance and importance of the activities of my position and how they contribute to the achievement of Iris' quality objectives.

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Printed Employee Name

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Employee Signature

Date

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Supervisor Signature

Date