

## Electrical Engineering Job Description

### Attollo Engineering

Attollo Engineering is looking for an innovative and practical electrical engineer to design and build prototype and production-level circuits and electrical systems for opto-electronic components and systems. Attollo specializes in the development of versatile opto-electronic sensors and systems that will draw upon a strong background of analog and digital electronics design.

### Specific Duties, Activities, and Responsibilities:

- Works hands-on for all efforts related to electrical engineering design including analog and digital circuits design, system power supply design, digital signal processing, and analog and digital filters in support of project objectives and requirements
- Digital designs for signal processing and microcontroller based products
- Analog amplifier design for sensitive optical and RF receivers
- FPGA (Xilinx, Lattice preferred) and microprocessor-based (Microchip PIC preferred) miniature cameras design
- Support custom test station builds and electronic system and component characterization
- Works collaboratively with other engineers including optical, mechanical, systems, and customers to ensure that a project meets the specified design goals
- Communicates risk informed design trades, make-buy analyses and cost-benefit trades pertaining to requirements and budget constraints

### Education and/or Experience

- Bachelor's Degree or Master's Degree in Electrical Engineering or related field with at least 4-5 years of experience
- Direct design experience (original circuit design and analysis)
- Experience with 16-bit PIC microcontrollers, microprocessors, and FPGA design and debugging techniques (Xilinx Virtex and Spartan series devices, Xilinx ISE development environment)
- Custom schematic capture and PCB design experience
- Direct hands-on experience with common electronic test equipment such as oscilloscopes, function generators, multimeters, spectrum analyzers, power analyzers, etc.
- Firmware and software development experience

### Knowledge / Skills Requirements:

- Experience with Altium Designer, Microchip PIC processors and integrated design environments, C/C++, Python, LTSpice, GPIB
- Experience with HDL languages like Verilog and VHDL
- Excellent prototyping capabilities and experience in getting boards fabricated and assembled in quantities from 1 to 1,000+.
- Ability to apply multiple engineering disciplines to support design, development, implementation and operational activities
- Expertise in architecting and designing electronics for high speed analog amplifiers for optical and RF receivers, system-level power design, digital sub-systems, analog-to-digital conversion, camera electronics, and portable systems.
- Ability to assist in definition, trade-off and design activity
- Ability to work with ambiguous requirements, performing and presenting the necessary trades that lead to the chosen design path
- Ability to review, evaluate and analyze designs
- Ability to prepare, review and evaluate documentation, specifications, test plans and procedures