



Job Description: Junior Software/Firmware Engineer

Position Title:	Junior Software/Firmware Engineer	Exempt/Non-exempt:	Exempt
Department:	Software Engineering	Full/Part Time:	Full
Reports to:	Director of Software Engineering	Permanent/Temporary:	Permanent

Position Summary

Research and implementation of tools and technology for the Software Engineering team. Work directly with Hardware Engineering in the process of researching and developing existing and future optimizer or other power electronics hardware. Write and maintain code for firmware and engineering tools.

Essential Job Functions (Roles and Responsibilities)

1. Work directly with hardware engineering to test and improve optimizer hardware functionality using embedded firmware.
2. Work with the software engineering team to test and improve wireless communication between Ampt hardware, and related software/firmware and tools.
3. Work with Field engineering and hardware engineering to improve internal tools and external (e.g. customer/installer-facing) tools as needed.
4. Work with Lead Firmware Engineer to create specifications for production hardware.
5. Create and maintain technical documentation for software and firmware products and tools.

Essential Job Requirements

Education:

Minimum BS in Computer Science, Computer Engineering, Mathematics, Electrical Engineering or equivalent experience (minimum 5 years) in RF and embedded systems and firmware development

Experience:

Embedded systems development, RF application development, software engineering, C, Assembler and other necessary programming languages.

	CT-0001	Job Description Template		Page: 1 of 2
	Owner:	Laura Miller	Dept: HR	Rev: A

Required Skills:

- Skilled in C and C++ languages, and able to identify similarities and differences between the two.
- A solid understanding of the C/C++ code building processes
- A solid understanding of the different types of computer memory.
- A solid understanding of Computer Algorithms and Data Structures
- A solid understanding of code execution and layout in memory.
- A good understanding of at least one Assembly language.
- A good understanding of at least one Micro controller.
- A good understanding of Linux.
- Ability and willingness to learn new things
- Able to take responsibility and ownership of assigned tasks.
- Good communication and interpersonal skills
- Ability to work well in a team and goal-oriented environment.

Preferred Skills:

- A good understanding of Embedded programming and Embedded Systems
- Computer networks, networking, protocols, and stacks knowledge.
- Operating Systems Concepts
- Concurrent Programming knowledge
- Bash, Lua, and python programming languages
- Qt toolkit knowledge/experience
- Software debugging skills
- Wireless Communication knowledge/experience
- Computer Hardware knowledge
- Software/Firmware Development, Testing, and Deployment experience
- Code Maintenance experience
- Electronics knowledge
- Oscilloscope and multi-meter operational knowledge
- Git knowledge
- Breadboard and/or soldering experience

	CT-0001	Job Description Template			Page: 2 of 2
	Owner:	Laura Miller	Dept:	HR	Rev: A