



Senior/Principal Electrical Engineer

Company Overview |

Frontier Audio Labs, based in Chicago, is a stealth-mode startup developing game-changing audio systems for industrial and military end-users. Recently spun-off from another company that had raised \$10m in venture capital, with a close-knit team of elite engineers and funding from the United States Department of Defense, Frontier Audio Labs is dead-set on transforming the sonic experience for the critical underserved defense and industrial market.

Job Description |

Frontier Audio Labs is looking for extremely hardworking and resourceful candidates with experience developing embedded systems to be its lead electrical engineer. As a member of a very small team, candidates should expect to own immense aspects of the R&D and product development process while learning and adapting quickly. "Crazy ideas", being scrappy, and having fun are tenants of the culture as well as focus and hard work, fundamental requirements to reach our goals. Frontier Audio Labs is an ideal company for those looking to be a cornerstone member of a quickly growing and motivated team developing next generation audio-centric products and technologies. Lastly, while Frontier Audio Labs as a startup may not be able to offer top-bucket cash compensation starting off, this position will include a significant (multiple percent) equity stake.

Responsibilities |

- Driving development of all embedded system (hardware heavy) powering and routing data
- Designing high speed digital circuits and entire electrical system architectures around low-power processors/chips and accompanying components including amplifiers, power supplies, DACs, antennas etc.
- Prototyping and testing hardware (e.g., assembling and building PCBs) and working with vendors through development and production
- Develop, test, and real-time implement software/firmware for accompanying hardware
- Collaborate closely with acoustic, DSP, and mechanical engineers through to create game changing products
- Developing IP to strengthen company's quickly growing portfolio





Qualifications I

Required

- 4+ years of experience with embedded system design for portable electronics
- 6+ years of experience with circuit design and assembly
- 8+ years of general experience with hardware/electronics design with substantial proficiency in soldering, rework, etc. and using electronic testing equipment such as multimeters, signal generators, logic analyzers and oscilloscopes
- 4+ years of experience programming with languages like C, C++, or RISC-V, working with microcontrollers, and familiarity with standard communication protocols like, I2C, SPI, UART and I2S
- Experience with radio engineering and/or communication standards like WiFi and Bluetooth
- Self-driven engineer who can independently prioritize and “get things done”
- Must have ability to be qualified to work in the U.S. in less than 3 months and have no restrictions for international travel
- Ability to commute to Frontier Audio Labs’ Chicago office on a daily basis

Preferred

- Experience with audio embedded system design
- Passion for acoustics and improving how people experience sound
- 15+ years of experience designing and building small electronics
- Experience with audio processors/chips or SOCs from Analog Devices, Greenwaves, Qualcomm, Cirrus Logic, or similar company
- Members of our engineering team have degrees in Acoustics or a similar field (mechanical or electrical engineering, physics, etc.), but if you have taken a different route to gain the required experience, that is acceptable

The applicant must be a flexible, results-oriented problem-solver who is passionate about introducing large-scale innovation into the audio industry.

Frontier Audio Labs evaluates qualified applicants without regard to race, color, religion, sex, sexual orientation, gender identity, genetic information, national origin, age, disability, veteran status, or any other legally protected characteristics.

All inquiries should be directed to pmoeckel@frontieraudio.com.

