



For over 40 years, Rockford has been a leader in the audio industry. We started with an idea, that sparked a movement and ignited a following. It was in that moment, that Rockford was born. Today, Rockford Fosgate makes lifestyle products that deliver THE audio experience in cars, boats, motorcycles, and recreational vehicles. It's not just a company - we are a team of people who are audio fanatics. We have a reputation for making products with our customers' needs and wants in mind. It's our passion and our fierce customer loyalty that sets us apart. Made for fanatics by fanatics...This is Rockford.

JOB TITLE: Embedded Engineer

The embedded engineer position is an integral part of the engineering team that focuses on the specification, simulation, design, debug, and verification of embedded circuitry and firmware for audio products such as amplifiers, processors, and integration accessories. The embedded engineer works closely with other product development and engineering disciplines to deliver class-leading products. This role has a high sense of ownership in the overall product since it will involve many aspects of design and validation starting from initial concept and going beyond product launch.

KEY RESPONSIBILITIES:

- Work with new product team and OEM customers to define embedded product requirements.
- Define embedded architectures and block diagrams for next generation audio products.
- Perform electrical and mechanical component selection for new hardware designs.
- Design schematics and PCB's using Altium Designer.
- Design and develop embedded firmware using C/C++.
- Perform board bring-up and debug to optimize embedded SW/HW on bench and in real-world conditions.
- Work closely with hardware test engineers to develop hardware validation test plans and EOL test systems.
- Work closely with software test engineers to develop software validation test plans.
- Maintain existing products by performing SW/HW root cause analysis and component EOL/substitutions.
- Facilitate production validation testing by travelling to 3rd party test labs.
- Research new technologies to integrate into future products.

REQUIRED SKILLS/QUALIFICATIONS:

- Minimum 3 years of relevant experience.
- Bachelor's in Electrical, Software, Computer Engineering or equivalent discipline.
- Experience in performing complex mixed signal schematic and PCB designs (6-layer min).
- Strong proficiency in writing and debugging C code on 32-bit microcontrollers.
- Understanding of signal integrity and simulation tools such as Tina, LTSpice, and PSPICE.
- Experience with routing high speed buses such as SPI, A2B, CAN, USB, etc.
- Knowledge of EMC/EMI best practices as well as mitigation techniques.
- Strong experience with analog audio circuits such as active and passive filter design, preamps, buffers, etc.
- Knowledge of power supply topologies such as buck, boost, and inverters.
- Experiencing using audio data converters (ADC's, DAC's, and CODEC's) in designs.
- Experience using microcontrollers and digital signal processors in designs.
- Experience with bootloaders, linker files, and toolchains (GNU, IAR, etc.).
- Ability to troubleshoot hardware using logic analyzers, oscilloscopes, and spectrum analyzers.
- Experience debugging C source code using hardware debuggers over JTAG and SWD.
- Attention to detail and appreciation for good code architecture and documentation.
- Experience with full product development lifecycle for all stages from conception through volume manufacturing.

- Experience coordinating with external contract manufacturers and overseeing prototype/production builds, including hands-on work when needed.
- Occasional travel to contract manufacturers facilities in Asia.
- Must be able to solder and rework fine pitch components.
- Strong team player with positive attitude and willingness to learn and collaborate in group settings.
- Excellent written and verbal technical and interpersonal communication skills.
- Self-starter with strong organizational skills and attention to detail.
- Ability to effectively execute multiple projects concurrently in a fast-paced deadline driven environment.

DESIRED SKILLS (OPTIONAL):

- System level audio design including knowledge of infotainment, audio amplification, transducers, and vehicle tuning.
- Experience with automotive CAN bus (ISO-11898, ISO-11783, J1939, NMEA2K, ISO-15765, ISO-14229).
- Experience with Bluetooth Low Energy (L2CAP, GATT).
- Familiarity with product/technology/certifications (e.g. Bluetooth classic and Bluetooth Low Energy).
- Knowledge of basic DSP building blocks for audio processing (FIR, IIR, FFT, etc.).
- Experience with embedded graphical HMI design.
- Experience with Linux, QNX or Android based embedded operating systems.
- Knowledge of creating scripts or programs using languages such Python, JS, C#, or LabVIEW.

Interested applicants, send resume and cover letter to jobs@rockfordcorp.com. This on-site position is based in Tempe, Arizona. No relocation assistance provided.

To learn more about Rockford Fosgate, please visit us at www.rockfordfosgate.com. We are an equal opportunity employer and value diversity in the workplace.