

# ROCKFORD CORPORATION

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Rockford Fosgate, a leading automotive audio company, is looking for a highly motivated person to fill the position of Electrical Engineer in the Advanced Engineering group. This multi-disciplined role will work with the latest technologies to design hardware and software for aftermarket and OEM audio products. This role will be in integral position and will interact with multiple groups within the organization including engineering, new product development, marketing and technical support.

**JOB TITLE: Electrical Engineer**

**KEY RESPONSIBILITIES:**

- Design, develop, troubleshoot and validate hardware for embedded audio products
- Assist in developing firmware for embedded audio products
- Perform mixed signal hardware design including schematic capture and PCB layout
- Simulate, design, and optimize electrical circuits
- Debug, test, and optimize HW and SW designs on bench and in real-world conditions
- Work closely with test engineers to define and implement end-product production test systems
- Maintain and improve embedded firmware of existing products

**REQUIRED SKILLS/QUALIFICATIONS:**

- Bachelors in Electrical Engineering, Software Engineering, Computer Engineering, or equivalent
- 3 to 5 years of related experience
- Experience with mixed signal circuit design simulation using PSpice or equivalent
- Experience with schematic and PCB layout using Altium Designer / Nexus or equivalent
- Ability to create automated test software using National Instruments Labview
- Understanding of communication protocols including USB/OTG, SPI, I2C, I2S, UART, and Bluetooth
- Experience with mixed signal design and signal conditioning for ADCs, DACs, and sensors
- Proficiency in developing C/C++ firmware for 32-bit ARM Cortex embedded processors
- Experience with developing BSPs and drivers for board peripherals including memory and displays
- Knowledge of DSP building blocks including digital filtering and FFT analysis
- Ability to troubleshoot SMT circuits using oscilloscopes, spectrum analyzers, logic analyzers, etc.
- Excellent communication and interpersonal skills; ability to multi-task and manage multiple projects simultaneously

**DESIRED SKILLS (OPTIONAL):**

- Knowledge of audio and acoustic design testing
- Experience with IAR Embedded Workbench for ARM tool chain
- Knowledge of CAN-bus protocol, preferably J1939 and/or NMEA 2000
- Advanced DSP audio signal processing algorithm design including adaptive filters, ANC, and echo cancellation
- Knowledge of EMC best practices and debugging

Interested applicants, send resume and cover letter to [jobs@rockfordcorp.com](mailto:jobs@rockfordcorp.com).

This position is based in Tempe, Arizona. No relocation assistance provided.

To learn about Rockford, please visit us at [www.rockfordcorp.com](http://www.rockfordcorp.com). We are an equal opportunity employer and value diversity in the workplace.