Rockford Fosgate, a leading automotive audio company, is looking for a highly motivated person to fill the position of Embedded Software Engineer. Primary responsibilities of this role will include the design, development, testing, and maintenance of embedded applications for both OEM and aftermarket consumer automotive audio products. A successful candidate will be responsible in developing and debugging firmware and software to support a broad range of processors including 8/16 bit microcontrollers, ARM, and DSP. A candidate must be able to communicate effectively and work as an integral part of a small product team.

**JOB TITLE:** Embedded Software Engineer

**KEY RESPONSIBILITIES:**
- Design and develop embedded firmware based on product requirements and specifications
- Work closely with electrical and audio engineers to develop firmware solutions that interface seamlessly to the hardware
- Debug, test, and, optimize 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
- Generate well defined code documentation
- May include International travel

**REQUIRED SKILLS/QUALIFICATIONS:**
- Bachelors in Software Engineering, Computer Engineering, or Electrical Engineering
- 3 to 5 years of related experience
- Proficiency in C/C++ for 32-bit ARM Cortex embedded processors
- Strong discipline and practice of object oriented software design
- Understanding of communication protocols including USB/OTG, SPI, I2C, I2S, UART, and Bluetooth
- Knowledge of CAN-bus protocol, preferably J1939 and/or NMEA 2000
- Experience with developing BSPs and drivers for board peripherals including memory and displays
- Experience with mixed signal design and signal conditioning for ADCs, DACs, and sensors
- Knowledge of DSP building blocks including digital filtering and FFT analysis
- Working knowledge of electrical and system hardware design
- Ability to troubleshoot using oscilloscopes, spectrum analyzers, and Audio Precision

**DESIRED SKILLS (OPTIONAL):**
- Experience with embedded Linux and Qt framework
- Experience with IAR Embedded Workbench for ARM tool chain
- Experience with Microsoft Team Foundation Server or basic knowledge of source control practices
- Knowledge of embedded RTOS
- Experience developing automated test and/or test benches with National Instruments Labview
- Experience developing PC graphical user interfaces using C#/.NET and WPF
- Advanced DSP audio signal processing algorithm design including adaptive filters, ANC, and echo cancellation
- Familiarity with iOS and/or Android mobile application development

Interested applicants, send resume and cover letter to 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. We are an equal opportunity employer and value diversity in the workplace.