



We are a customer focused provider of audio solutions. We exceed users' expectations with well thought out design, integration, and service. Our purpose-built products meet our customers where they are at, enhancing their moment with a powerful experience through music.

Job Title: Electrical Test Engineer

Job Location: Tempe, AZ (100% Onsite)

We are seeking an Electrical Test Engineer to own in-house electrical, audio performance, and reliability validation of audio amplifiers and related electronic systems. This hands-on role is responsible for independently planning and executing validation activities, identifying reliability risks, providing data-backed design feedback, and implementing focused test automation where it improves validation efficiency and repeatability. This role reports to the Manager of Electrical Engineering.

Key Responsibilities

Bench-Level Electrical & Audio Validation

- Independently perform bench validation of audio amplifiers and electronic subsystems, including functional, performance, stress, and reliability testing.
- Execute audio measurements such as power, distortion, noise, frequency response, efficiency, and thermal behavior.
- Use Audio Precision analyzers and standard lab equipment to produce accurate, repeatable results.
- Configure and maintain test setups including power supplies, loads, signal sources, wiring, fixtures, and instrumentation.

Reliability, Stress & Robustness Testing

- Plan and execute extended-duration and accelerated stress tests under worst-case operating conditions.
- Perform thermal, voltage, load, and duty-cycle stress testing to assess operating margins and protection behavior.
- Conduct fault-condition and abuse testing (over/under-voltage, load faults, shutdown and recovery behavior).
- Validate corner-case operation across supply, load, and signal extremes.
- Analyze performance drift, intermittent failures, and degradation trends during long-run testing.
- Document failure modes, operating limits, and reliability findings to support design improvement and validation readiness.

Test Automation & Data

- Identify and implement automation for repetitive validation tests to improve efficiency and repeatability.
- Develop and maintain Python-based test scripts and tools.
- Integrate automated workflows with Audio Precision and bench instrumentation where appropriate.
- Analyze and summarize test data to support clear engineering decisions.

Documentation, Standards & Collaboration

- Author clear test procedures, reports, and DVP&R inputs with minimal supervision.
- Ensure validation results are traceable, repeatable, and audit-ready.
- Partner with Electrical Engineering on design bring-up, debug, and root-cause analysis.
- Support Quality and external validation partners by defining test intent and reviewing results.

Required Skills & Qualifications

- Bachelor's degree in Electrical Engineering, Electrical Engineering Technology, or related field.
- 3 – 6 years of hands-on electrical or electronics testing experience.
- Strong experience performing audio testing using Audio Precision equipment (required).
- Solid understanding of analog and mixed-signal electronics.
- Proficiency with bench equipment (oscilloscopes, power supplies, electronic loads, signal generators).
- Experience with manual test setup, wiring, fixtures, and instrumentation.
- Ability to automate test workflows using Python or similar scripting languages.
- Demonstrated ability to diagnose failures and perform root-cause analysis at the system level.
- Strong technical documentation and reporting skills.
- Ability to work independently while collaborating effectively with cross-functional teams.

Preferred Qualifications

- Experience testing Class-D audio amplifiers or power electronics.
- Familiarity with embedded-controlled systems such as RGB controllers.
- Exposure to EMC pre-compliance testing concepts.
- Experience working with external validation labs.
- Automotive, marine, motorcycle, motorsports, or consumer audio product experience.

About Rockford & Benefits

Rockford Fosgate is an equal opportunity employer located in Tempe, Arizona. Join us and thrive in a dynamic office environment where your contributions truly make a difference. Enjoy the benefits of flexibility, competitive pay, affordable healthcare, a 401k match, and a pathway for growth.

Interested and qualified applicants are encouraged to send their resume and cover letter to jobs@rockfordcorp.com Visit www.rockfordfosgate.com to learn more about us.