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: ATE Software Test Engineer **Job Location:** Tempe, AZ (100% Onsite)

We are seeking an ATE Software Test Engineer to own development, deployment, and continuous improvement of automated End-of-Line (EOL) test software for audio amplifiers and electronic systems. This role is responsible for implementing test sequences, maintaining version-controlled test environments, integrating instrumentation and third-party systems, and enabling data-driven quality monitoring across global manufacturing sites. Equally central to the role is the future of our test platform: you will sustain our established LabVIEW codebase while spearheading its migration to a modern, Python-based architecture, using AI coding agents to build a foundation that is extensible, maintainable, and built to last.

This role operates within the Quality organization and is distinct from product validation engineering, focusing specifically on production EOL test readiness, execution, and sustainment.

Key Responsibilities

EOL Test Software Development

- Develop and maintain automated EOL test sequences within our existing LabVIEW-based test executive framework, ensuring uninterrupted production support.
- Translate product test specifications, DFMEA outputs, and validation requirements into executable test scripts.
- Implement modular, scalable, and reusable software architectures across multiple product platforms.
- Ensure all test software is version controlled, traceable, and production-ready.

Test Platform Modernization & AI-Assisted Development

- Spearhead the migration of the EOL test platform from LabVIEW to Python, defining the target architecture, coding standards, and a phased transition roadmap that protects production continuity.
- Design a modular, well-documented Python test framework with clear hardware abstraction layers, enabling new products and test stations to be onboarded with minimal rework.
- Leverage Claude and other AI coding agents to accelerate development, refactoring, unit test generation, and documentation, applying disciplined engineering review to every AI-assisted contribution.
- Develop agentic workflows and internal tooling that automate repetitive test development tasks and raise the productivity of the broader test engineering team.
- Establish code review, automated testing, and CI practices that keep the codebase maintainable as it grows.

System Integration & Automation

- Integrate test software with DAQ systems, DMMs, power supplies, and communication interfaces including CAN, CAN-FD, BLE, and A2B.
- Develop custom integrations using Python, C, or other APIs for third-party tools and hardware.
- Support standardized communication interfaces through common system connectors and abstraction layers.

Database & Data Analytics

- Interface test systems with cloud-synced Oracle databases for test sequences, limits, and results storage.
- Develop data analytics tools to monitor first pass yield, limit drift, and failure trends.
- Ensure data integrity, traceability, and audit readiness of all production test records.

Production Deployment & Support

- Release, deploy, and maintain test software across overseas manufacturing partners.
- Support on-site test engineers and technicians during DV, PPAP, and ramp phases.
- Troubleshoot test software failures and implement corrective actions.

Governance, Controls & Compliance

- Enforce strict operator controls preventing unauthorized changes.
- Ensure pass/fail integrity is maintained across all test sequences and results.
- Ensure all EOL test processes meet internal quality standards and customer expectations.

Required Skills & Qualifications

- Bachelor's degree in Electrical Engineering, Computer Engineering, Software Engineering, or related field.
- 3–7 years of experience in automated test development or production test systems.
- Strong experience with National Instruments LabVIEW, including maintaining and extending production test code.
- Experience integrating hardware using DAQ systems and test instrumentation.
- Strong proficiency in Python, including object-oriented design, packaging, and automated testing (e.g., pytest); working knowledge of C or similar languages.
- Experience with database systems, preferably Oracle as well as SQL.
- Strong understanding of production test concepts, yield, and statistical analysis.
- Demonstrated ability to diagnose failures and perform root cause analysis.
- Strong documentation and version control discipline.
- Hands-on experience with AI-assisted and agentic development tools such as Claude, Claude Code, or GitHub Copilot, and a genuine openness to making them a core part of the daily engineering workflow.

Preferred Qualifications

- Experience with automotive communication protocols including CAN, CAN-FD, A2B, and BLE.
- Familiarity with manufacturing test system deployment at CM/ODM partners.
- Experience with audio product testing or electronics manufacturing.
- Exposure to DFMEA, PPAP, and quality systems.
- Experience migrating legacy test systems (e.g., LabVIEW or TestStand) to Python-based frameworks such as OpenHTF or pytest.
- Experience building agentic AI workflows or tooling using LLM APIs or the Model Context Protocol (MCP).

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.