

Principal / Senior Engineer - Supplier Quality Management - Semiconductor Solutions (Testing and Burn-in)

Your tasks

Supplier Quality Management

- Develop, implement, and maintain a supplier quality management system for wafer sort, Burn-In, and Final Test suppliers.
- Define and track supplier quality KPIs (Yield, PPM, test escapes, reliability failures..)
- Conduct periodic business and quality reviews with key partners to align expectations and improvement.

Compliance & Audits

- Plan & conduct VDA6.3 process audit & IATF16949 system audits at test suppliers
- Ensure full compliance with AEC-Q100 reliability qualification and customer specific requirement.
- Support APQP/PPAP deliverables for new product and changes.

Issue Resolution & Problem Solving.

- Lead root cause analysis and CA/PA(8D) for test related issues (yield drops, reliability failure, test escapes, burn-in fallout)
- Ensure robust containment, root cause analysis, and permanent corrective actions (PCA) are implemented at suppliers.

New Process/Components Introduction

- Work with R&D and Technology & Operation Team to approve test spec, correlation study, control plans, reliability requirements, and FA report.
- Validate Supplier readiness for NPI and new component introduction, including hardware/software, burn-in boards, and correlation validation.
- Review Design for Test (DFT) implementation and production test coverage, including scan, ATPG, memory BIST, logic BIST, and boundary-scan/JTAG, to minimize test escapes and support robust series production.
- Define and review Burn-In and High-Voltage Stress (HVS) technical requirements, including stress conditions, hardware readiness, correlation, monitoring, failure criteria, and disposition of stressed units.
- Ensure robust change management (PCN/ECN) in line with automotive standards.

Continuous Improvement

- Drive suppliers towards zero-defect strategy, focusing on process capability (CP/CPK), test coverage improvement, automation.
- Reduce test escapes, reliability fallout, and field returns risks through



Job ID

REF11491U

Field of work

Quality

Location

Singapore

Leadership level

Leading Self

Legal Entity

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proactive improvement actions.

- Benchmark and share best practices across the supply base to strengthen supplier competence.

Reporting & Documentation

- Maintain up-to-date audit records, PPAP packaging, reliability data, FA reports, and supplier dashboard.
- Provide regular management update and supplier quality status, risks and

improvement progress.

Your profile

Education:

- Bachelor's degree in Electrical/Electronic Engineering, Semiconductor Physics, or related discipline.
- Certification (Six sigma black belt, IATF/VDA auditor) preferred.

Experience

- Minimum 7+ years of experience in semiconductor supplier quality or test engineering, with at least 3 years in an automotive semiconductor environment.
- Strong knowledge of semiconductor test flows, reliability testing, and failure analysis methods.
- Hands-on experience with DFT concepts and test-coverage review, including scan/ATPG, memory BIST, logic BIST, and boundary-scan/JTAG, with the ability to assess their application in wafer sort and final test.
- Practical experience with Burn-In and HVS for automotive semiconductor products, including stress-condition definition, burn-in boards/sockets, correlation, data analysis, and failure investigation.
- Hands-on experience with IATF 16949, VDA 6.3, APQP, PPAP, and AEC-Q100 qualification requirements.
- Proven track record managing reliability labs and FA support with OSAT test suppliers.

Skills and Competencies:

- Strong knowledge of automotive core tools (APQP, PPAP, MSA, SPC, FMEA)
- Proficient in problem-solving methodology. (8D, DOE, DMAIC)
- Strong interpersonal and communication skills to work with suppliers and customers.
- Ability to work effectively in a fast-paced, cross-functional, and global environment.
- Willingness to travel to supplier sites globally.

Our offer

Ready to take your career to the next level? The future of mobility isn't just anyone's job. Make it yours! **Join AUMOVIO. Own What's Next.**

About us

Since its spin-off in September 2025 AUMOVIO continues the business of the former Continental group sector Automotive as an independent company. The technology and electronics company offers a wide-ranging portfolio that makes mobility safe, exciting, connected, and autonomous. This includes sensor solutions, displays, braking and comfort systems as well as comprehensive expertise in software, architecture platforms, and assistance systems for software-defined vehicles. In the fiscal year 2024 the business areas, which now belong to AUMOVIO, generated sales of 19.6 billion Euro. The company is headquartered in Frankfurt, Germany and has about 87.000 employees in more than 100 locations worldwide.