

Location: Sophia-Antipolis, France
Employment type: Experienced Professional
Contract type: Permanent position

Ref: **SSW_SFE_ENG**

SOFTWARE FUNCTIONAL SAFETY ENGINEER

The Automotive industry is living through a revolution. Electrification, autonomous driving, diverse mobility, connectivity are trends that are drastically changing the industry's rules. Among all decisive topics revolutionizing cars in the next future, Silicon Mobility is committed to support the rapid advent of electric and hybrid cars.

Silicon Mobility, an Intel company, is a technology leader for cleaner, safer, and smarter mobility. The company designs, develops and sells flexible, real-time, safe, and open semiconductor solutions named FPCU (Field Programmable Control Unit) for the automotive industry used to increase energy efficiency and reduce pollutant emissions while keeping passengers safe.

The Company is opening an “**Software Functional Safety Engineer**” position in its main Research and Development center ideally located in the Sophia-Antipolis Technology Park on the French Riviera.

You are a brilliant and passionate Senior Software Engineer for Automotive Applications? You want to support the development of disruptive products accelerating the car powertrain electrification? At Silicon Mobility, we would like to light up our employees' potential. Are you up for the challenge? Contact us and send your resume and cover letter to recruitment@silicon-mobility.com

ROLE & MISSIONS

As part of the System & Software Engineering team, you will contribute to the development of software products, and you will be responsible for the specification, development, and integration of embedded software in on-board chargers, DC-DC converters and traction inverters for hybrid and electric vehicles with a strong focus on functional safety features.

The primary responsibilities of the position include:

- Requirement analysis.
- Participation in the software architecture definition and specification writing under the supervision of the architect.
- Embedded software design, development according to specifications and in compliance with the team's development process and ISO 26262 Functional Safety standard requirements.
- Documentation writing.
- Code and tests review participation.
- Contribution to the specification of unit, integration, functional and qualification tests.
- Ensure software performance and functionality safety requirements.
- Quality handling to meet A-SPICE, ISO 9001 quality requirements and development procedures.
- Suggestion and implementation of improvements to the development process.
- Interaction with third parties as part of collaborative projects and strategic partnerships.
- Customer and supplier technical support when needed.

The position requires pro-active involvement with the other team members, but also with the Product and Hardware Engineering team.



REQUIRED SKILLS AND EXPERIENCE

EDUCATION:

- Master's degree in embedded software engineering.

TECHNICAL SKILLS & EXPERIENCE:

- A minimum of 5 years' experience in software development in C language.
- Very comfortable in embedded software development on 32 bits RISC CPU environment.
- Good knowledge and experience in ISO 26262 (Road Vehicle - Functional Safety) standard.
- Good Experience of the automotive environment and constraints.
- Very good knowledge of System-On-Chip and microcontrollers.
- Good skills on hardware peripherals and on validation on boards.
- Expert in real time system constraints.
- Good experience in static and dynamic code analysis to meet the quality requirements of ISO 26262 standard.
- Very good experience in verification and automatic test development with test tools such as VectorCast C++.
- Good analysis of solving technical issues.
- Knowledge of debugging tools such as JTAG box and Lauterbach debugger.
- Analytical skills for debugging software.
- Experienced in embedded AUTOSAR Software development and configuration is a plus.
- Cybersecurity knowledge and experience is an advantage (HSM, ISO 21434, EVITA).

LANGUAGE SKILLS:

- Fluent in English
- French speaking is a plus.

BEHAVIORAL SKILLS:

- Be self-motivated, pro-active, flexible, and able to accept new challenges.
- Be autonomous, organized, rigorous, and have a high sense of priorities.
- Demonstrate strong communication and multi-cultural teamwork skills.

