

**Ref: RD\_EPT\_SYS\_ENG**

## ELECTRIC POWERTRAIN SYSTEM EXPERT

The Automotive industry is living 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 is a technology leader for cleaner, safer and smarter mobility. The company designs, develops and sells flexible, real-time, safe and open semiconductor solutions for the automotive industry used to increase energy efficiency and reduce pollutant emissions while keeping passengers safe.

The Company is opening an **Electric Powertrain System Expert** 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 Electric Powertrain System expert? You want to support the development of disruptive products accelerating the car's powertrain electrification? At Silicon Mobility, we like to light up our employee's potential. Are you up for the challenge? Contact us: send your resume and cover letter to [hr@silicon-mobility.com](mailto:hr@silicon-mobility.com).

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### ROLE & MISSIONS

You will be in charge of the development and validation of embedded system for the control and power management of the electric engine for Hybrid and Electric Vehicles. Silicon Mobility offers to the market a solution based on a FPCU (Field Programmable Control Unit) named OLEA. You will be the algorithm expert for electric powertrain application based on Silicon mobility solution.

Your main activities will be:

- Requirement analysis
- Specification writing
- Responsible for Inverter control, AC/DC (OBC) and DC/DC converter algorithm control loop definition, model development, simulation and implementation on OLEA solution
- Support AC/DC, DC/DC and Electrical Motor control loop validation and calibration in HW system environment
- Lead innovation on new algorithms
- Customer interaction for definition and support
- Quality handling

The position requires pro-active involvement with all departments of the Company and customers.

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### REQUIRED SKILLS AND EXPERIENCE

EDUCATION:

- Good university degree in electric/electronics system engineering



#### TECHNICAL SKILLS & EXPERIENCE:

- A minimum of 10 years of experience in embedded system development for automotive electric motor inverter controller, AC/DC and DC/DC converter application
- A strong knowledge of algorithm to control Inverter and AC/DC and DC/DC converter
- A strong knowledge of Matlab/Simulink
- Experience in power electronics
- Experience in C/C++ development for embedded system application
- A good ISO26262 knowledge is expected
- Experience on AUTOSAR
- Experience on ARM or other 32 bits RISC CPU environment

#### LANGUAGE SKILLS:

- Perfectly fluent in English
- German or Chinese speaking is a plus

#### BEHAVIORAL SKILLS:

- Be self-motivated, pro-active, flexible and capable of accepting new challenges
- Demonstrate strong communication skills at technical and management levels
- Be able to work efficiently across different teams within Silicon Mobility to understand their individual needs and constraints

Please send your resume and cover letter to [hr@silicon-mobility.com](mailto:hr@silicon-mobility.com)

