DATE: 01/03/2025

Job offer No. REC2025\_02

**Vacancy: Hardware Design Engineer**

ASE Optics Europe is a dynamic company based in the vibrant city of Barcelona focused on the development of custom optics and integrated optical systems. We currently have a vacancy for a senior mechanical engineer to complement our existing team. The successful candidate will be involved in a great variety of projects cutting across fields as varied as medical, scientific or defense with one common theme: light. ASE Optics Europe covers projects ranging from the design and construction of custom optical lens systems to fully integrated optical systems such as OCT or laser optical radar. ASE Optics Europe also participates in funded R&D projects such as those available through CDTI or Horizon Europe.

We are looking for an experienced **Hardware Design Engineer** to design the electronics of the advanced optical systems, including imaging systems, laser-based systems, and other innovative optical technologies. This role will involve close collaboration with the software development team to ensure seamless integration and optimal system performance.

**Responsibilities:**

* Design, develop, and test FPGA-based systems and custom PCB layouts for advanced optical applications.
* Create and review hardware schematics and layout designs.
* Work closely with software engineers to ensure seamless hardware-software integration.
* Debug and troubleshoot hardware issues using advanced instrumentation.
* Ensure compliance with industry standards and best practices.

**Requirements:**

* Bachelor’s degree in Electrical Engineering, Electronics, or a related field.
* At least 2 years of experience in hardware design.
* Proficiency in FPGA design, including VHDL/Verilog and testbench development.
* Experience with FPGA platforms, such as Xilinx, Altera, or others.
* Experience with PCB design tools (preferably Altium Designer).
* Strong knowledge of electronic instrumentation and debugging tools (oscilloscopes, logic analyzers, etc.).
* Experience with version control systems (e.g., Git).
* Good communication skills, both written and oral.

**Optional:**

* Familiarity with signal integrity and high-speed design principles.
* Knowledge of power management and battery-operated systems.
* Experience with embedded software development.
* Knowledge of compliance testing (e.g., EMC/ESD).

**Conditions and benefits:**

* Inclusion in a motivated multi-disciplinary team
* Innovative work, always at the forefront of technology
* Opportunities for training and personal development
* Full-time employment

**Submission of applications**

Interested professionals should send their **CV and cover letter** using the following channel:

* E-mail: info@aseoptics.com