

JOB DESCRIPTION

SENIOR ELECTRONICS ENGINEER

Role Overview

We are seeking a Senior Electronics Engineer with strong experience across digital, analog, and mixed-signal systems. Semiconductor or equipment-related experience is highly desirable. The ideal candidate combines solid design fundamentals with hands-on validation skills and the ability to translate system requirements into robust, manufacturable hardware.

Core Technical Expertise (Required)

Digital & FPGA Design

- Experience developing digital architectures on FPGAs (e.g., Xilinx, Lattice Semiconductor or similar)
- Competence in hardware description languages (VHDL / Verilog / SystemVerilog)
- Integration of standard digital interfaces (SPI, I²C, UART, Ethernet, etc.)
- Ability to carry out synthesis, timing analysis, and optimization for reliability and performance
- Familiarity with implementing DSP or real-time processing blocks (filters, FFT, decimation/interpolation)

Analog / Mixed-Signal Design

- Experience designing analog front-ends (e.g. filtering, amplification, ADC/DAC interfacing, etc.)
- Good understanding of noise, stability, bandwidth, impedance, and grounding fundamentals
- Ability to ensure robust interactions between analog circuitry and digital subsystems (FPGA, DSP, MCU)

Simulation & Modeling

- Proficiency with SPICE or mixed-signal simulation tools (e.g., LTspice, PSpice, Cadence Design Systems, Mentor, Simulink co-sim, ModelSim/Quarta, etc.)
- Ability to run behavioral, system-level, and transistor-level simulations to validate design concepts
- Experience performing corner, worst-case, and sensitivity analyses to ensure design robustness

PCB Design & Layout

- Ability to define schematics, constraints, and review PCB layouts
- Experience with tools such as Cadence Allegro (or equivalent)
- Understanding of high-speed routing, impedance control, power distribution, and EMC-aware layout
- Experience supporting industrialization, DFM/DFT reviews, and working with manufacturing partners

Laboratory Measurement & Validation

- Hands-on experience with oscilloscopes, spectrum analyzers, power analyzers, function generators, and protocol analyzers
- Ability to correlate simulation models with measurements and refine designs based on empirical data

- Skilled in debugging hardware issues related to noise, EMC, stability, thermal behavior, or reliability

Education & Experience

- MSc or PhD in Electronics Engineering, Electrical Engineering, Embedded Systems, or related field
- 7–15+ years of relevant hands-on experience in digital/analog/mixed-signal hardware design
- Experience in semiconductor equipment, high-reliability electronics, precision instrumentation, or similar technology-intensive sectors is a strong plus

Soft Skills

- Strong analytical and problem-solving mindset
- Ability to collaborate with interdisciplinary R&D, process, and equipment engineering teams
- Clear, structured communication and technical documentation skills
- Proactive, ownership-driven, and comfortable operating in a fast-paced development environment

Location

San Martino di Lupari (PD)

Work Mode

On-site (Office / Lab)

Benefits & Perks

- Growth: dedicated Learning & development budget.
- Financials: relocation package, performance-based bonus (MBO) and meal vouchers
- Well-being: health insurance plan and supplemental pension fund