**Hardware Developer**

As a member of the engineering team, this position is responsible for developing, delivering and implementing high speed and mixed signal hardware for functional safety products. The Hardware Designer provides the best approaches to realize complex hardware designs using their board level skills and in-depth knowledge of signal integrity, analog and digital design.  The Hardware Designer must have a strong knowledge of Real-Time systems, functional safety, and security along with advanced problem-solving skills.

**Responsibilities:**

* Designing and implementing mixed SIL board level hardware from requirements to PCBA according to IEC61508
* Signal integrity analysis (pre and post PCB)
* Timing, power and thermal analysis
* Component selection following the corporate purchasing policies and hardware cost requirements
* Designing analog/mixed signal interfaces
* Addressing DFM and DFT requirements
* Providing guidance, seeking consultation and working closely with peer PCB and Mechanical designers
* Providing guidance, seeking consultation and working closely with peer FPGA designers
* Participating in peer reviews
* Participating in FMEDA and defining hardware failure avoidance measures
* Practicing entrepreneurial, customer focused, innovative, and forward-looking culture

**Position Qualifications**

* Master’s degree in Electronics or Computer Engineering or bachelor’s degree with equal work experience
* Strong mixed signal and high speed digital design
* Hands on experience with CAD tools including Schematic, PCB, Signal Integrity, Timing Analysis (Cadence Allegro tool set knowledge is an asset)
* Hands on experience conducting FMEDA for SIL rated designs
* Hands on experience with measurement and test tools
* Working experience with low level programming languages (C, C++)
* Working experience with hardware design languages VHDL or Verilog
* Familiarity with RTOSs, BSPs and general embedded programming techniques
* Hands on FPGA design is an asset
* Experience designing 1Gbps or higher Ethernet interfaces is an asset
* Strong analytical and problem-solving skills is a must
* Functional Safety Certified Engineer, P.Eng or any Security certification is a great asset