

VACANCY

SENIOR DESIGN ENGINEER: FIRMWARE

Reutech Radar Systems is a radar development company located in Stellenbosch. We develop radar systems and subsystems for the defence, security and mining industries, both locally and internationally.

The purpose of this position is to ensure that, Digital and RF/Microwave Engineering domain, the requisite design methodologies and capabilities are present to provide specific engineering activities in support of the execution of projects.

This position entails development of both firmware (i.e. HDL compiled for deployment on FPGAs) and embedded software (i.e. microcontroller code).

MAIN RESPONSIBILITIES:

- Assessing a design brief and generating the required design-related documentation
- Documenting the design process and presenting progress reports to all relevant stakeholders
- Develop re-usable library modules
- Creating multiple iterations of design prototypes using HDL design suite and tools
- Conducting rigorous tests and modifying the product based on the test results
- Verify and debug system firmware
- Develop firmware modules based on industry standards and regulations
- Evaluating design solutions against industry standards and regulations
- Develop engineering UI for configuration, monitoring and testing

QUALIFICATIONS:

- Minimum bachelor's degree in electronic engineering, computer engineering, or similar
- A minimum of 5 years' experience as a FPGA firmware design engineer

INHERENT REQUIREMENTS:

- Attention to detail
- Decision-making
- Follow the applicable design methodology(s)
- Creative problem solving (creativity)
- Quality orientation
- Action orientated
- Good inter-personal communication skills
- Teamwork

COMPETENCIES:

- Good understanding of abstraction principles as applied to software and firmware design
- Experience with FW designs with FPGA and soc devices e.g Intel and AMD
- Experience with HDL languages such as Verilog and VHDL
- Proficiency in an HDL design environments such as intel quartus, AMD Vivado or Efinix Efinity
- Proficiency in an HDL simulation tool such as siemens Modelsim or questa
- Good understanding of embedded software, especially bare metal C++ on arm and RISC-V; as well as embedded LINUX.
- Good understanding of software workflows, such and GIT-based version control, KANBAN boards, issue tracking, etc.
- The ability to stay up-to-date with the latest advancements in technology and design

CLOSING DATE: 14 JULY 2023

Should you be interested and meet the requirements, please submit your application to Clio Visser at cliov@reutech.co.za or careers@reutech.co.za. If you do not receive any feedback within 2 weeks of submitting your application, please consider your application unsuccessful. The company has the right to cancel or amend the vacancy as advertised.