



Job Title:	Digital Analogue
Department:	Engineering
Division:	Electronics

Position Summary:

The Digital Analogue Position Specialist will be responsible for the design, development, and implementation of digital Analogue positioning systems. The successful candidate will work closely with cross-functional teams to ensure the integration of cutting-edge technology into our products and solutions. This role requires a strong understanding of digital and Analogue signal processing, as well as hands-on experience in designing and optimizing positioning algorithms.

Responsibilities

System Design and Development:

- Design, develop, and optimize digital Analogue positioning systems using industry-standard tools such as MATLAB, Simulink, and LabVIEW.
- Conduct detailed analysis of system specifications and recommend appropriate hardware and software solutions.
- Collaborate with hardware and software engineers to ensure seamless integration of digital Analogue positioning technology.
- Drive development and verification of state-of-the-art Analogue blocks and mixed signal CMOS designs which can be reused across different market segments.

Algorithm Development:

- Develop and implement positioning algorithms using tools like Python, C++, and CUDA.
- Optimize algorithms for real-time performance, considering hardware limitations and constraints.
- Conduct simulations using software tools to validate algorithm accuracy and efficiency.

Testing and Validation:

- Design and execute comprehensive testing procedures for digital Analogue positioning systems.
- Leverage software tools for simulation and testing, such as ANSYS or COMSOL Multiphysics.
- Collaborate with quality assurance teams to identify and resolve any issues or discrepancies.
- Ensure compliance with industry standards and regulations through rigorous testing.
- Build/develop circuits based on an IP specification, drive the layout design and final IP characterization

Documentation:

- Create detailed documentation for digital Analogue positioning systems, including system architecture, algorithms, and testing procedures.
- Utilize documentation tools such as Confluence or Jira to maintain comprehensive records.
- Prepare technical reports and presentations for internal and external stakeholders.

Collaboration and Communication:

- Provide technical support including IC specification, project planning, design team management, and layout supervision.
- Work closely with cross-functional teams, utilizing collaboration tools such as Slack or Microsoft Teams.
- Provide technical expertise and guidance to team members.

Requirement

- Bachelor's or Master's degree in Electrical Engineering, Computer Science, or a related field.
- Proven experience in digital analogue positioning system design and development.
- Proficiency in software tools such as MATLAB, Simulink, LabVIEW, Python, C++, CUDA, ANSYS, and/or COMSOL Multiphysics.
- Strong understanding of digital signal processing and analogue signal processing.
- Hands-on experience with positioning algorithms and simulation tools.
- Effective communication and collaboration skills.