Job Description

SENIOR ELECTRICAL ENGINEER

Melbourne-Mnemonics-Inc.

US CITIZENSHIP REQUIRED

SUMMARY

The Senior Electrical Engineer designs and implements advanced hybrid analog/digital embedded electronic systems to create products meeting Mnemonics marketing objectives. This engineer participates in initial product conception; formulation of functional and performance requirements; project scheduling and resource allocation; software/hardware design; implementation; hardware/software commissioning, integration, and debug; testing; and the transition to Manufacturing. The engineer is expected to conduct product development in accordance with Mnemonics quality, configuration management, and development life-cycle processes. This individual has the responsibility and authority to perform the assigned tasks listed below.

ESSENTIAL DUTIES AND RESPONSIBILITIES

- Receive and understand communications, control and general hardware/software requirements to be implemented in embedded systems.
- Provide time estimates for all activities.
- Design and document embedded hardware implementation to match requirements.
- Work with Quality Assurance team to implement test cases and validate hardware.
- Provide full product lifecycle support for legacy products including bug fixes and feature updates.
- Propose design concepts for next generation products.
- Work closely with Software, Electrical and FPGA team members to ensure that new products meet all key product requirements.
- Responsible for participating in the quality management system initiatives and adhering to all requirements.
- Responsible for performing other related tasks deemed necessary by superiors.
- Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

QUALIFICATIONS, EDUCATION AND EXPERIENCE

- Bachelor's Degree in Electrical Engineering (Master's desirable).
- 10+ years of experience in the design of advanced hybrid analog/digital electronic systems and technologies requiring schematic design, simulation, modeling, debug, test and verification at the component, board and system level including qualification to MIL-STD-461 requirement.
- Solid understanding of PCB layout and fabrication processes and experience in supervision of PCB layout, plane definition, and EMC optimization.
- Familiarity with use of requisite test equipment (e.g. logic analyzers, oscilloscopes, spectrum analyzers, function generators, power supplies, data acquisition and control systems).
- Highly Proficient in all aspects of FPGA design and verification and should have in-depth familiarity with Xilinx FPGAs, particularly the Virtex, Spartan and Kintex product families, and in-depth knowledge of development tools including Xilinx Vivado, as well as source and revision control tools.
- Experienced in developing/simulating DSP algorithms in Matlab and Simulink.
- Expert in VHDL and Verilog Implementation of DSP modules in FPGA's.

- Ability to use and maintain legacy designs as well as troubleshoot component and system designs operating within an integrated system.
- Familiarity with Built-In-Test coverage analysis.
- Ability to develop implementation architectures from requirements documents or high-level specifications as well as communicate and work with multi-disciplined engineering.
- Experience with wireless communications systems, digital signal processing, and communication theory is desired.
- Due to the sensitivity of customer related requirements, U.S. Citizenship is required.
- Must be able to obtain and maintain a DOD Secret Clearance.
- Excellent history working with cross functional teams.
- Excellent oral and written communication skills.

E-Verify Job Type-Full Time

9/80 work week

Drug Free Workplace Salary: $45 to $55 / hour

E.O.E: race, color, religion, gender, age, national origin, gender identity, individuals with disabilities, veteran status, protected veterans or disabled veterans.