



Contact: Terry McCarthy
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Position: Electrical Engineer 3
Department: Engineering
Industry: Medical Device
Location: Irvine, CA

Company Overview:

Our client is an early stage company located in Irvine, California that is pioneering ground-breaking technology to enable kidney dialysis to be performed at home.

Job Description:

Identifies, Analyzes, Designs and Implements electronic hardware including sensors, controllers and communication subsystem interfaces.

Essential Duties and Responsibilities:

Electrical

- Identifies and specifies electronic subsystems and boards.
- Documents and analyzes design requirements for implementation.
- Design, model, simulate and test complex electronic circuits, subsystem and systems.
- Create schematic drawings and support PCB design, layout and routing of sub-assemblies and systems.
- Apply risk, failure analysis, and root cause analysis as required within the engineering discipline.
- Diagnoses and proposes solutions for electrical system issues.
- Works with production to ensure manufacturability of electrical designs.
- Provides solutions for production pre and post validation.
- Produces and reviews BOMs.
- Writes detailed functional specifications

Firmware

- Implement HDL designs including FPGA and CPLD sub-systems.
- Verify HDL through functional simulation and hardware testing
- Support communication architecture design, including system bus and memory interfaces

Qualification Requirements:

- Bachelor's degree in relevant field
- At least 5 years of relevant experience

Experience and Required Skills:

- FPGA design (VHDL) and verification including interfaces to sensors, actuators, communication busses, memory and processors.
- Digital signal processing including filter design, controller and control algorithm design.
- Ability to diagnose electrical problems and offer solutions.
- Altium ECAD experience.
- Medical Device experience required.
- Experience with meeting EMC requirements.
- Experience launching product (medium to high volume).
- Experience with electronic lab equipment.
- Good written and verbal communication skills.

Knowledge & Abilities:

- Sensor implementation and communication
- Microcontroller based designs
- Analog circuit design
- PCB design and layout toolsets.
- Best practices for medical device electronics safety, IEC 60601-1, IEC 60601-1-2
- Show high initiative, be self-motivated, and have ability to act independently on technical matters

Travel up to 5%.