



Senior Power Electronics Design Engineer

Job Description

Oztek designs and manufactures sophisticated power solutions for tomorrow's technologies. You will find our products in use around the world, in everything from wind and solar energy systems to transportation and industrial manufacturing equipment.

As a Senior Power Electronics Design Engineer you will be responsible for the design, development, and verification of advanced power and analog electronics for use in digitally controlled power converters. As a principal member of the engineering design group, you will help shape a growing product portfolio targeting Energy Storage, grid-interactive inverters, high speed motor drives, and DC/DC converters from 1kW to 500kW.

The position requires an education in electrical engineering and strong verbal and written communication skills. The ability to multi-task and work well in a self-directed environment is essential.

Responsibilities

- Participate on multi-disciplinary teams in the development of new power technologies for next gen products
- Perform system level product architectural design
- Power electronics circuit design including modeling, simulation, and analysis of circuits and their controls
- Product design including Filters, Harmonic Control, EMI, Magnetics, and Stress Analyses
- Perform detailed product design verification testing
- Oversee product qualification and certification testing, UL, CE, etc.
- Create customer documentation including User's Manuals, Application Notes, etc.

Basic Qualifications & Experience

- BSEE with 8+ years of experience or MSEE with 5+ years of experience
- Circuit and system simulation, modeling, and analysis experience using Spice, MATLAB, Simulink
- Experience designing and implementing switched mode and linear power electronics designs.
- Schematic capture experience.
- Experience integrating and debugging power control systems.
- Must be legally authorized to work in the US without company sponsorship

Preferred Skills

- Knowledge of device characteristics relevant to power electronics, such as: MOSFETs, IGBTs, BJTs, JFETs, diodes, various capacitor families, etc.
- Knowledge in one or more of the following areas: gate drive circuits, multi-level inverters (MLI), zero-voltage switching (ZVS), Resonant Circuits, motor controller design
- Experience with power electronic utility interface and regulatory specifications
- Experience with EMI/EMC qualification testing per commercial and automotive standards
- Experience in design for outdoor and harsh environments