

Sr. Staff Principal IC Design Engineer

Navitas Semiconductor is a venture back startup creating the world's first & fastest integrated GaN Power ICs for Mobile phone, tablet & laptop fast chargers, wireless charging and many other products. Navitas was founded in 2013 and is located in the heart of El Segundo. We are currently seeking a Product Engineering leader for our product engineering activities in this exciting new field of GaN power ICs. In this role, reporting to the VP Engineering, you will work in a fast-paced environment to develop, characterize, qualify and production-release of the world's first GaN Power ICs.

Job description:

- Design, implement and verify power IC thorough transistor level to top-level for various PMIC products.
- Evaluate system-level trade-offs for next-generation power supply and identify IC architectures in collaboration with the system application team to meet performance requirements
- Interface with characterization, modeling, and EDA design engineers to define and optimize device characteristics and simulation needs.
- Guide layout engineers on physical design. Review layouts and floorplan and provide feedback for optimal layout design.
- Tape-out designs on-schedule adhering to required specifications.
- Evaluate and validate designs in the lab and identify any deviations from requirements and implement corrective actions.

Qualification:

- Minimum MSEE + 7 Years or PhD + 5 Years of industry experience in analog or mixed-signal IC circuit design.
- Experience as chip lead on at least one project with demonstrated success.
- Proven track record of designing power IC from concept phase to massive production. E.g, from concept phase through chip architecture, IC design, layout supervision, post extraction verification, lab correlation & debug, yield and failure analysis support, release to production
- Experience in AC-DC IC design,
- Strong skills in designing various analog/mixed-signal building blocks such as bandgap references, LDOs, comparators, charge pumps, op amps etc.
- Deep understanding of semiconductor device physics, device safe-operating area (SOA), and power transistors used for high frequency switching. Good understanding of silicon fabrication and how it affects the device physics, device model, and circuit performance.

- Proficient with EDA tools, such as Cadence Spectre, Virtuoso XL, Post Parasitic Extraction simulation, Monte carlo Analysis etc.
- Experience with DFT approaches and development of characterization and production test plans.
- Lab and test equipment skills for the debug, characterization, and validation of designs.
- Effective and clear written and oral communication skills.
- Self-motivated, positive work attitude with a desire to work in a startup environment.