

Navitas Semiconductor

Job Description:

Title: Staff/Sr. Staff/Principal IC Design Engineer

Reports to: VP, China IC Design
In Office ⊠/Remote □/Hybrid□
Based: Shanghai/Hangzhou/Shenzhen

Job Purpose:

Navitas Semiconductor (Nasdaq: NVTS) is a high-growth, publicly traded technology company seeking a Staff/Sr. Staff/Principal IC Design Engineer. The ideal candidate will be self-motivated, energetic, techsavy, collaborative, and understands the dynamics of a fast-growing company.

Key Responsibilities and Duties:

- 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 electronic applications 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.

Requirements:

- Minimum MSEE + 7 Years or PhD + 5 Years of industry experience in analog 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 is a plus.
- Experience in wide bandgap based power device and power circuit design is a plus
- 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.



职位介绍:

职位: 主任/高级主任/首席 芯片设计工程师

汇报线: 中国芯片设计副总裁

In Office \boxtimes /Remote \square /Hybrid \square

地点:上海/杭州/深圳

岗位职责:

• 负责各种电源芯片架构以及从底层模块到顶层电路的设计、仿真和验证

- 指导版图工程师完成版图设计和验收
- 协助测试工程师进行芯片的调试和测试
- 芯片 debug 和各种失效分析

任职要求:

- 硕士及以上学历,5年以上模拟或者混合信号芯片设计经验
- 有成功量产经历,完成过从芯片架构、模块设计、顶层仿真、芯片后仿真、流片测试、各种失效和良率分析等全部流程
- 熟练掌握各种 EDA 工具使用
- 熟悉器件物理和工艺
- 熟练掌握各种模拟基本单元电路,例如 bandgap、LDO、运放、比较器, charge pump 等
- 有 AC-DC 或者 GaN 芯片设计背景更佳
- 良好自我驱动力、团队合作意识和沟通能力

