

SI & PI Simulation Engineer



Overview

Position: Signal and Power Integrity Simulation Engineer

Reporting to: Director of Signal Integrity

Location: Redondo Beach, CA

Job Description

An exciting fabless semiconductor company seeks an experienced Signal and Power Integrity Simulation Engineer to support the development of packages and PCBs for highly integrated monolithic and multi-chip solutions. The candidate will be involved with the development of new-to-the-world ultra-high speed RF CMOS SOC's and MCM's for a wide range of high frequency commercial, military, and aerospace applications. The person will work with industry leading IC design, package design, PCB design and systems engineering experts that are involved in the development of state-of-the-art hybrid digital/RF receivers and transmitters. Specific tasks include understanding PCB and package performance specifications. The candidate will determine and perform the required signal and power integrity simulations and optimizations. An understanding of system level specifications to determine necessary simulations or test bench measurements is required. A well-rounded individual with experience in various aspect of signal and power engineering for commercial infrastructure and/or mil-aero applications is desired.

Required Skills and Experience

The position requires at least 10 years industry experience with the following:

- Ability to work in a team environment
- Experience working with layout PCB and package teams as well as digital and analog IC teams
- Understanding of electromagnetic theory
- Understanding of PDN and application to PCBs, packages and ICs
- Signal integrity analysis/optimization tools: ANSYS HFSS/Layout with application to channel simulation, footprints/launch conditions, via structures, layer stack, routing
- Power integrity analysis/optimization tools: Cadence Sigrity and/or ANSYS SIWave, with application to chip/package/PCB PDNs
- Ability to organize simulation results into clear, concise internal and customer engineering reports
- BS EE or Physics degree or higher

Desired Skills and Experience

The following skills and experiences are desirable, but are not necessary:

- Signal and power integrity testing



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- Ability to understand and apply customer specification and determine analysis to perform
- Familiarity with obtaining signal and power integrity characteristics and correlating to simulation results