

## **Requirements for a Senior Analog Mixed Signal ASIC Design Engineer**

### **About Scientific, Inc.**

Scientific, Inc. is a VA-Certified, Veteran-Owned. Employee-owned Small Business headquartered in Huntsville, AL specializing in nuclear and space radiation effects system survivability, analysis, verification and testing. Scientific provides full service science and engineering solutions to complex problems facing national defense and aerospace programs supporting both government and prime contractors. Our demonstrated experience extends from research and development through production and qualification. We study environment induced failures; explore new concepts and theories; execute and interpret environmental models; develop new technology designs and materials; and collaborate with government, industry, and academia to implement solutions for our customers.

### **Job Description:**

Experienced, respected, results-oriented individual with successful career in engineering and project leadership positions. Accustomed to handling organizational issues and working with cross-functional, multi-disciplined groups to maintain efficiency, execution, and timely delivery of a final product. Proven track record with documented history of accomplishments in roles of increasing responsibility. Ability to effectively and efficiently communicate complex technical ideas to others. Ability to apply technical expertise to Design Evaluation, Circuit Analysis, and Reverse Engineering.

### **Education Requirements:**

BS in Electrical or Computer Engineering

MS in Electrical or Computer Engineering desired

### **Basic Qualifications (Required Skills/Experience):**

Integrated circuit analog design and analysis using schematic entry and spice simulation.

Board level analog design and analysis using schematic entry and spice simulation.

Proficiency with commercial Electronic Design Automation tools for Design, Simulation, Monte Carlo Analysis, Physical Layout, and Physical Verification. Prefer a broad background involvement in all of the steps from concept through production.

Familiarity with amplifier and data converter design.

Experience with and understanding of unique Deep-sub-micron technology effects.

Experience with high power bipolar foundry technologies.

Experience supporting production issues – such as field failures.

Familiarity with UNIX/Linux operating systems from a user's standpoint.

Experience leading design teams and mentoring new designers.

Customer communication.

**Analog Integrated Circuit Design and Analysis Skills:**

Ability to understand requirements documents and translate into appropriate block level architecture.

Ability to translate requirements into a detailed design specification.

Ability to translate requirements and design specification into test bench simulations.

Strong understanding of semiconductor fabrication processes and techniques in current commercial technologies.

Strong understanding of board level and package level parasitics.

Experience with full-custom layout methodologies.

Experience supporting production test and using design for test methodologies.

Experience with design for packaging methodologies.

Experience supporting failure analysis of production designs.

**Software skills:**

Ability to demonstrate design correctness via spice simulation, and efficiently diagnose and debug design errors.

Knowledge of some of the following languages is preferred:

C, C++, Python, Perl, TCL/TK, Bash/Korn/CSH/TCSH Shell Scripting, Verilog A, Cadence SKILL

Knowledge of some of the following software packages is preferred:

Cadence Virtuoso Schematic and Layout, Cadence ADE XL, Cadence Spectre, Cadence PVS DRC and LVS, Mentor Calibre DRC and LVS, Cadence Quantus QRC, Keysight MBP

**Primary Job Location:** Crane, IN

**Job Posting:** 06/06/2018

**Position Type:** Full-Time/Regular

**Travel Requirements:** Yes, up to 10% of the time.

**Security Requirements:** Candidate must be a U.S. Citizen and possess (and be able to maintain) a Final Secret Clearance or meet the eligibility to obtain (and maintain) a Secret clearance.

**Closing Date:** 07/15/2018

Scientific is an Equal Opportunity/Affirmative Action Employer, M/F/Disability/Veteran.

Scientific believes in recognizing employees' worth by offering competitive salaries and benefits, including health, dental, and vision insurance, 401(k) contributions, educational reimbursement, and much more.