Job Notification Form, IIT Delhi

Company Overview

Name: Silicon Labs Inc.

Website: www.silabs.com

Company Type: Core (Technical)

Description: Silicon Labs Inc. is a leading American Multinational Semi-Con Company headquartered in Austin, Texas, USA. The Company has increasingly focused on developing technologies for the IoT market, which in 2019 accounted for more than 50 percent of the company's revenue, but in 2020 had increased to about 58 percent. In August 2019, Silicon Labs had more than 1,770 patents worldwide issued or pending. The Company has its vibrant global presence over 16 Countries) holding an annual revenue of 886.7 Million USD (As of FY 2021) and still counting.

We are a leader in secure, intelligent wireless technology for a more connected world. Our integrated hardware and software platform, intuitive development tools, unmatched ecosystem and robust support make us the ideal long-term partner in building advanced industrial, commercial, home and life applications. We make it easy for developers to solve complex wireless challenges throughout the product lifecycle and get to market quickly with innovative solutions that transform industries, grow economies and improve lives.
More About Silicon Labs: • Pioneers in wireless innovation with leading wireless product portfolio • Founded in 1996 • More than 1,300 Patents • About 30,000 Customers • Learn more about Silicon Labs is a leader in IoT

Job Details

Designation: Associate Engineer / Engineer

Type: Core (Technical)

Place of Posting: Hyderabad

Job Details: Associate Design Engineer / Design Engineer
Engineering, Full Time
Hyderabad, India

About Silicon Labs:
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Why this Position Matters:
As a Design Engineer at Silicon Labs, you will play a key role in designing transistor-level analog circuit blocks, doing and/or supervising physical layout, verifying circuit level operation and performance, and assisting with tape-out related activities.
The position requires a strong analog circuit design background encompassing all phases of the design process. The individual will have a role in defining and implementing the overall system architecture, designing transistor-level analog circuit blocks, simulating sub-system performance, creating and using behavioural models of blocks and the entire IC, creating and/or supervising physical layout, verifying circuit and chip-level operation and performance, and assisting with PG related activities.
Silicon Labs has a track record of multiple industry firsts and of transforming and disrupting large and diversified markets. Our engineers are at the forefront of that success!

Excited? See what it's like to be a part of the Silicon Labs Team • Silicon Labs Glassdoor • Interning at Silicon Labs • International Women's Day

What you should possess: • Strong knowledge of digital circuit design concepts, simulation, and verification techniques. • Skills in the following areas will be considered a plus: • Competence in circuit simulation, electromagnetic simulation, and analysis tools • Competence in schematic capture, layout, layout verification tools, and parasitic extraction • Competence in behavioral modeling (e.g. Verilog, Verilog AMS, System Verilog), high-level languages (e.g., C, C++, MATLAB) and scripting languages (e.g. Python)

Detailed Job Descriptions – Divisions and Requirements

1. RF IC Design
• M.Tech. / Ph.D in Electrical Engineering with focus on RF IC design. • Study or experience in the follow areas will be considered a plus: • LNA, mixer, PA, synthesizer, VCO, data conversion, baseband analog signal processing, RF systems design, modulation/demodulation techniques, wireless communications, digital signal processing, low-power techniques • Electromagnetic modelling and interference mitigation techniques • Example project overview: RF/IF circuit and sub-system specification, design, analysis, and implementation (including schematic entry, simulation, layout supervision, silicon validation, etc.).

2. Digital IC Design
• M.Tech. / Ph.D. in Electrical Engineering or Computer Engineering • Any study or experience in the follow areas will be considered a plus: • Microprocessor architecture and implementation • Low-power digital circuit design techniques • Wired and wireless digital communications systems • Digital circuit verification and production test coverage • High-speed, high-performance digital circuit design techniques • Logic synthesis, placement, clock tree synthesis, and timing analysis • Example project overview: Specification, design entry, verification, FPGA emulation of digital blocks and chip-level designs

3. Analog IC Design
• M.Tech. / Ph.D. in Electrical Engineering with focus on Analog IC design • Strong knowledge of analog integrated circuit design concepts, simulation, and verification techniques • Any study or experience in the follow areas will be considered a plus: • Data conversion, op amps, power management, regulators, oscillators, low power techniques, high precision techniques, noise analysis, PLLs • Low-leakage circuit design, custom digital, custom memories, device physics, ESD circuit design, high voltage circuits, device failure analysis • Example project overview: Baseband or general-purpose analog circuit and sub-system specification, design, analysis, and implementation (including schematic entry, simulation, layout supervision, silicon validation, etc.)

4. Communications & DSP IC Design
• M.Tech. / Ph.D. in Electrical Engineering with focus on Communications Theory • Any study or experience in the follow areas will be considered a plus: • Signal representation (time, frequency, constellations, passband signals) •

Implementation of digital multi-rate filters, mixers, and arithmetic units • Modulation and demodulation techniques • Modelling of noise in mixed-signal environments • Error correction coding • Wireless signal propagation models, Clock and data recovery and Encryption techniques • Example project overview: Digital signal processing block, software, and sub-system specification, design, analysis, and implementation (including RTL entry, simulation, FPGA emulation, silicon validation, etc.)

What You Will Do:
• Architect, design, implement, and verify circuits, logic, systems, algorithms, etc. to meet product requirements (including schematic entry, simulation, layout supervision, etc.) • Development and use of behavioral models for simulation of analog and mixed-signal circuits. • Verification of analog and mixed-signal sub-systems and the entire design using transistor-level and behavioral models. • Report on design results through design reviews and other detailed design documentation, in accordance with company quality requirements, and resolve action items generated as a result of reviews • Attend design reviews to provide input and learn from other designers' experiences • Validation of design by laboratory measurement • Support marketing in product definition • Support product engineering to meet manufacturing and production needs • Support applications engineering to meet customer needs • Work under the general supervision of project lead and/or senior project team members

We are an equal opportunity employer and value diversity at our company. We do not discriminate on the basis of race, religion, color, national origin, gender, sexual orientation, age, marital status, veteran status, or disability status.

Joining By: 1 July 2022

Salary Details

CTC: 3,424,149 INR Per Annum

Gross: 2,753,640 INR Per Annum

CTC Breakup: Total Cost to the Company: INR 34,24,149/-

Find below the Compensation Structure:
RF + Analog - M.Tech
Particulars Amount in Rs.
Gross Fix + Retirals 2200000.00
Annual Bonus 212149.00
Sign-On Bonus 120000.00
Retention Bonus 300000.00
Stocks* - USD 8000 592000.00
Total CTC 3424149.00

The Stocks* (Called as RSUs) will vest in a series of four equal annual installments commencing on the first anniversary of the date of grant.

Perks / Bonus: Explained above

Selection Process

Resume Shortlist: Yes

Written Test: No

Online Test:	No
Group Discussion:	No
Medical Test:	No
Personal Interview:	Yes
No. of Rounds:	2
No. of Offers:	3

Eligibility

Recruiting PHDs:	No
Eligible Departments:	M.Tech in Communications Engineering, M.Tech in Integrated Electronics & Circuits, M.Tech in Radio Frequency Design & Technology, M.Tech in VLSI Design Tools & Technology, M.S.(R) in Electrical Engineering