Job Notification Form, IIT Delhi

Company Overview

Name: Qualcomm

Website: www.qualcomm.in

Company Type: Other (Semicon)

Description: HR

Job Details

Designation: System Engineer

Type: Other (System Eng)

Place of Posting: Bangalore

Job Details: Title: Electromagnetic Design Engineer
Location: Bangalore, India
Job Overview: Qualcomm is the industry leader in 3G, 4G and 5G communication technology and designs the most advanced radio technology in the commercial wireless marketplace, from LTE to Bluetooth.
QCT's RF EM Team is actively seeking engineers with demonstrated experience in the design, EM simulation, and circuit modeling of RF passive components for use in our RFIC designs. Exposure to RF package, module, and PCB design and modeling is a plus.
Knowledge of PCB level Power Distribution Network (PDN) and RF transmission line layout and analysis is an asset.
Working experience and knowledge of Power Amplifier (PA) and Low Noise Amplifier (LNA) matching is an advantage.
Basic understanding of patch antenna design parameters and matching is also desired.
Responsibilities: • Design and develop RF passive components for use in the next generation of highly integrated RF integrated circuits in deep sub□micron 28nm and 14ff CMOS and SOI technologies.
• Work with the circuit design team to optimize component sizes and performance for use in RF circuit blocks.
• Deliver components that include compact models, and DRC clean physical designs.
• Execute isolation analysis and optimization to reduce on-chip and chip to package coupling.
• Optimization of multichip carriers for RF systems, focusing on loss and isolation.
• Participate in RF package, module, and PCB modeling to optimize overall system performance
All Qualcomm employees are expected to actively support diversity on their teams, and in the Company.
Skill and Experience: • Experience in the design and simulation of RF passive components
such as inductors, transformers, MOM capacitors and passive filters.
• Demonstrated abilities with EM simulation techniques and tool including MoM EM solvers and HFSS.

• Experience with circuit design and layout using Cadence tools and Agilent ADS.
• Compact RLCK Model extraction of multiport passive components.
• Ability to use EM tools to predict circuit level electric and magnetic coupling.
• Understanding of Chip fabrication process and design understanding
• Electromagnetic theory, microwave theory and design
• Antenna design and understanding of radiation and propagation wave
• Good understanding of SI and PI at chip, package, and PCB level
• Basic RF system understanding
• Understanding of noise propagation mechanism in chip, package, and PCB
• Tools: Ansys Suit (HFSS, Q3D, SiWave, Layout), Lorentz, Helic, EMX, Cadence virtuoso, Allegro or similar for Package/Module layout, Expedition (or similar) for PCB layout and schematic, VRF
• Passionate self-starter and team player with experience in project leadership and multi-tasking.
Minimum Qualifications: • Bachelor's degree in Science, Engineering, or related field.
• 2+ years ASIC design, verification, or related work experience.
Keywords: On-chip passive, Inductor, Transformer, MOM Cap, Antenna, Signal and
Power Integrity, PDN, Substrate coupling, RF Module, RF Package modeling, HFSS, Ansys, ADS, VRF
Educational Requirements: Required: Bachelor's degree in Science, Engineering, or related field.
Preferred: Master's and PhD

Joining By: 1 July 2022

Salary Details

CTC: 33 INR Per Annum

Gross: 16 INR Per Annum

CTC Breakup:

Details	Amount
Total Gross Pay	INR 16.00 L
Retirals (PF and Gratuity)	INR 0.75 L
Performance Bonus*	INR 1.60 L
Joining Bonus	INR 9.60 L
Relocation Bonus	INR 0.50 L
Restricted Stock Value Awards	INR 12.00 L ($ 16000)
Retention Bonus (Paid after 12 months)	INR 5.00 L

Perks / Bonus: attached detail

Selection Process

Resume Shortlist: No

Written Test: No

Online Test: No

Group Discussion:	No
Medical Test:	No
Personal Interview:	Yes
No. of Rounds:	2
No. of Offers:	5
Minimum CGPA:	7.5

Eligibility

Recruiting PHDs:	Yes
Eligible Departments:	B.Tech and M.Tech in Biochemical Engg & Biotechnology, B.Tech and M.Tech in Chemical Engineering, B.Tech and M.Tech in Computer Science & Engineering, B.Tech and M.Tech in Mathematics & Computing, M.Tech in Applied Optics, M.Tech in Atmospheric-Oceanic Science and Technology, M.Tech in Biomedical Engineering, M.Tech in Chemical Engineering, M.Tech in Communications Engineering, M.Tech in Computer Science & Engineering, M.Tech in Computer Technology, M.Tech in Construction Engineering & Management, M.Tech in Control & Automation, M.Tech in Energy & Environment Technologies and Management, M.Tech in Energy Studies, M.Tech in Engineering Analysis & Design, M.Tech in Environmental Engineering & Management, M.Tech in Fibre Science & Technology, M.Tech in Geotechnical and Geoenvironmental Engineering, M.Tech in Industrial Engineering, M.Tech in Industrial Tribology & Maintenance Engineering, M.Tech in Instrument Technology, M.Tech in Integrated Electronics & Circuits, M.Tech in Materials Engineering, M.Tech in Mechanical Design, M.Tech in Molecular Engineering: Chemical Synthesis & Analysis, M.Tech in Optoelectronics & Optical Communication, M.Tech in Polymer Science & Technology, M.Tech in Polymer Science and Technology, M.Tech in Power Electronics, Electrical Machines & Drives, M.Tech in Power Systems, M.Tech in Production Engineering, M.Tech in Radio Frequency Design & Technology, M.Tech in Rock Engineering & Underground Structures, M.Tech in Solid State Materials, M.Tech in Structure Engineering, M.Tech in Telecommunication Technology & Management, M.Tech in Textile Chemical Processing, M.Tech in Textile Engineering, M.Tech in Thermal Engineering, M.Tech in Transportation Engineering, M.Tech in VLSI Design Tools & Technology, M.Tech in Water Resources Engineering, B.Tech in Civil Engineering and M.Tech in Geotechnical and Geoenvironmental Engineering, B.Tech in Civil Engineering and M.Tech in Water Resources Engineering, B.Tech in Mechanical Engineering and M.Tech in Thermal Engineering, B.Tech in Mechanical Engineering and M.Tech in Computer Science & Engineering, B.Tech in Civil Engineering and M.Tech in Structural Engineering, B.Tech in Civil Engineering and M.Tech in Construction Engineering & Management, B.Tech in Textile Engineering and M.Tech in Computer Science & Engineering, B.Tech in Engineering Physics and M.Tech in Computer Science & Engineering, B.Tech in Chemical Engineering and M.Tech in Computer Science & Engineering, B.Tech in Production & Industrial Engineering and M.Tech in Computer Science & Engineering, B.Tech in Mechanical Engineering and M.Tech in Computer Science & Engineering, B.Tech in Mechanical Engineering and M.Tech in Computer Science & Engineering, B.Tech in Production & Industrial Engineering and M.Tech in Production Engineering, M.S.(R) in Applied Mechanics, M.S.(R) in Biochemical Engineering and Biotechnology, M.S.(R) in Biological Sciences, M.S.(R) in Telecommunication Technology and Management, M.S.(R) in Civil Engineering, M.S.(R) in Chemical Engineering, M.S.(R) in Computer Science

& Engineering, M.S.(R) in Electrical Engineering, M.S.(R) in Sensors, Instrumentation and Cyber-physical System Engineering, M.S.(R) in Automotive Research and Tribology, M.S.(R) in VLSI Design Tools and Technology, M.S.(R) in Mechanical Engineering, M.S.(R) in Materials Science and Engineering, M.S.(R) in Information Technology