

Objective

Aspiring to work with an organization where I can utilize my analytical thinking and skills to the best of my ability to achieve both organizational and individual goals.

Summary of Qualification

- Understanding of the ASIC design flow.
- Understanding of the FPGA Architecture.
- Experience in writing RTL models using Verilog HDL at both data flow level & behavioral level.
- Experience in writing linear test benches using Verilog.
- Experience in writing test benches using System Verilog and UVM.
- Understanding of Advanced Verilog code and coverage.
- Experience in using industry standard EDA tools for front-end Design Flow & Verification.
- Hands on experience on removing the bugs or errors.
- Good understanding of digital logic design.

Certified Training

Advanced VLSI Design and Verification Course – Maven Silicon VLSI Design & Training Centre, Bangalore. (May 2022 – Present)

Technical Skills

VLSI Domain Skills:

- **HDL** : Verilog
- **HDVL** : System Verilog
- **Verification Methodology** : Coverage Drive Verification, Assertion based VerificationSV
- **TB Methodology** : UVM
- **EDA Tool** : ModelSim-Intel, Quartus Prime-Mentor Graphics, QuestaSim-Mentor Graphics
- **Domain** : ASIC front-end Design and verification
- **Programming Languages** : Java(Good Knowledge of OOPs concept, class, Inheritance and Polymorphism)
- **Operating System** : Linux,Windows

VLSI Projects

Router 1x3 – RTL design and Verification:

HDL: Verilog, EDA Tools: ModelSim, Quartus Prime

Description: The router accepts data packets on a single 8-bit port and routes them to one of the three output channels i.e channel0, channel1, channel2.

Responsibilities:

- Architected the block level structure for the the design
- Implemented RTL using Verilog HDL

Work Experience (Jan-2021 to Present)

1. Xiaomi India Pvt Ltd. (Bangalore) — Power & Thermal Testing Engineer

(APR 2022- PRESENT)

Responsibilities:

- Experience in Power & Thermal Validation and Verification of Mobile devices.
- Good Understanding of Android Platform, Android Architecture, Thermal config & codes.
- Perform Thermal Configuration test for both Qualcomm & MediaTek Chipset using Python Script.
- Experience in JIRA Management including Raising & Tracking JIRAs found from the regular test.
- Collaborate with R&D Engineers to analyze and optimize power consumption and thermal-related issues within the deadline.
- Perform power measurement tests using the “Monsoon Power monitor tool” to verify power consumption of the device for various functions related to Modem, Display/Video, WLAN/BT/GPS, Audio, Camera, Standby & Wake-lock.
- Execute thermal tests in different ambient like (27, 35, 40, 45)°C for various functions related to Deadlock, Charging, Gaming, Modem, WLAN/BT/GPS, Audio, Video & Camera using a “Thermal chamber, IR camera, and Keysight K-type thermo-couple”

2. VIVO Mobile India Pvt Ltd. (G.Noida) — Process Electronics Engineer (Engineer-2)

(JAN 2021- MAR 2022)

Process Responsibilities:

- Responsible for functional failure timely Detection, Analysis, and Control Action to achieve the First Pass Yield target.
- Perform RCA of electronic components & process-related abnormality, evaluate the existing process, and identify the areas for continuous improvement.
- Have proper follow-up with the R&D & SQA team, Material Supplier Vendor, and SMT team for performance enhancement and cost-saving.
- Develop & maintain process-related documents i.e. SOPs & Engineering Guidance.
- Provide training to “Training Team & Production team” related to process and various technical parts.

NPI Responsibilities:

- Responsible for FMEA during New Product Introduction (NPI).
- Analyse the material issue & follow up with CQE for supplier RCA and material improvement.

Software Responsibilities:

- Responsible for eliminating software bugs with the China SQA team by fetching log of devices for MTK and QUALCOMM platform.
- Make Bug ID for aging failed devices by capturing BSP log, Putty log, serial & Dump log.

Career Summary

- Hands-on experience in Product System Testing
- Good knowledge of testers environment i.e “Antenna 4G/5G, GPS-Wifi, Audio, Camera, Auto MMI, and current tester”
- Proficient in functional and microlevel analysis of electronics components like (LCM, Sensors, Camera, RF wire, Speaker & Receiver, FPC, Motor, Battery & PCB)
- Capable of PCB troubleshooting, Circuit analysis & Layout based analysis.
- Experienced in working both day & night shifts.

Tools Used

- Software tools: CMD, Monsoon Power, ResearchIR, Keysight BenchVue, Logcat, Battery Historian.
- Hardware tools: HV Power Monitor, Keithley, LW-9022MP Thermal chamber, DAQ970A Thermocouple
- MES, eMES, Oracle, MTMS & PLM which is used in manufacturing.
- MS Office: Excel, Word, PowerPoint.

Certifications

- Advanced VLSI Design and Verification from Maven Silicon (Verilog & System Verilog): “Currently Pursuing”
- Java at HPES Patna issued by RCPL
- Introduction to Python for data science issued by edx.

Soft Skill Highlights

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|-------------------------------------------------|------------------------------------------------|
| ○ Patience & Attention to detail | ○ Proper follow-up & tracking |
| ○ Good analytical & problem-solving skills | ○ Strong written & verbal communication skills |
| ○ Team player & able to collaborate effectively | ○ Deep thinker |

College Skills

Subject Expertise:

- Digital Electronics
- Signal and System
- Control System
- Analog Electronics

College Projects

- Home automation using PIR sensor and Arduino.
- A 5V mobile charger.

Education

- Bachelor of Technology: Electronics & Communication (2016 -2020)
College: University Institute of Engineering & Technology, Kurukshetra University
- 12th: Science (2016) , S.G.D.M College, Patna, B.S.E.B
- 10th: Patliputra Central School (2013), Patna, C.B.S.E