OBJECTIVE

A professional engineering position utilizing my experience and education to contribute to the organization's goals and objectives

PROFESSIONAL SUMMARY

- 10 years of Product engineering /Characterization support for multiple projects for high speed performance semiconductor solutions including Trans-Impedance Amplifiers (TIA), Laser Drivers, Signal Conditioners, Ethernet Switches
- Successfully completed projects on time with good quality and within budget by utilizing my knowledge in Engineering Management
- Proactive, self-motivated, reliable, team player with excellent interpersonal skills
- Effective written, verbal and presentation skills

TECHNICAL SKILLS

- Strong knowledge of high speed, mixed signal ICs
- Mastered skills in Python, SQL, data wrangling, data visualization, hypothesis testing, and machine learning
- Hands-on experience with various test equipments

PROFESSIONAL EXPERIENCE:

VITESSE SEMICONDUCTOR CORP

2003 to present

Product Engineering

- Strong knowledge in IC manufacturing processes, successful and timely transition of many products into volume production as well as driving sustaining activities to improve the cost competitiveness of mature products
- Define project scope, schedule, and develop test/characterization plans for Bench and ATE. Identify risks, make decision on many levels, track and follow up on commitments
- Day-to-day coordination between test, characterization, validation, marketing and IC design teams from specification to testing silicon in the lab

- Perform failure analysis, coordinate product qualification, and design burn-in boards for HTOL qualification test
- Communicate product technical status to the core team, change specifications based on characterization results, release documentation
- Calculate temperature guard band for test limits, and perform single insertion study over temperature to decide final temperature for production testing
- Perform cost analysis and understand process sensitivity
- Work closely with IC design teams for new design revision
- Responsible for full production release of numerous devices
- Mentor junior engineers

Characterization Engineering

- Accountable for all tasks required for characterization flow of new products across extreme temperature, frequency, voltage and wafer process on Bench or ATE using automated and manual setups
- Characterize product performance against the datasheet and characterization plans
- Perform data analysis using JMP/Excel, and generate characterization report
- Work with various products such as 10Gbps Trans-Impedance Amplifiers (TIA) and Laser Drivers, Multi-rate Channel Extenders (Signal conditioner) up to 14.5 Gbps, Ethernet Switches with 1G/6G Serdes

Test Engineering

- Released 10.7 Gbps TIA product family to production including die level validation, at-speed 100% testing, software coding & debugging
- Utilized GGB probe card for manufacturing and test engineering
- Provided guidance to operators

EDUCATION

- Springboard Data Science Career Track, Certification 2023, 6-month intensive course in data science, machine learning, Python, and SQL Portfolio Projects: https://github.com/vv333333/DS
- M.S. Engineering Management 2009, California State University of Northridge, CA
- B.S. Electrical and Computer Engineering 2004, California State University of Northridge, CA

REFERENCES

Available on request