Priyanka SP

Hardware Design Engineer

Total Years of Experience:4+

Objective:

To leverage my expertise in hardware design and development to contribute to the success of an innovative organization while furthering my career growth in electronics and communication engineering.

Professional Summary:

•Strong experience in hardware design and development, including circuit design and testing

•Proficient in hardware testing techniques such as board bring-up, screening testing, and EMI/EMC compliance.

•Skilled in FPGA and CPLD coding, with hands-on experience in communication protocols such as UART, SPI, and RS-422

•Expertise in using tools like Cadence OrCAD Capture for circuit design and View- Mate for Gerber review.

•Proficient in using debugging tools including JTAG, oscilloscopes, multimeters, power supplies, and logic analysers.

•Extensive experience in designing and developing consumer products using 16/32- bit microcontrollers/processors.

•Adept at preparing requirement specifications, design documents, testing documentation, PCB guidelines, and assembly instructions.

•Experienced in power supply design, including DC-DC converters.

•Proficient in Microsoft Office tools such as Excel, Word, and PowerPoint.

Work Experience:

Design And Development Engineer August 2021- Till Date

•Work on defence and aerospace products, contributing to the design, development, and testing of cutting-edge technologies.

•Manage cost estimates and budgets, including Bill of Materials (BOM) costing and identifying opportunities for cost savings.

•Test prototype designs to ensure they meet performance and regulatory requirements, including failure analysis of defective parts.

•Collaborate with cross-functional teams to resolve design, development, and manufacturing issues.

•Generate comprehensive technical reports and documentation for customers, ensuring clarity and precision.

•Continuously identify process optimizations to improve efficiency and reduce product lifecycle costs.

Projects:

Project 1: Advanced Flight Data Transfer Unit (AFDTU)

•Managed end to end project lifecycle, including planning, scheduling, and coordination of resources to ensure timely delivery of project.

•Selected and Sourced Components based on electrical specifications, cost, and availability, optimizing for performance and budget constraints.

•Designed and Developed circuit schematics using OrCAD tool, ensuring functionality and manufacturability.

•Prepared Bill of Materials (BOM) with detailed part specifications to support procurement and production planning.

• Conducted initial hardware bring-up and testing validating board functionality against design specifications and identifying potential issues early.

•Performed board-level debugging and troubleshooting using tools such as oscilloscopes and logic analysers to resolve electrical and functional issues.

• Documented all project activities, including design decisions, testing procedures, and final reports, ensuring traceability and knowledge transfer.

Education:

Bachelor of Electronics and Communication Engineering, VTU University Graduated: 2019