Arjun Raj SR

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Kozhikode-673612, Kerala

Career Objective

Seeking a career as a Semi-Custom Physical Design Engineer, where I can Contribute my skills for the organization's success and improving my technical ability while being Resourceful, innovative and flexible.

Core Competancy

- Performed Audit Checks, Floor Plan, Power Plan, Placement,Trial Route, Timing Analysis, CTS and Detail Routing.
- Interpreting the given guide and manually placing of macros as per the data flow lines, Macro family and ports.
- Analyzing timing reports and fixing setup and hold violations.
- Fixing Floorplan by analyzing global routing congetion.
- Analyzing and debugging DRC and LVS issues.
- Maintaining the proper Power Plan to limit IR Drop.
- Analyzed Clock slews and skews and optimizing the clock tree for maintaining the slew and skew limits.

Education Details

Advanced Diploma in ASIC Design - Physical Design **2023**

RV-VLSI Design Center

Bachelor Degree in **Electronics and Communication** **2022**

NSS College Of Engineering, Palakkad, with 7.61 CGPA

2018

NANMINDA HIGHER SECONDARY SCHOOL, with 94.66 %

SSLC **2016**

JAI RANI SABS PUBLIC SCHOOL KOZHIKODE KERLA (CBSE board), with 97 %

Domain Specific Project

RV-VLSI AND EMBEDDED SYSTEM DESIGN CENTER

Graduate Trainee Engineer Sep-2022 to Jan-2023

SoC in 40nm

Description

Block Level design in 40 nm technology, Supply voltage - 1.1V, Area (approx) - 4.2 square millimetres, Clock frequency - 883 MHz, Power consumption - 600 mW, IR drop < 55 mW, Macro count -34.

Tools

IC Compiler, Prime Time

Challenges

- Manual placement of hard macros as per the data flow diagram, Macro family and ports so as to achieve maximum core area.
- Other tasks handled were Power plan to meet target IR drop, Place and Route, perform STA and bring the block to timing closure.
- Debugging DRC and LVS errors in the design.

B.E / B.Tech Academic Project

NSS College Of Engineering, Palakkad

ROBOT - ASSISTED HEALTH MONITORING SYSTEM FOR ELDERLY PEOPLE

Description

Health Monitoring Systems Home Patient Monitoring Sensors For Data Analysis Cloud Coumputing in IoT(Data in Thingspeak) Robotic rover is developed using Raspberry Pi Model B Pi camera used for initialising live streaming

Tools

SOFTWARE Arduino IDE Thonny IDE Thingspeak HARDWARE Arduino UNO Sensors for monitoring temperature pulse and fall detection ESP-01 Wi-Fi module 12V 4.5ah battery Raspberry Pi 4 Model B processor Pi cam used for video streaming

Challenges

- The biggest challenge we encountered was the cost of hardware and software, such as managing the budget. But later we cope up with this problem. However, communication between our groups has been key in eliminating all challenges.