

**Name** : HARI SATYA PRASAD KANDREGULA

**Email Id** : khari2023@gmail.com

**Phone no** : +91 8074644730

[www.se-minds.com](http://www.se-minds.com)

---

## **OBJECTIVE**

Seeking a responsible position as an entry level Physical Design Engineer which enables to bring the best out of my knowledge and experience in achieving organizational goals and personal growth.

## **PROFESSIONAL TRAINING**

An Industry Oriented Trainee in **VLSI ASIC PHYSICAL DESIGN** from **Se-minds Pvt. Ltd.**, Hyderabad from **August 2022 to January 2023**.

## **COURSE OUTLINE**

Basic Electronics, Digital fundamental concepts, MOSFET, CMOS design concepts, layout concepts, stick diagrams, fabrication, Basics of STA, Logic Synthesis fundamentals. Physical Design concepts: floor planning, PG planning, Low Power design techniques, CTS, Routing techniques, signal integrity. Advanced STA, vi editors, Basics of Unix.

## **Tools:**

Experience in physical design of 90nm and 45nm technologies using Cadence tool

- Cadence Innovus : Place & Route
- Cadence Genus : Logic Synthesis

## **PROJECTS:**

### **Project -1: Place and Route (Top level)**

Design Name : asic\_entity  
Objective : Timing Driven layout.  
Tools Used : Cadence Innovus  
Area : 31672192.5  $\mu\text{m}^2$   
Macros/Instances : 29/53797  
No. of Clocks : 08  
Frequency : 125Mhz  
Technology/Layers : 90nm/9 Metal Layers

**Role** : Performing Audit checks, Floor plan, Placement, Trail route, Timing Analysis, CTS, Detailed Routing, Post Route Optimization, Sign Off Checks, Achieved 0% Congestion at Trail Route Stage.

### **Project -2: Place and Route (Block level)**

Design Name : eVITERBI\_322  
Objective : To Observe I/O Pins Placement and Fixing DRV's & DRC's  
Tools Used : Cadence Innovus  
Area : 435.024  $\mu\text{m}^2$   
Macros/Instances : 0/113  
No. of Clocks : 01  
Frequency : 250Mhz  
Technology/Layers : 45nm/7 Metal Layers

**Role** : Performing Audit checks, performing normal PNR flow and done with foundation flow, Floor plan, Placement, Trail route, Timing Analysis, CTS, Detailed Routing, Post Route Optimization.

**Name** : HARI SATYA PRASAD KANDREGULA

**Email Id** : khari2023@gmail.com

[www.se-minds.com](http://www.se-minds.com)

**Phone no** : +91 8074644730

---

### **Project -3: Place and Route (Block level)**

Design Name : usb\_wrapper

Objective : To Meet Setup & Hold time, Fixing DRV's & DRC's

Tools Used : Cadence Innovus

Area : 1741021.4826  $\mu\text{m}^2$

Macros/Instances : 12/28104

No. of Clocks : 17

Frequency : 208.33Mhz

Technology/Layers : 90nm/5 Metal Layers

**Role** : Performing Audit checks, performing normal PNR flow and done with foundation flow, Design Import, Floor plan, Placement, Trail route, Congestion Analysis, Timing Analysis, CTS, Detailed Routing, Post Route Optimization, Fixing Shorts & Opens.

### **Project -4 : Logic Synthesis**

Objective : Perform ZWLM Synthesis & Obtained optimized Gate Level Netlist.

Tools Used : Cadence Genus

Instances/Area : 4131/237011.129  $\mu\text{m}^2$

No. of Clocks : 07

Frequency : 500Mhz

Technology/Layers : 45nm/11 Metal Layers

**Role** : Check SDC and error correction, generating reports for Area, Timing and Power, different efforts for optimization (Generic, Mapping, Optimization), timing analysis and fixing.

## **ACADEMIC EDUCATION:**

- B.Tech in Electronics and Communication engineering from (2017-2020) in Swarnandhra College Of Engineering & Technology Autonomous, Narsapuram with 7.51 CGPA.
- Diploma: State Board of Technical Education and Training from (2014-2017) in Smt. B. Seetha Polytechnic college, Bhimavaram with 78.26 % aggregate.
- SSC from Board of Secondary Education in Adithya Vidhya Nilayam School (visweswarayapuram) with 7.5 CGPA.

## **PERSONAL STRENGTHS**

- I can easily adopt to any technology.
- I have good logical knowledge towards problem solving.

## **Declaration:**

I hereby declare that the above-mentioned information is correct to the best of my Knowledge.

**(HARI SATYA PRASAD KANDREGULA)**