

Sudhakar Selvaraj

B1-705, Manjeera Diamond Towers
Diamond Heights Colony, Gopanpally
Hyderabad, Pin Code: 500019

Cell Phone: +91 9884240110, 9952430110
e-mail: sudhakara84@gmail.com

Career Objective

To project the best of my talents and abilities in a challenging position and give my best efforts for the development of the company.

Experience

- Total Experience of 18 Years.
- Experience in PCB design 14 Years

Credentials

Routing experience of differential signals topologies of speed up to 10G+ (LPDDR5, DDR5, DDR4, DDR3, XGMII, RGMII, PCI Express, USB 3.0, SATA, SFP, PMIC)

- Designed Printed Circuit Boards (PCBs) for various multi applications like Xilinx FPGA, Altera, ARM controller, SDRAM, DDR2, DDR3, DDR4, FLASH, Ethernet, SD-card, USB, JTAG, design.
- Good knowledge in Signal and power integrity guidelines on PCB Design.
- Good knowledge in EMI/EMC guidelines and implementation on PCB.
- Designed very complex constraints designs up to 16 layers stack-up design.
- Designing the PCB's according to DFM (Design for Manufacturing) and DFA (Design for Assembly) techniques using Valor tool and CAM350.
- Good knowledge in Analog, Digital and Analog-Digital mixed signals
- Good knowledge and experience on High Density Interconnect (HDI) technology using Blind/Buried vias.
- Setting the constraints (Design rules) according to design requirements.
- Good knowledge in Power plane and power supply requirements.
- Knowledgeable on Product Development Life Cycles.

Skill Set

- Schematic, PCB Design and Other Tools : Xpedition, Allegro, PADS, Altium, DxDesigner and Hyperlynx, Viewmate, Valor, CAM350, Genesis, Polar
- Interface : PCIe, USB2.0, USB3.0, I2C, SPI, UART, CAN, RGMII ETHERNET, DDR5, DDR4, DDR3, LPDDR5, NAND, SD, EMMC, LVDS,
- Signal Integrity tools: Mentor Graphics Hyperlynx (Beginner)

Professional Experience

Currently working for **Micron Technology, Hyderabad**

Nov2020 to till date

Designation: Lead Engineer

- Designing PCB layout for DIMM Modules, SSD designs, Internal and Lab boards.
- Co-ordinate with Global team to deliver the product with good quality.
- Managing the 3 member's team and reviewing the designs.
- Training the new Team members.
- Responsible for the QMS process.

Organization: Visteon Technical and Service Centre, Chennai

Designation: Senior PCB designer

Dec2018 to Nov2020

- Designed PCB layout for automotive products like infotainment system, Clusters and Test boards.
- Interact with various CFT team to deliver the product with good quality.
- Maintaining the Customer PCB samples and Design checklist.
- Verify the design done at Vendor side.

Organization: Intel India Technologies Private Ltd., Bangalore

Designation: PCB design engineer

Mar2018 to Dec 2018

- Designing type3 and type4 boards.
- Designing HSD and RF boards.
- Major and Discrete components Placement and Fanning out the SMD pins.
- Signal grouping and classification and CES setup.
- Power plane segmentation
- Routing - Clock Signals, Critical signals, Bus & Single Ended Traces
- DRC checking and cleanup
- Gerber files generation and verification
- Complete review of the PCB design and co-ordinate the fab house for board fabrication.

Organization: Harman India private Ltd., Bangalore
Designation: Senior PCB design engineer

Sep 2013 to Mar 2018

- Responsible for parts library creation and Schematic capture.
- Major and Discrete components Placement and Fanning out the SMD pins.
- Signal grouping and classification and CES setup.
- Power plane segmentation
- Routing - Clock Signals, Critical signals, Bus & Single Ended Traces
- DRC checking and cleanup
- Gerber files generation and verification
- Using PTC for project respiratory and board release.
- Complete review of the PCB design and co-ordinate the fab house for board fabrication.

Projects

1. Worked for a card for transporting audio and video over IP

Synopsis: The card is used to transport audio and video over 10G Ethernet SFP cables over long distances. The protocol is based on AVB and AES67. We used Altera Arria 10 processor (FPGA + SOC) for this design. With this processor, maximum of 4k videos can be transmitted over 4 SFP cables.

Tasks:

- Captured the schematics using Mentor Expedition DxDesigner.
- Part creation, Board placement and routing
- Signal grouping and classification and CES setup
- Routing - Clock Signals, Critical signals, Bus & Single Ended Traces
- DRC checking and cleanup
- Gerber files generation and verification
- Co-ordinated with the fab house for board fabrication.

Working period: 6 Weeks

Organization: JVS Electronics India Private Limited., Bangalore
Designation: PCB Design engineer

Aug 2012 to Sep 2013

- Responsible for part creation, schematic capture, component placement and routing.
- Gerber files generation and verification. Co-ordinated with the fab house for board fabrication.
- Involved in board PCB assembly and debugging

Projects

1. Working on a Power supply design

Synopsis:

It has designed with 70 microns double layer board. It had Components like DPA425R Package switch and EFD 30. Operating frequency is 300 kHz.

Power Outputs are 65W. Secondary outputs are +12V, -12V, +24V and +5V.

Tasks:

- Responsible for part creation, schematic capture, component placement, constraint setup and routing.
- Gerber files generation and verification. Co-ordinated with the fab house for board fabrication.
- Involved in board PCB assembly and debugging
- Captured the schematics in Altium Designer and PCB designed using Altium tool.

Working period: 3 Weeks

Organization: Sienna ECAD Technologies India Pvt Ltd., Bangalore

Designation: PCB Design engineer

Oct 2011 to July 2012

- Responsible for component placement, constraint setup and routing
- Gerber files generation and verification.

Projects

1. Worked for the **ISG4800-Main Board**

Synopsis: It had nearly 2000 components, had major components like 4 DDR3, Processor, Flash. Used star topology from address and byte lane for Data from Processor to DDR.

Tasks:

- Responsible for component placement, constraint setup and routing.
- Gerber files generation and verification.
- PCB designed using Expedition tool

Working period: 4 weeks

2. Worked for the **KOPIN CPU CARD**

Synopsis: A Complex board with HDI technology. It had 0.4 mm OMAP 547 Pins and Micro and Buried via stacked 10 layer stack up design. Used via sizes are 4mil/8mil for micro via and 8mil/16mil for buried via.

Tasks:

- Responsible for component placement, constraint setup and routing
- Gerber files generation and verification.
- PCB designed using Cadence 16.3 tool

Working Period: 4 Weeks

Organization: Sony Electronics Pte Ltd., Singapore

Designation: Quality Checker and Tester

Apr 2009 to May 2011

- Support machine improvement activities to ensure high productivity.
- Support quality improvement activities to ensure low reject.
- Escalate critical issues on important lots to the appropriate Engineers.
- Perform process condition check and process maintenance data.
- Monitor production quality condition and report abnormal condition to superiors timely.
- Provide training to the new comers.
- Carry out other tasks assigned by superiors.

Organization: AVG Automation India Pvt Ltd., Bangalore

Designation: PCB Design engineer

Mar 2008 to Dec 2008

- Responsible for part creation, schematic capture, component placement, constraint setup and routing.
- Gerber files generation and verification.
- PCB designed using Mentor Board station tool

Organization: Caliber Infotech India Pvt Ltd., Coimbatore

Designation: PCB Design engineer

Apr2006 to Dec 2007

- Designing of single, double and multilayer-ed PCB boards for ATE Equipment (Probe card & Load board) having analog, mixed signal and high speed electronic circuits.
- Responsible for component placement, constraint setup and routing
- Gerber files generation and verification.

Projects

1. Worked for PCI – Express card

Synopsis: It is a PCI – Express form factor board. It was design with 8 layers. It contains a high speed transceiver section connecting the edge connectors to the FPGA. It contains a DDR with 16 bit address and data. It also contains an SDRAM. The signals from the FPGA to SDRAM, flash and to the PCI connector are respectively matched to the clock length. Similarly the address and data signals to the DDR are matched w.r.t to their clock and control signals.

Tasks:

- Responsible for component placement, constraint setup and routing.
- Gerber files generation and verification.
- PCB designed using Expedition tool

Working period: 4 weeks

2. Worked for **CPU Card**

Synopsis: A Complex Board with HDI technology. This board had components like, Processor, DIMM, QDR, SFP connectors. All the RX and TX are routed such a way that the stub length is minimized. Also this processor was drawing more current so used the blind via's inside the pin field to have good plane.

Tasks:

- Responsible for component placement, constraint setup and routing.
- Gerber files generation and verification.
- PCB designed using Expedition tool

Working period: 4 weeks

Organization: Datalog Technologies India Pvt Ltd., Coimbatore

Designation: Electronics Engineer

Apr 2004 to March 2006

- Installation & commissioning of Micro-controller based Automation Products & various Electronic products.
- Production, Quality control & Planning.
- Assembly & Testing of various Microprocessor & Electronics Products.
- Trouble shooting of various Electronic Products & PC boards.

Education

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| ➤ M.Tech (Automotive Electronics),
WILP , BITS PILANI, Rajasthan, January 2022 | 6.84 CGPA |
| ➤ B.Tech Engineering Technology,
WILP , BITS PILANI, Rajasthan, December 2019 | 6.28 CGPA |
| ➤ Diploma in Electrical and Electronics Engineering , April 2003
Tamilnadu Polytechnic College (Autonomous), Madurai. | 86.7% |
| ➤ SSLC, MAR 2010
Govt High School, Sirugudi. | 87.4% |

Certifications

- Completed the course of Generic Manufacturing Skills (Integrations) – **SINGAPORE**.
Competency units are:
 1. Apply Quality System
 2. Operate Electrical Measurement devices
 3. Apply 5S Techniques
 4. Use Basic hand Tools and Equipment
 5. Apply Teamwork in the Workplace