JASPER FERNANDO
PCB Designer

Contact

Gmail

+971 563224089

Website

LinkedIn

Skills

- PCB Designing
- PCB Reverse Engineering
- Altium, OrCad, KiCad
- Embedded Systems Development
- Design for Manufacturability (DFM)
- SPICE Simulation Analysis
- Schematic Capture

Other Skills

- Corel Draw
- Soldering & Prototyping
- PCB Troubleshooting
- Arduino, ESP32
- Ms Office and Adobe
- System Skills & Troubleshooting

Personal Details

DOB: 06/11/1997

Marital Status: Single

Education

2015 - 2019

Mechatronics Engneering

Languages

English

Objective

As a PCB Designer, I specialize in schematic capture, multi-layer PCB design, and troubleshooting, focusing on optimizing embedded systems for high performance. I aim to contribute to a design role, applying my expertise in DFM principles, hardware and software integration, and signal processing. My goal is to deliver reliable, manufacturable solutions that meet industry standards and compliance requirements.

Work experience

June 2024 - Present

PCB Designer & Embedded Systems Engineer
Energy Technical Associates, AbuDhabi, UAE.

- Specialized in troubleshooting and repairing PCBs, diagnosing and resolving issues to restore functionality.
- Led PCB design projects, from concept to production, ensuring optimized designs for real-world applications.

Nov 2022 - May 2024

PCB Designer & Embedded Engineer,
Versatron Solutions, Chennai, India.

- Designed and developed custom Automated Test Equipment (ATE) for industries including aerospace and automotive, enhancing testing efficiency and accuracy.
- Collaborated with engineers and technicians to analyze customer requirements and deliver customized solutions to meet industry-specific needs.
- Reverse-engineered PCB designs using Altium Designer, creating detailed schematics and layouts for seamless production and integration.

Nov 2021 - Nov 2022

Embedded Systems Engineer,
Emerald Global Automations India, Chennai, India.

- Designed and developed embedded systems, automation system optimization, enhancing operational efficiency in industrial environments.
- Led PCB design projects, integrating hardware and software for seamless system functionality.
- Specialized in PLC programming and focusing on creating SCADA systems for real-time monitoring and intuitive HMIs for user-friendly control.

Jul 2019 - Nov 2021

PCB Designer & Embedded Engineer,
Bright Electronics and Services, India

- Developed and implemented Arduino-based projects, translating concepts into real-life applications by designing custom PCBs.
- Integrated sensors, actuators, and communication modules to create fully functional embedded systems.
- Optimized hardware and software for efficient operation in real-world environments.

Projects

Aug 2024

Drone Flight Control Board (KILLSF411)

- Designed a control board for UAVs, integrating STM32F411CEU6 microcontroller and sensors to ensure stable and safe flight operations.

Skills: PCB Design, KiCAD

Jul 2024

Mitsubishi Main Elevator Board KCJ Series

- Addressed a delay in the contactor activation on a Mitsubishi main elevator board, ensuring timely deactivation and reliable elevator operation.

Skills: Electro-mechanical Troubleshooting, Elevator Maintenance, Circuit Diagnostics

Jun 2024 to Jul 2024

Walkie Talkie

- Designed a Walkie Talkie board and reverse-engineered the PCB, enhancing skills in schematic capture, DFM principles, and innovative circuitry design. Conducted rigorous testing to ensure reliability and compliance with technical specifications.

Skills: KiCAD, Altium, Reverse Engineering, PCB Design

Nov 2023

RF Transmit and Receive Combine Module Design

- Developed and tested a comprehensive RF module with custom housing, optimizing design for performance and reliability, and validating functionality through a dedicated testing jig.

Skills: PCB Design, RF Engineering, Fusion 360, Functional Testing

Sep 2023

Flex Temperature Sensor for Radiosonde

- Designed a flex PCB for high-precision temperature sensing in Radiosonde applications, optimizing layout for accuracy, reliability, and manufacturability.

Skills: Altium Designer, Flex PCB, Sensor Design

Nov 2022 - Nov 2023

Dual Transmit Receiver Module

- Reverse-engineered a high-frequency dual transmit-receiver module, enhancing functionality with advanced PCB design, schematic capture, and DFM principles while ensuring reliability through rigorous testing.

Skills: KiCAD, Reverse Engineering, High-Frequency Circuit Design

Dec 2020 - Oct 2021

Audio System Controller

- Enhanced an Arduino-based audio remote kit by improving audio quality through advanced signal processing and multi-layer PCB design techniques. Incorporated additional remote control features and optimized performance using schematic capture, DFM principles, and innovative circuitry design. Conducted rigorous testing to ensure reliability and compliance with product specifications.

Skills: Arduino, Audio Systems, Circuit Design, Testing, Remote Control Technologies

Declaration

I hereby declare that all the details furnished above are true to the best of my knowledge and belief.