

Project Report

(Internship Semester January–June)

Design of Front end converter using SVPWM technique

Submitted by

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Under the Guidance of

Mr. Sarv Parteek Singh Technical Advisor Statcon Electronics Pvt Ltd, Noida Dr. Tejinder Singh Saggu Faculty Coordinator Department of Electical Engineering Punjab Engineering College (Deemed to be University), Chandigarh

Declaration

I hereby declare that the project work entitled "Design an Active Front End" is an authentic record of my own work carried out at Statcon Electronics India Ltd as requirements of six months project semester for the award of degree of B.E./B.Tech. Electrical Engineering, Punjab Engineering College (Deemed to be University), Chandigarh, under the guidance of Mr. Sarv Parteek Singh and Dr. Tejinder Singh Saggu, during January to June, 2024.

Date: April 29, 2024 Shashank Agarwal 21104024

Certified that the above statement made by the student is correct to the best of our knowledge and belief.

Dr. Tejinder Singh Saggu Faculty Coordinator Department of Electical Engineering Punjab Engineering College (Deemed to be University), Chandigarh Mr. Sarv Parteek Singh Technical Advisor Statcon Electronics Pvt Ltd, Noida

Acknowledgement

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Furthermore, I would like to express my sincere appreciation to Dr.Dora for his invaluable guidance in the development of the SVPWM Inverter and his assistance with MATLAB. His expertise and mentorship have been indispensable in overcoming technical hurdles and achieving project milestones.

Lastly, I extend my gratitude to the Director of the college for providing me with the opportunity to work on this project. Their trust and support have been pivotal in enabling me to pursue this endeavor and gain valuable experience.

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1. Summary

I got the opportunity to do my internship at Statcon Electronics India Ltd. Statcon Electronics established in 1986 is one of India's largest ISO 9001-20151 certified manufacturer of Static energy Conversion system. My internship started on 10th January 2024.

1.1 Timeline

2. Introduction

3. Work

4. Industry

5. Review

- **5.1** Company review
- 5.2 Project review

- **6.** Details of work and review
- **6.1 Problem Statement**

7. Conclusion and Future scope

8. References