

Construction of Variable frequency drive for three-phase Induction Motor

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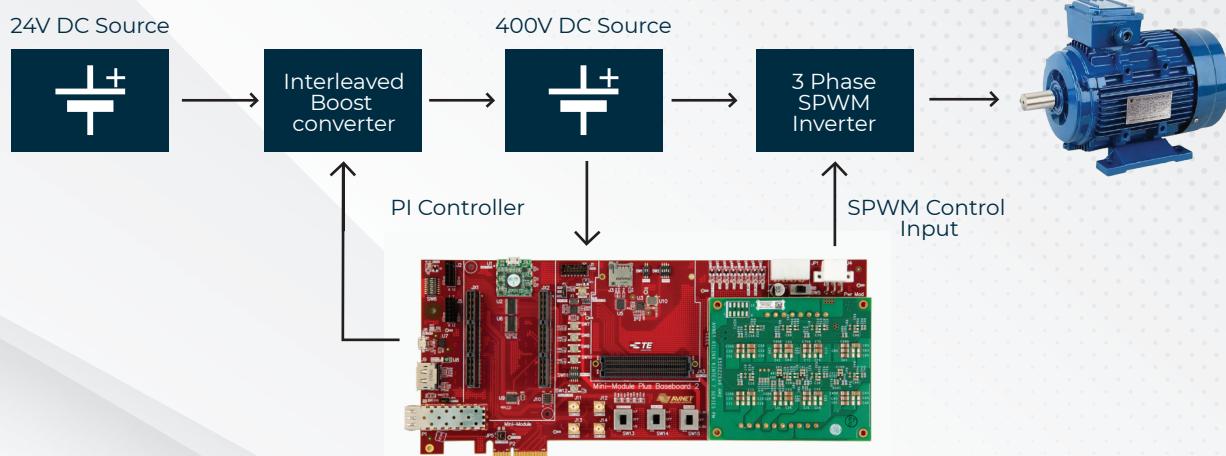
Problem Statement

Indigenously built VFDs having high boost capability for Electric Vehicles and Solar Pumps.

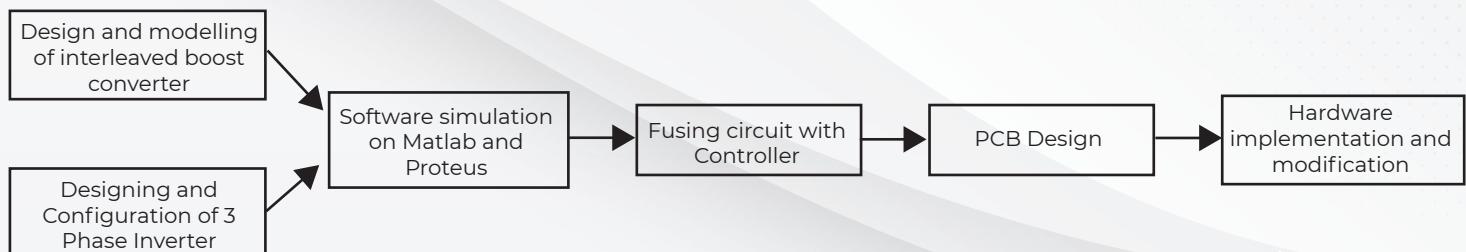
Product Scope

To build VFD that could control the speed and torque of three phase induction motor according to the operation required.

Block Diagram



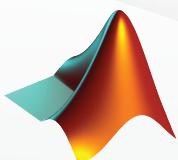
Methodology



Goals and Objectives

- Aims at building VFD for three phase induction motor
- Variable frequency drive which is
 - Energy efficient
 - Economical
 - Improve power factor
 - Environment friendly (Electric Vehicles)

Software Used



MATLAB



Proteus



PowerSIM



Arduino IDE

Targeted consumer

- High Power VFD can be employed in
 - Electric Vehicles
 - Air conditioners
 - Boilers pumps
 - Compressors
 - Water Pumps