

# Simulation of Vector Control of Induction Motor Powered by Solar Panel

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**Abstract:** Solar panel is widely used in industrial applications. In this paper, DC-DC topology is used to increase the output of solar panel. This DC-DC converted voltage can convert into AC voltage by integrating an inverter which converts dc to ac by means of space vector pulse width modulation (SVPWM) technique. Design of this paper directly coupled to get the voltage from solar cell panel, DC –DC Boost converter, full bridge space vector pulse width modulation inverter, of an induction motor. The FOC vector control is used to control the speed. This is implemented using MATLAB simulink.

**Keywords:** Solar panel

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