

**BOOST DC TO DC CONVERTER USING SINGLE
PHASE MATRIX CONVERTER TOPOLOGY**

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MATRIX CONVERTER TOPOLOGY**

**This thesis is presented in partial fulfillment for the award of the
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ABSTRACT

This project is to look the operation of Single-Phase Matrix Converter (SPMC) as Boost DC to DC Converter and four quadrant DC to DC Converter. The power switching device is used in the SPMC is insulated gate bipolar transistor (IGBT). In this project, the output is being synthesized using Pulse Width Modulation (PWM) technique. Simulation model is developed using MATLAB/Simulink (MLS) and PSPICE software to investigate the behavior of the matrix converter operations. Results from PSB simulation are compared with those obtain from PSPICE to ascertain its validity.

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