

ABSTRACT

. The converter is a device that can produce a voltage converter system and power supply. Switching power supply is a power supply system whose power regulation uses electronic switching (switch), and this switching power is usually found in the main power source / voltage circuit of an electronic device or commonly called a regulator / power supply.

In this final project, a converter that uses a Dickson Charge pump topology will be designed which is able to store small power and functions to increase the voltage generated by the output which can be optimized more efficiently.

The results obtained from this study are the input voltage of 3 V and produce an output voltage of 4,5 V. The microcontroller functions to regulate the switching on the MOSFET by using a 60% duty cycle with a frequency of 35 KHz.

Keywords: *Converter, Voltage, Switched Capacitor*