

EE 256 LAB PROJECT

GROUP: E1-B4

BOOST CONVERTER

TEAM MEMBERS:

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PROBLEM STATEMENT:

1.To make a DC-DC Boost Converter with the following specifications:

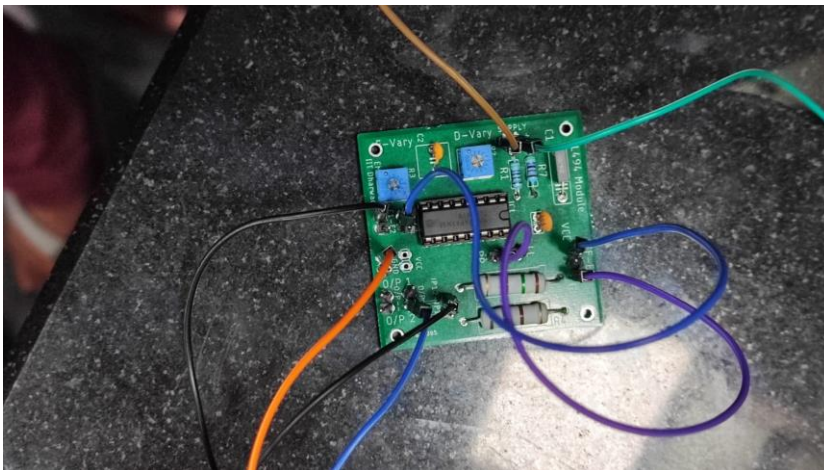
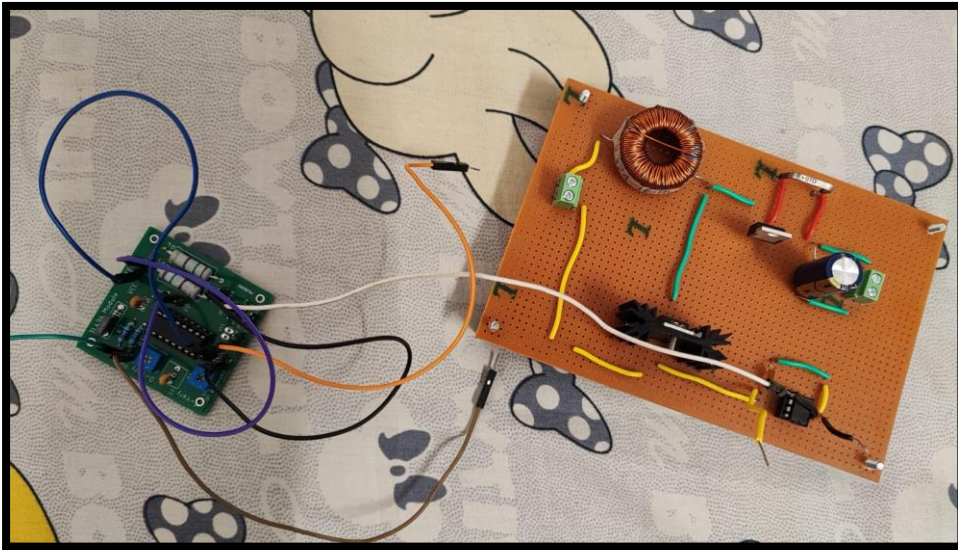
Input 15V, Output 25V, Switching frequency 7.5kHz, Output current 1A

and observe the waveforms of DIODE current and INDUCTOR voltage in CCM.

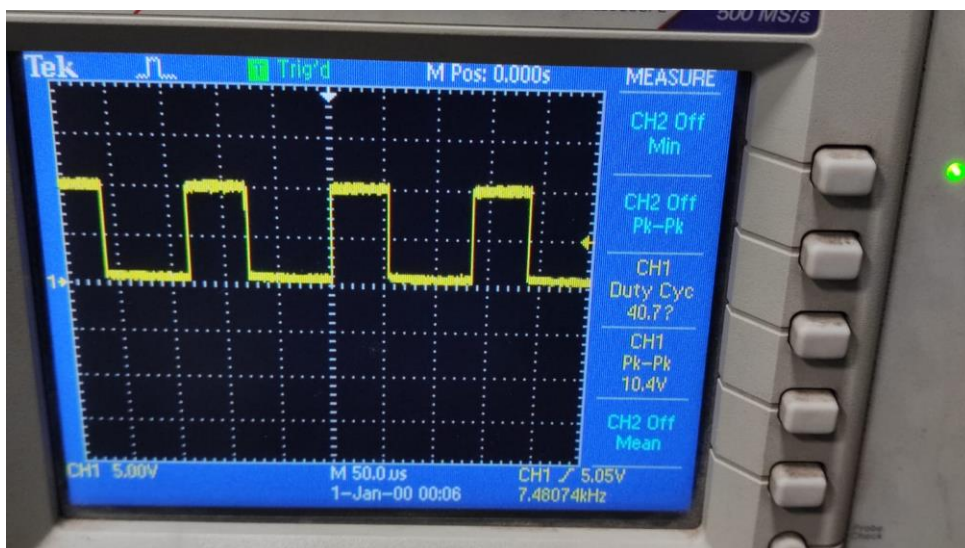
2.Increase load resistance to demonstrate DCM

PWM AND DRIVER INTEGRATION

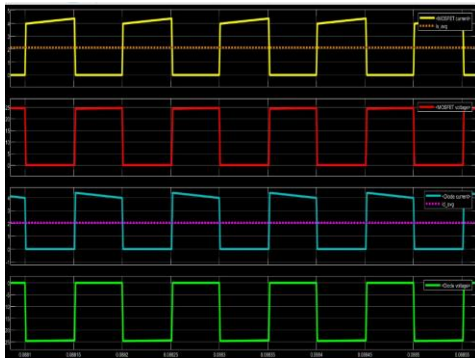
THE PROJECT GALLERY:



THE PULSE WIDTH MODULATOR

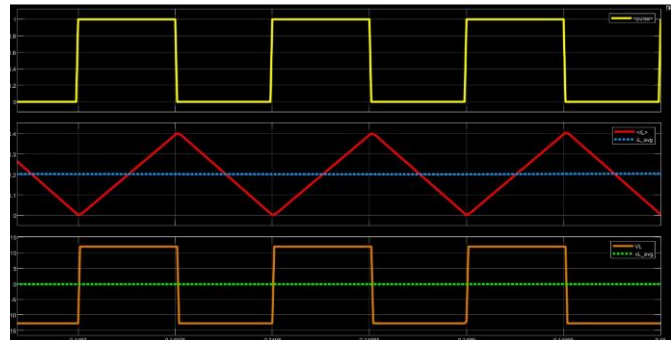


DRIVER OUTPUT WITH 40%DUTY CYCLE AND DRIVER OUTPUT WITH FREQUENCY 7.5KHz



DIODE CURRENT AND DIODE

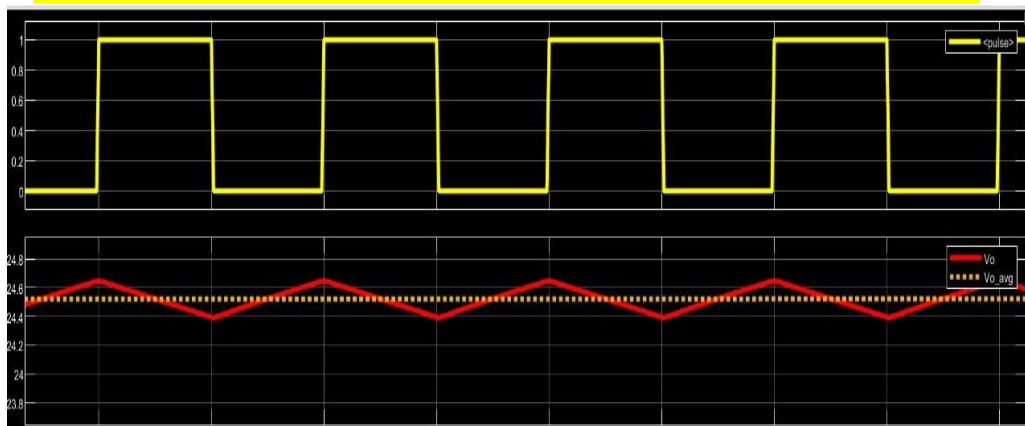
VOLTAGE IN CCM BY SIMULATION



INPUT PULSE , INDUCTOR CURRENT

AND VOLTAGE IN CCM BY SIMULATION

INPUT PULSE AND OUTPUT VOLTAGE IN CCM BY SIMULATION



INPUT PULSE , INDUCTOR CURRENT AND VOLTAGE IN DCM BY SIMULATION

