

# Project Report

## SET-E2

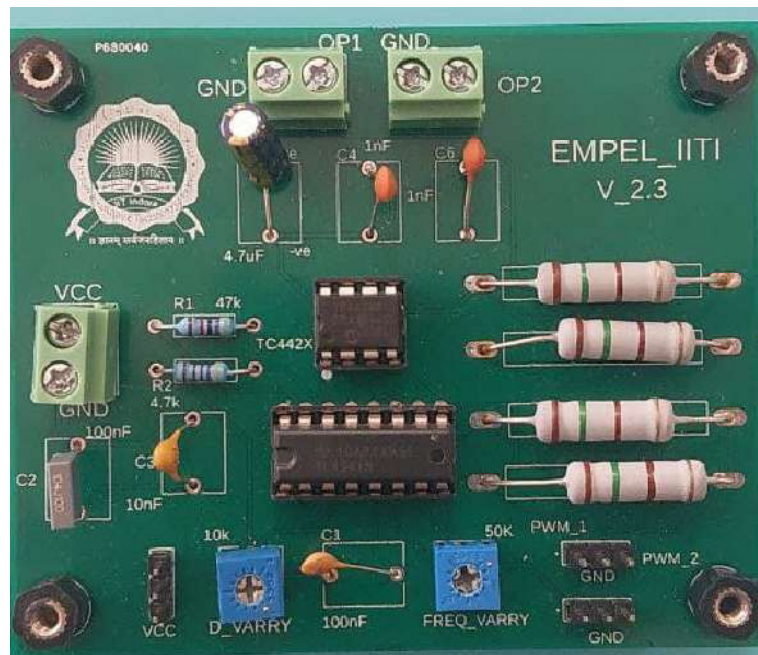
**Batch:** B10

**Roll no of students:** 230002052  
230002065  
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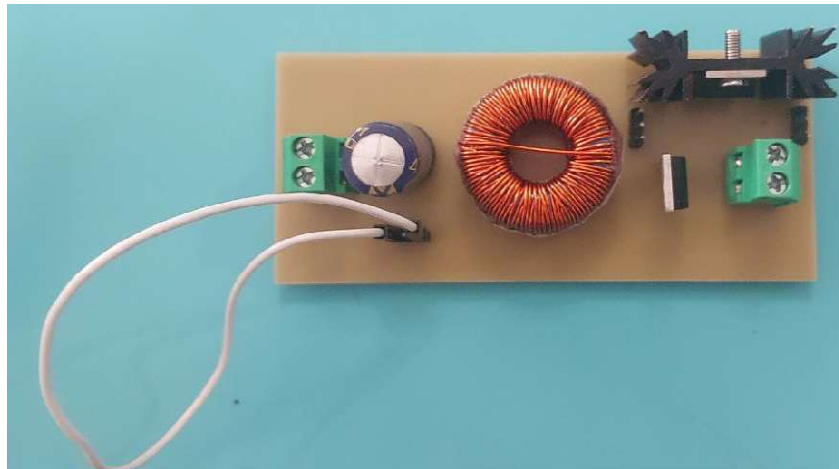
**Problem Statement:** Buck Converter

- a) Specifications: Input 25 V, Output 17.5 V, Switching frequency 15 kHz, Output current 1 A.
- b) Waveforms of inductor current and diode voltage in CCM.
- c) Increase load resistance to demonstrate DCM.

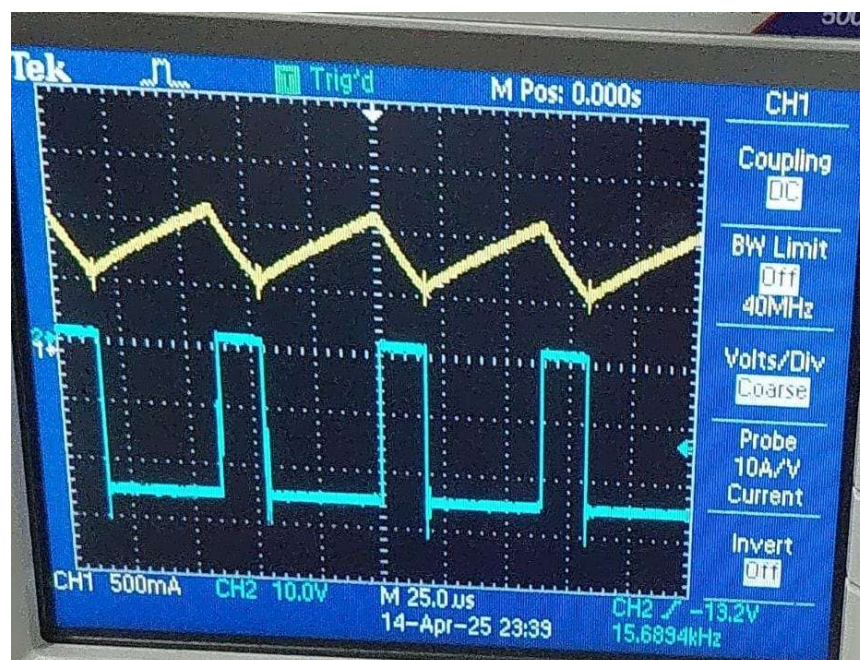
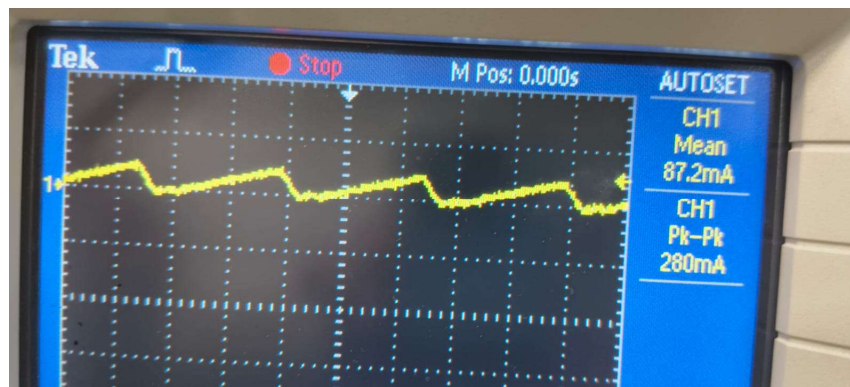
**Soldered gate driver:**

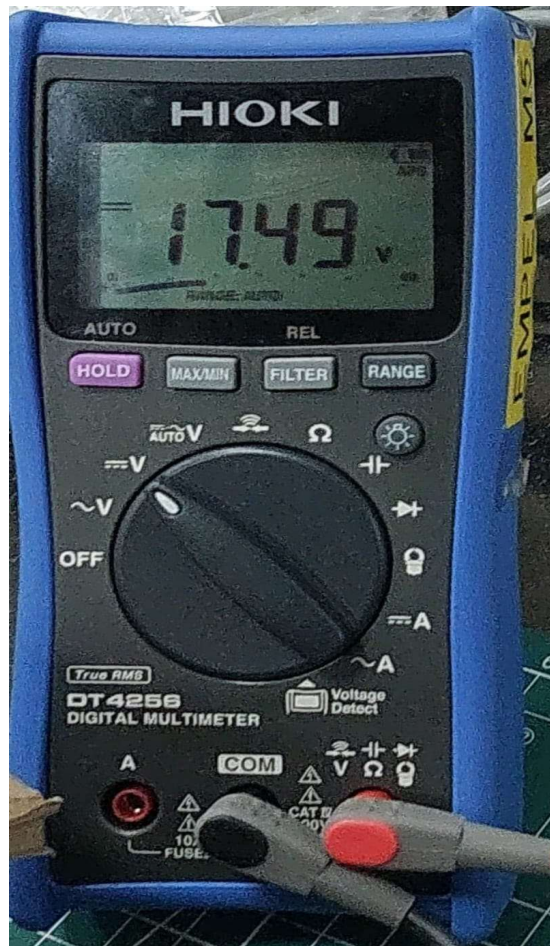


## Buck Converter:



## Waveforms: CCM





**Fig: Output Voltage**