

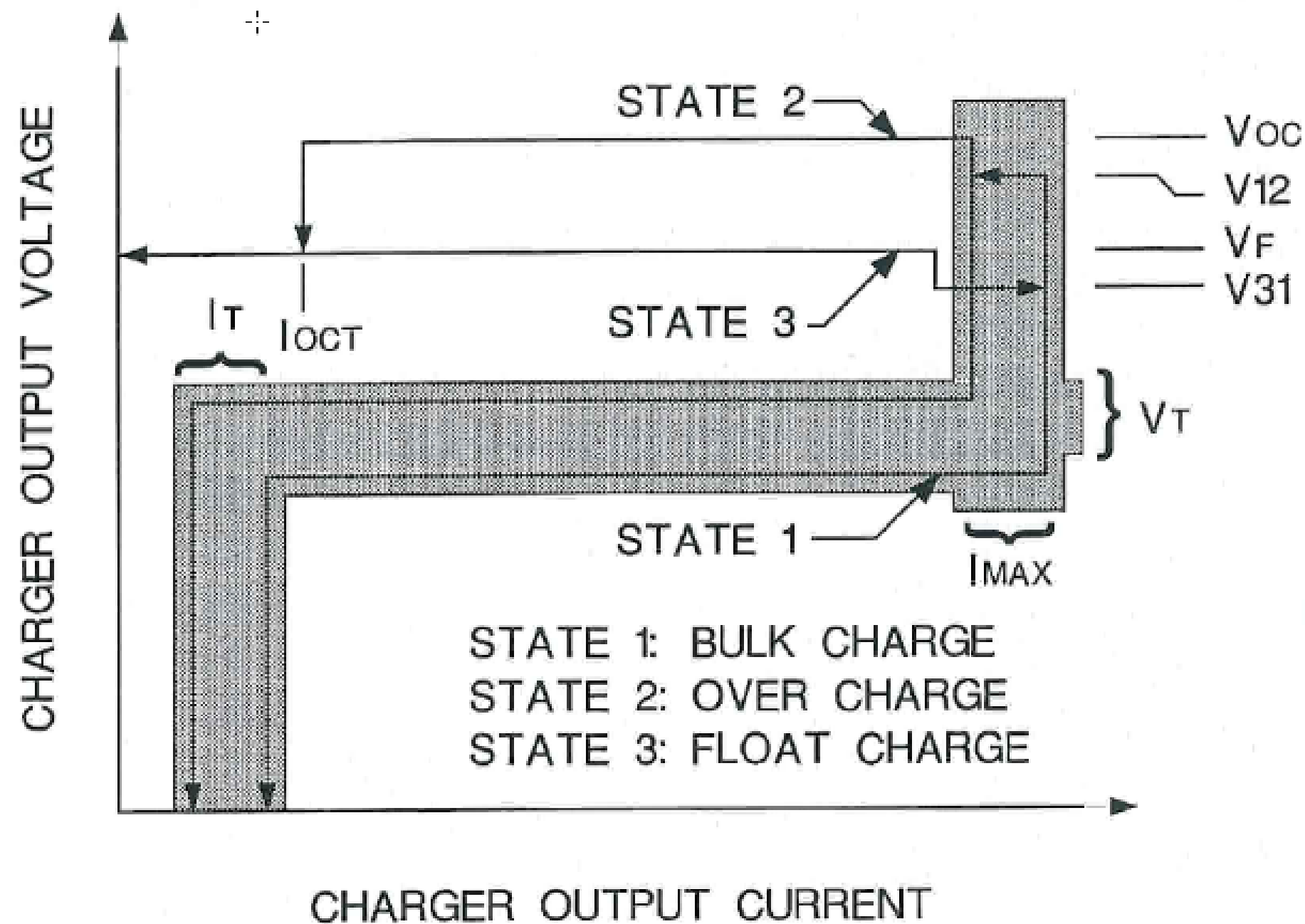
# LEAD ACID BATTERY CHARGER

## 24V 8A

EN2110 Electronics - III Project  
Electronic and Telecommunication Engineering  
University of Moratuwa

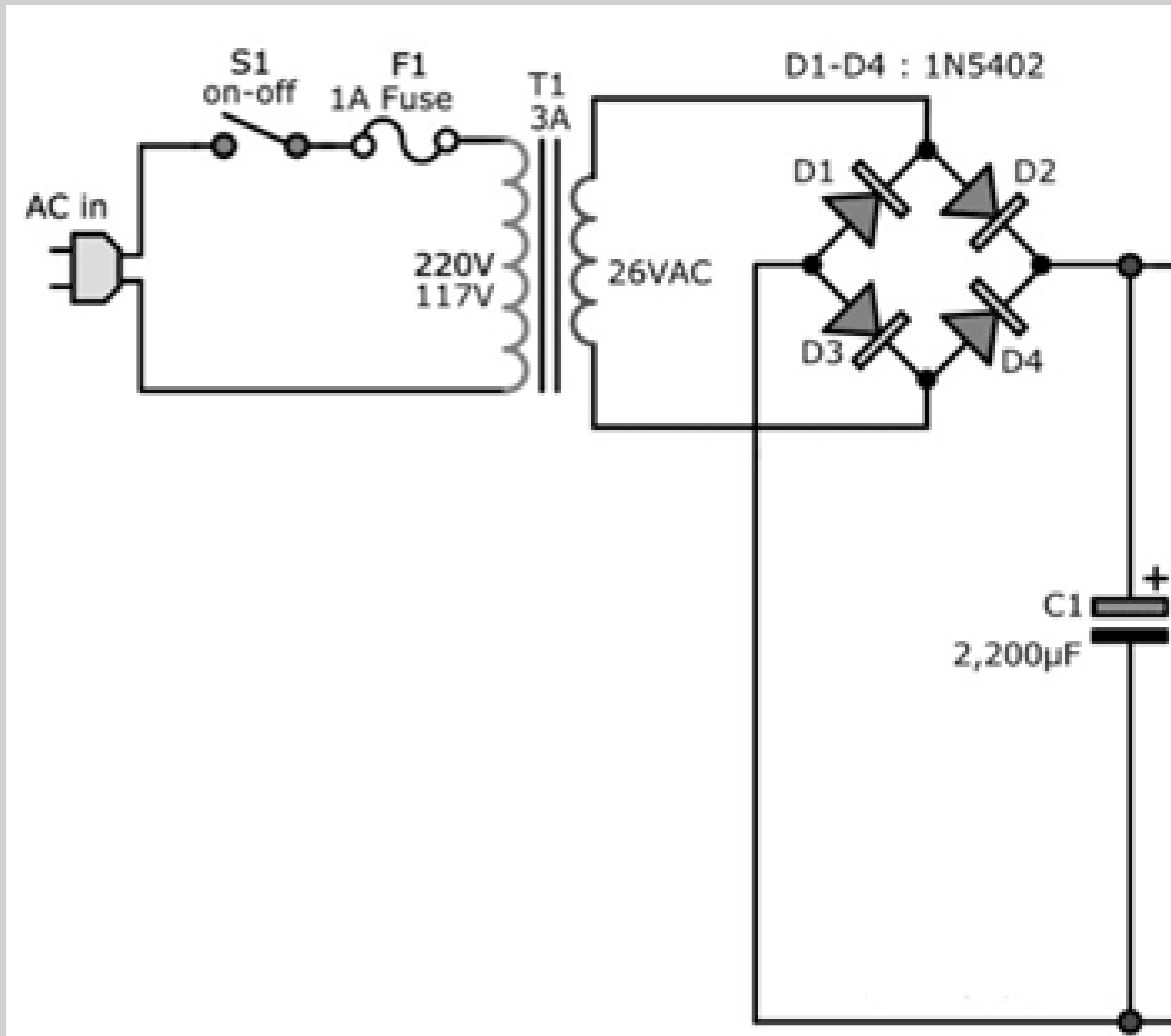






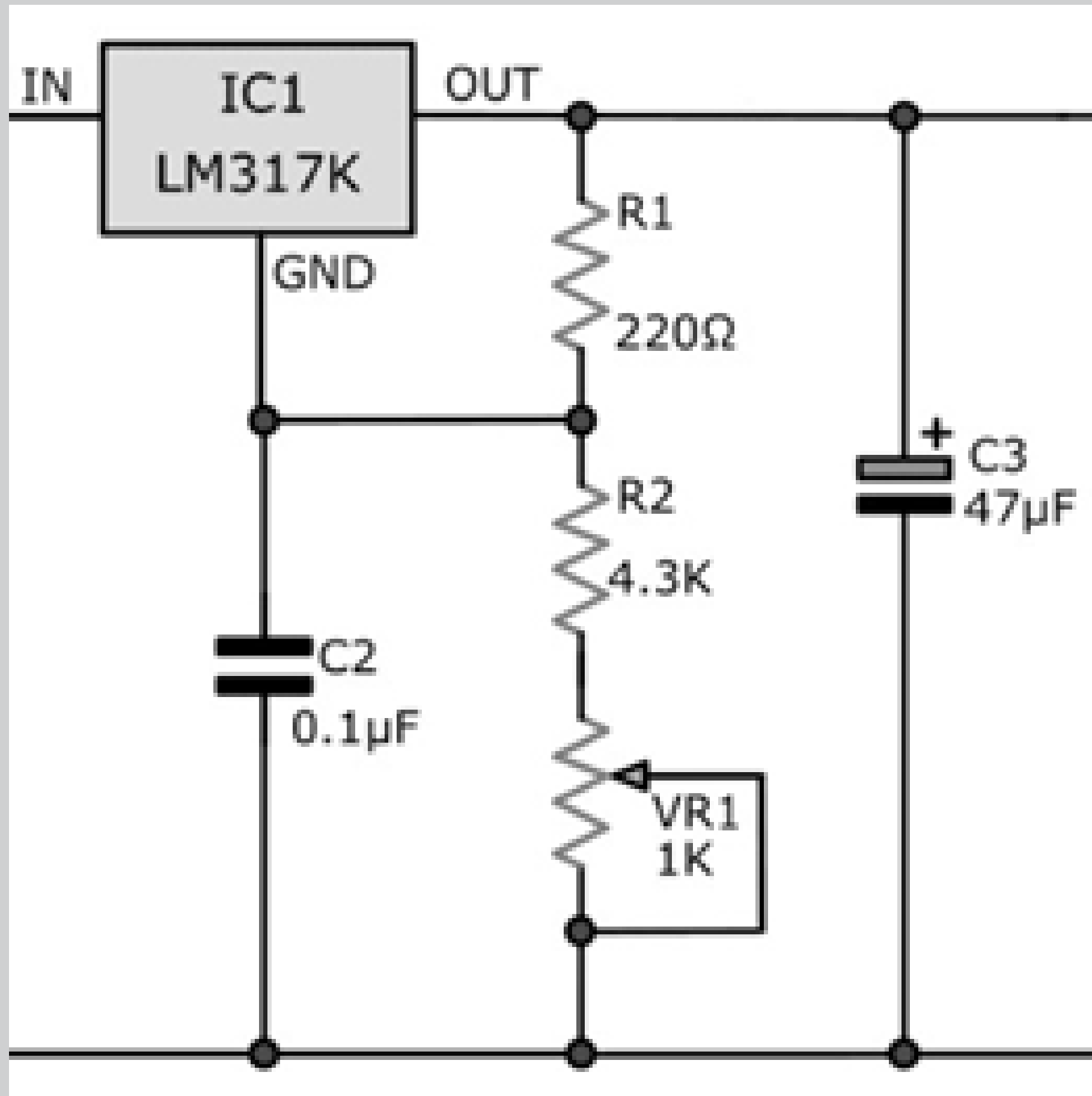
## SPECIFICATIONS

- Optimized control for maximum battery capacity and life.
- Internal logic provides three charging states.
- Controls both voltage and current at the output.
- High accuracy achieved in various temperature of the battery.
- Standby supply current can be achieved up to a minimum level



# AC TO DC VOLTAGE CONVERTOR

- 230V AC input
- DC output
- Contains transformer  
bridge rectifier

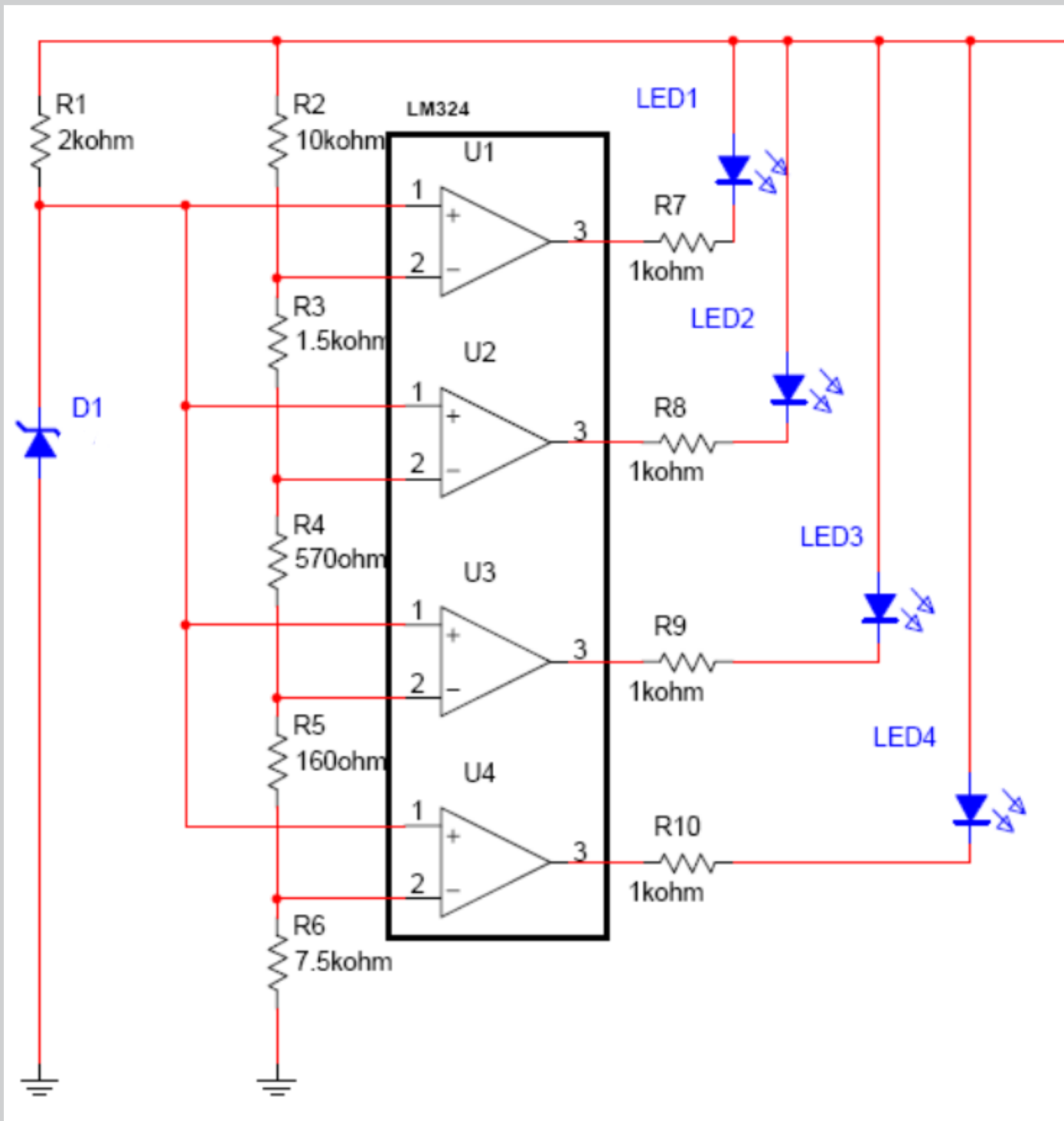


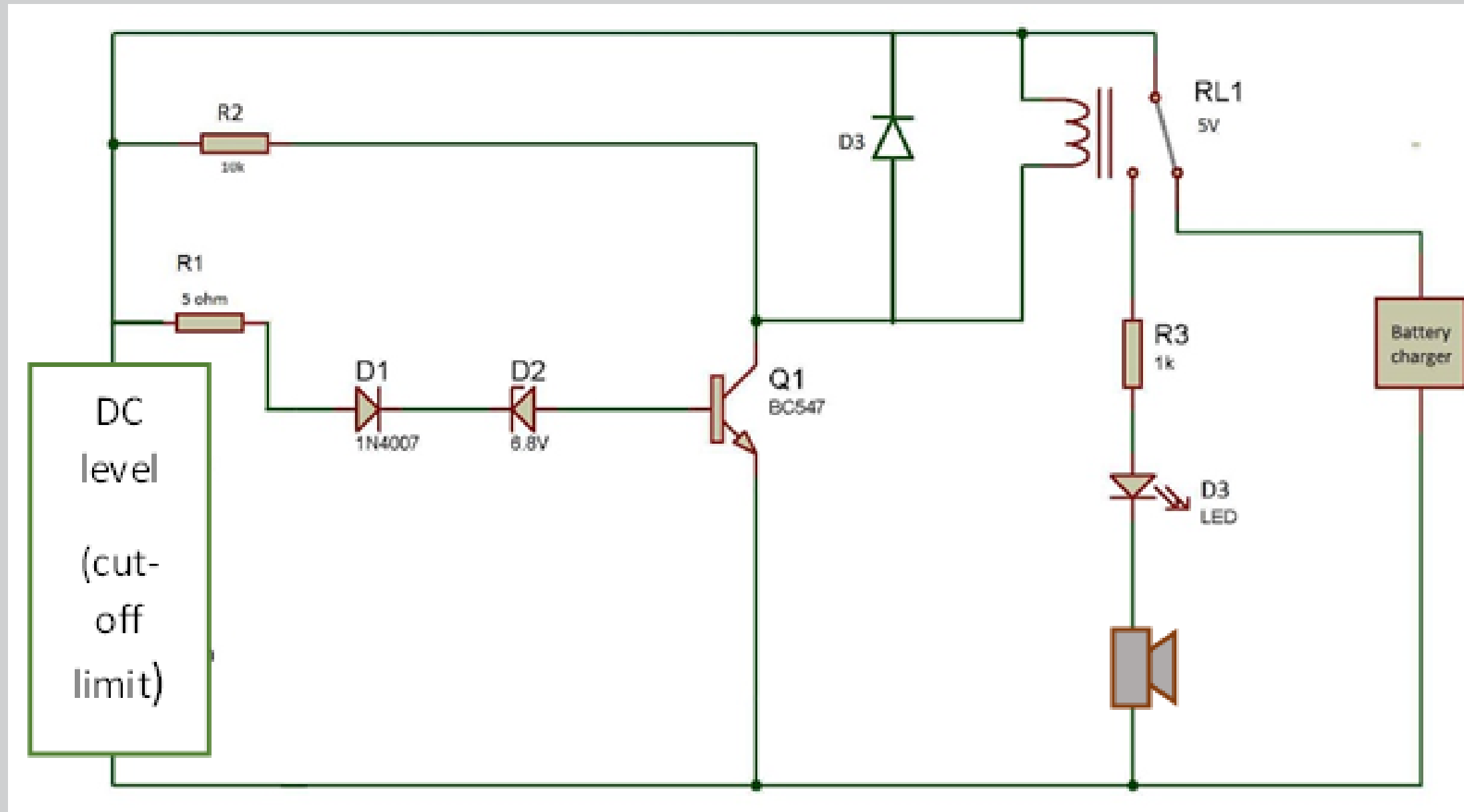
## DC VOLTAGE REGULATOR

- Input is from the voltage converter output
- 24V DC regulated output

# VOLTAGE LEVEL INDICATOR

- Voltage Level Indicator according to the battery feedback
- 4 - level Indicator





## OVERCHARGING INDICATOR

- Detecting cutoff terminal voltage
- Back current protection
- Indication of full charging

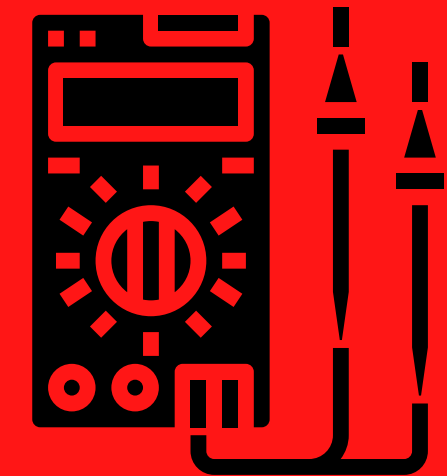
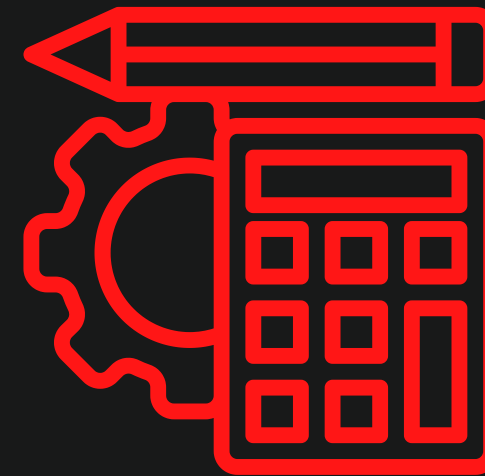
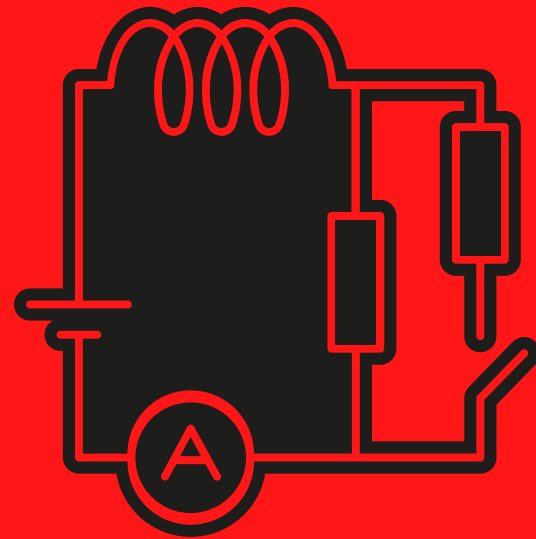
# **TIMELINE**

Market Analysis

Basic circuit design

Calculations for meet the specifications

Testing and debugging



Finished

- Block-wise simulation of the entire circuit.
- In-progress
- To be completed by May 15

- Calculate the required values to meet the specified requirements
- May 16 - May 29

- The actual implementation of the product with testing and debugging
- May 30 -June 12.



# TEAM MEMBERS

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**THANK  
YOU**

