PROJECT NAME : VOLTAGE TRIPLER CIRCUIT USING DIODE AND CAPACITORS

Group Member

Intake : 50

1. Mohammad Ashikur Rahman (ID - **22234103217**)
2. Waliullah Fahat (ID – **22234103224**)
3. Amzed Hasan Zarir (ID – **22234103226**)
4. Prioraj Kumar Sinha (ID – **22234103231**)
5. Ferdouse Hassan Nowrin (ID – **22234103237**)
6. Jannatul Ferdous Prity Chowdhury (ID – **22234103239**)
7. Redwan Ahmed (ID – **22234103129**)

Intake : 42

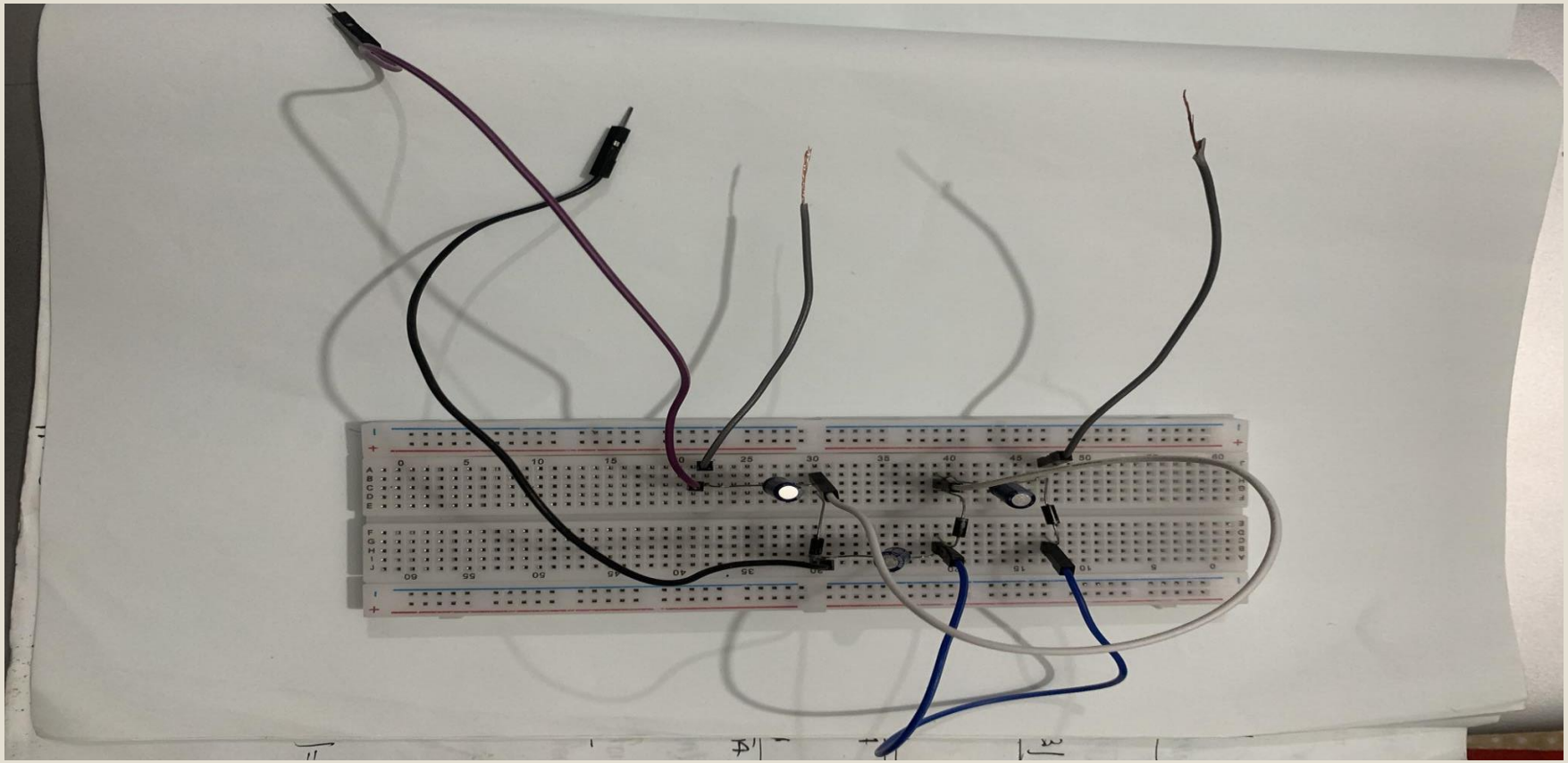
1. MD Tamim Hasan (ID : **18193103045**)

Project Name : Voltage Tripler Circuit Using Diode and Capacitors

Instruments:

1. Bread Board
2. Capacitors
3. Diodes
4. Jumping Wire

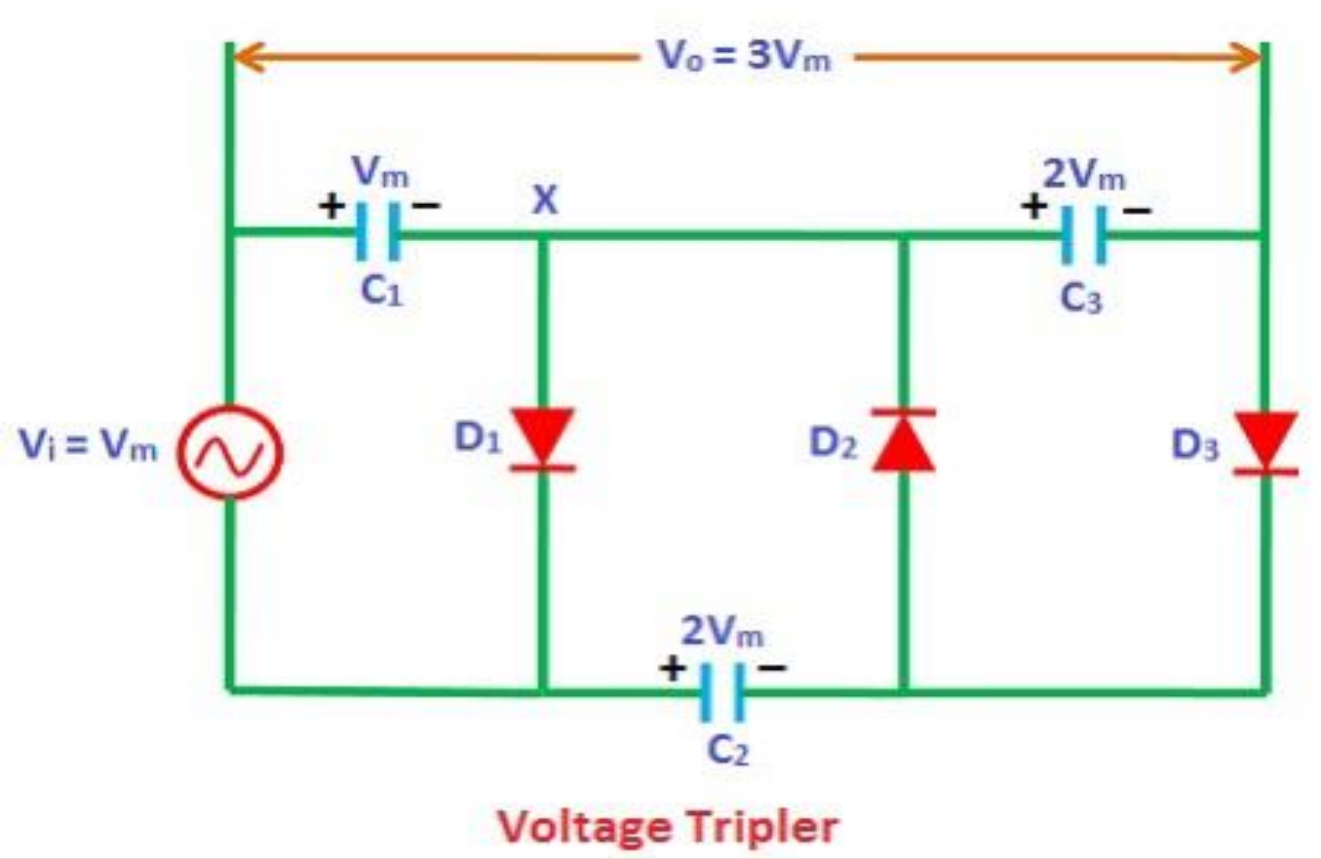
Project:



What is Voltage Multiplier ??

A voltage multiplier is an electrical circuit that converts AC electrical power from a lower voltage to a higher DC voltage, typically using a network of capacitors and diodes.

Diagram



Voltage Tripler

Practical Applications

Voltage multipliers are used in :

- Cathode Ray Tubes (CRTs)
- Laser System
- X-Ray Systems
- LCD Backlighting
- Power Supplies
- Oscilloscopes
- Particle Accelerators
- Copy Machines

Advantages

- *Low Cost*
- *Produce High Voltage*
- *Alternative of Transformer*

Conclusion:

In conclusion, the voltage Tripler circuit using diodes and capacitors is a configuration that can triple the input voltage. It finds applications in situations where a high DC voltage is required. However, it has limitations such a increased output ripple and sensitivity to load variations, which need to be taken into account during design and implementation.

The End