

**ECE-3003**

**Microcontroller and its  
Application**

**EVM-Electronic Voting Machine**

## Group Members

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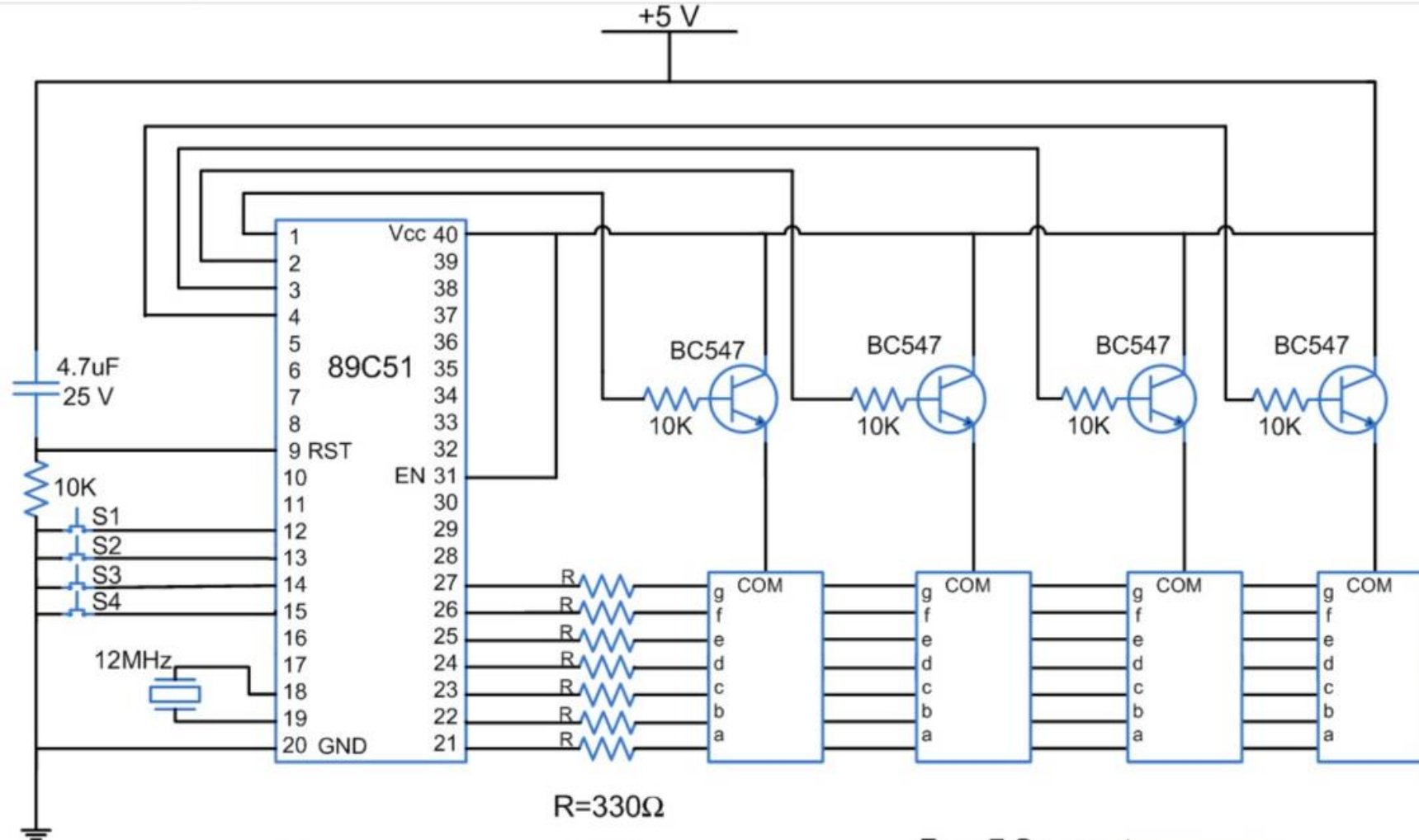
## Objective

Electronic voting machine has now replaced the traditional mechanism of voting due to several advantages like security, automatic counting etc. This project presents a way to develop an electronic voting machine which displays the count of votes on a 16x2 LCD interface. A user can get his/her vote register through a set of switches (one for each candidate). After every cast of vote, the subsequent count can be seen on LCD. The circuit uses 8051 microcontroller and the code for the project has been written in C.

# Introduction

The project is designed for eight contestants. Voters can poll their vote to any one of the contestant. In this project, one port is dedicated for 8 push-button switches for eight contestants, and a master switch for polling officer. A simple yet powerful program is written in assembly language and is burnt onto the microcontroller to accept votes and to keep counting the total votes polled. A Polling-officer switch (master) is provided to avoid multiple polling by a single voter. Every voter gets approval from the polling officer. If the polling officer issues approval with his control switch, then only the voter can poll his vote.

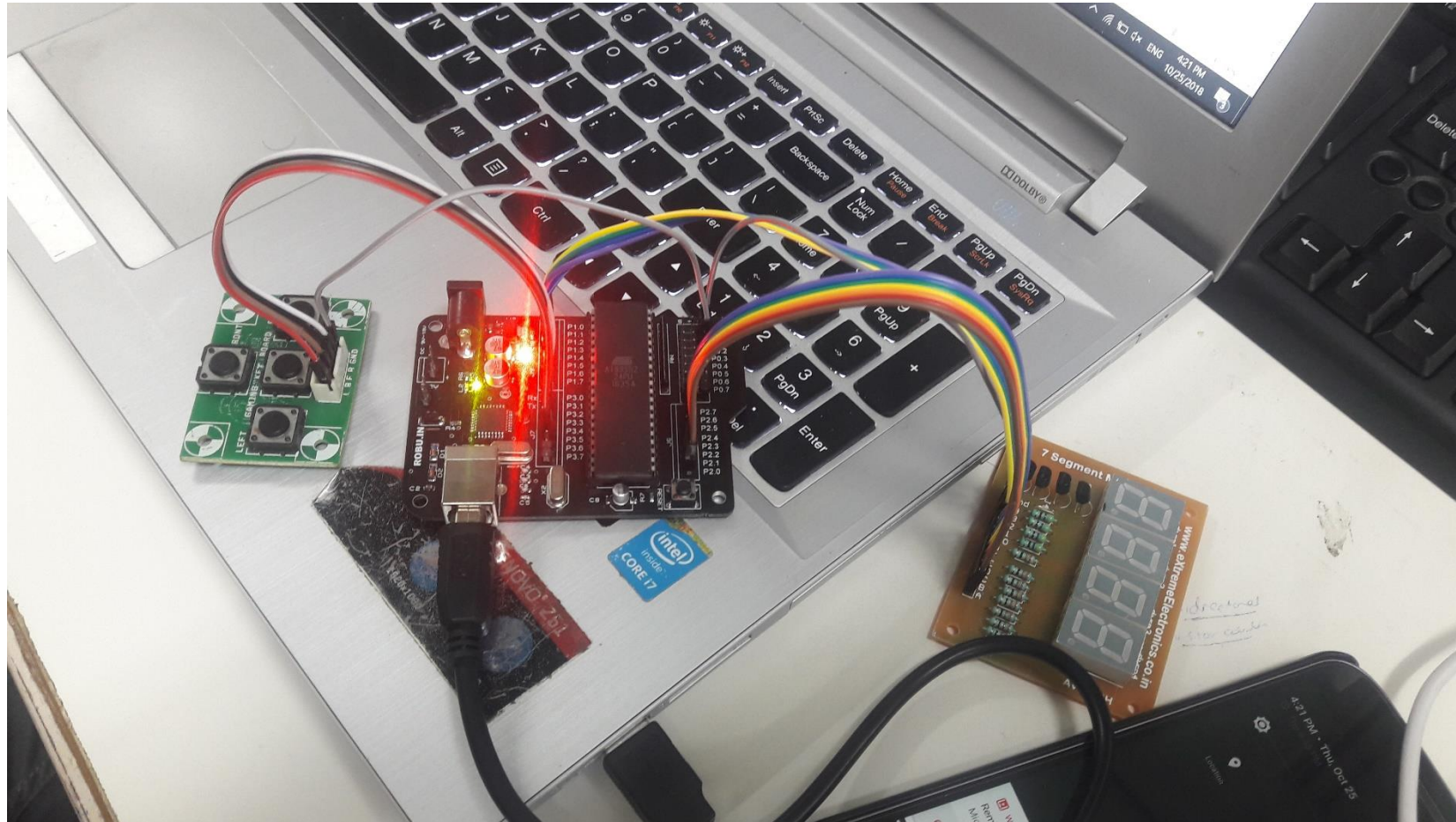
# Block Diagram



# Hardware Requirements

- 8051 series Microcontroller
- Push Buttons
- Transistors
- Transformer
- Voltage Regulator
- LED
- Resistors
- Capacitor
- EEPROM
- Buzzer

# Setup



# Applications

- Fast track voting which could be used in small scale elections, like resident welfare association, “panchayat” level election and other society level elections.
- It could also be used to conduct opinion polls during annual share holders meeting.
- It could also be used to conduct general assembly elections in school and colleges to introduce idea about democracy.



# References

- [www.keil.com/docs/datashts/atmel/8051](http://www.keil.com/docs/datashts/atmel/8051)
- [https://www.tutorialspoint.com/embedded\\_systems/es\\_microcontroller.htm](https://www.tutorialspoint.com/embedded_systems/es_microcontroller.htm)
- [www.google.com](http://www.google.com)