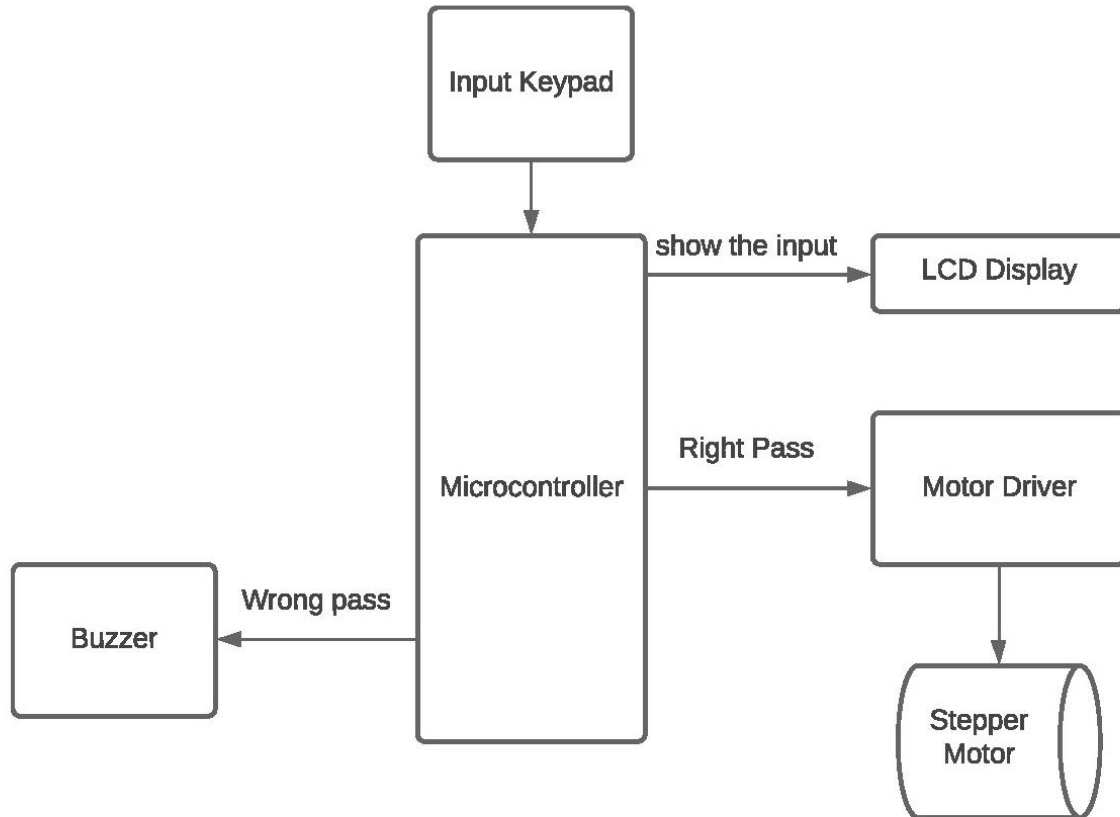


Microcontroller based Door lock

Block Diagram



INTRODUCTION

Many times, we forgot to carry the key of our home. Or sometimes we come out of our home and door latch closes by mistake. In these cases, it is really difficult to get inside the house. This project is designed to solve this purpose. Main concept behind this project is of a door-latch opening using a password entered through keypad. As well as turning on the Buzzer when password is entered wrong. Today people are facing more problems about security in all over world, nowadays security is the most

essential issue everywhere in the world so security of everything gains higher and higher importance in recent years. The main component in the circuit is 8051 microcontrollers. Here, 4*4 keypad is used to enter the password. The entered password is compared with the predefined password. If it is correct password, the system opens the door by rotating door motor and displays the status of door on LCD. If the password is wrong then door remains closed and displays —password is wrong on LCD. It can be used at organizations to ensure authorized access to highly secured places. With a slight modification by replacing the motor driver with a relay driver, this circuit can be used to control the switching of loads through code. This circuit can be also modified by using EEPROM chip interfaced to the microcontroller and store the entered password in the chip. Such an automatic lock system consists of electronic control assembly which controls the output load through a password. This output load can be a motor or a lamp or any other mechanical/electrical load.