PASSWORD BASED DOOR LOCK SYSTEM USING 8051 MICROCONTROLLER

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ABSTRACT

The olds lock systems using mechanical lock and key mechanism are being replaced by new advanced techniques of locking system. These techniques are an integration of mechanical and electronic devices and highly intelligent. One of the prominent features of these innovative lock systems is their simplicity and high efficiency.

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. This project develop an electronic code lock system using a 8051 microcontroller, which provides control to the actuating the load. It is a simple embedded system with input from the keyboard and the output being actuated accordingly.

This system demonstrates a password based door lock system wherein once the correct code or password is entered, the door is opened and the concerned person is allowed access to the secured area. After some time, the door would close. Again if another person arrives and fails to enter the correct password, the door would remain closed, denying access to the person.

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Chapter 1

Introduction

1.1 Background of Study

Traditional lock systems using mechanical lock and key mechanism are being replaced by new advanced techniques of locking system. These techniques are an integration of mechanical and electronic devices and highly intelligent. One of the prominent features of these innovative lock systems is their simplicity and high efficiency.

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