

RFID BASED ATTENDANCE SYSTEM

ABSTRACT

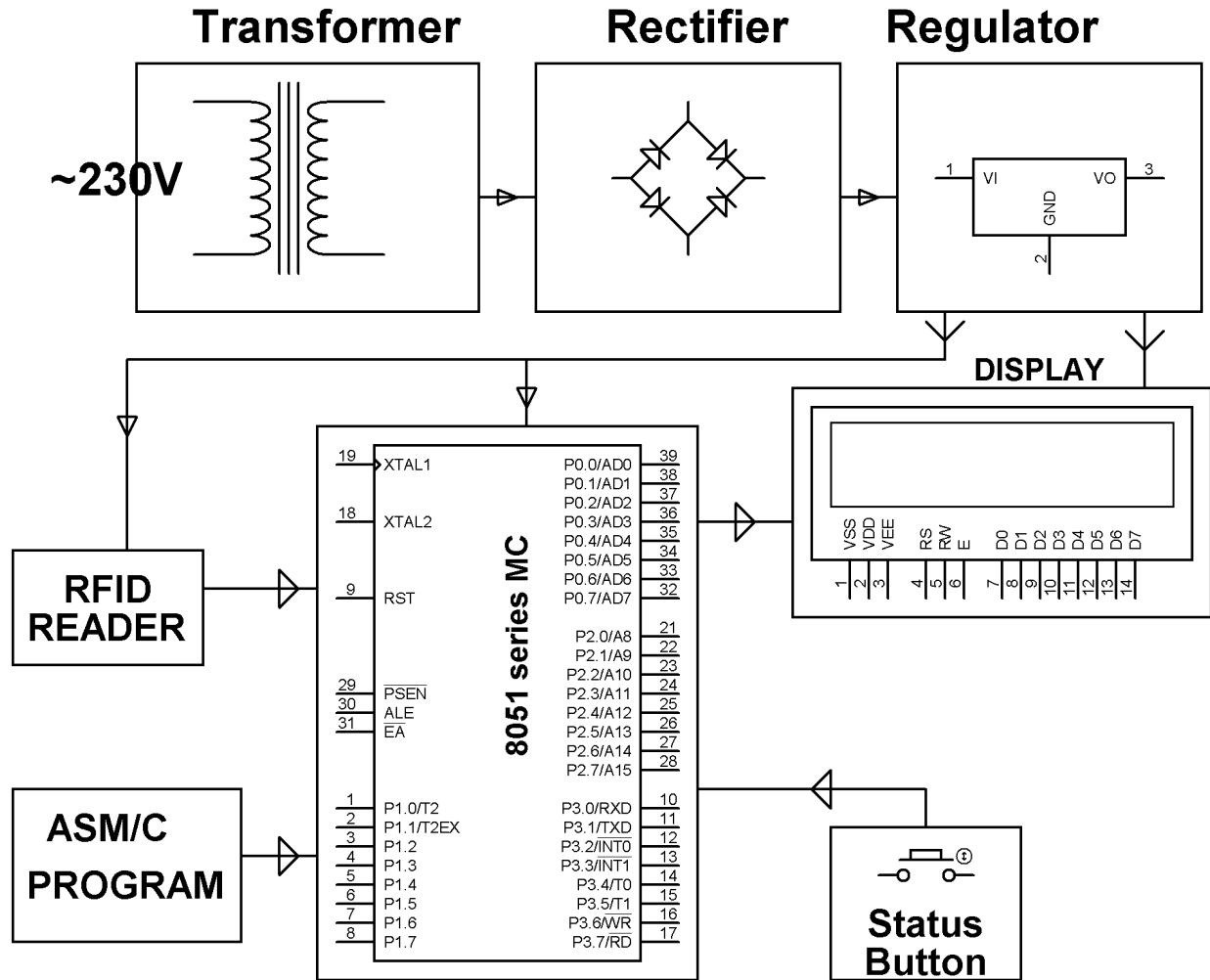
The main objective of this project is to record the attendance of students using RFID tags. Each student is provided with his/her authorized tag to swipe over the reader to record their attendance.

In classrooms, time is wasted in roll calls as it is done manually. In this proposed system, authorized student is given an RFID tag. This tag contains an integrated in built circuit that is used for storing, processing information through modulating and demodulating of the radio frequency signal that is being transmitted. Thus, the data stored in this card is referred as the identification/attendance of the person.

Once the student places the card in front of the RFID card reader, it reads the data and verifies it with the data stored in the microcontroller from 8051 family. If the data matches, then it displays a message on the LCD confirming the entry of that student else displays a message denying the attendance. The status of a student's attendance can be retrieved from this system by pressing the status button interfaced to the microcontroller. Hence, a lot of time is saved as all the students attendance is directly stored in the data base.

The project can be further enhanced by adding features like sending an SMS of the daily attendance of students to their parents. It can also be enhanced by using a finger print module in place of RFID module that has certain drawbacks of tags be misused.

BLOCK DIAGRAM



HARDWARE REQUIREMENTS:

8051 series Microcontroller, RFID tags and RFID Reader, LCD, Resistors, Capacitors, Diodes, Transformer, Voltage Regulator, Crystal, switches.

SOFTWARE REQUIREMENTS:

Keil compiler

Language: Embedded C or Assembly