

PC based digital notice board with display on LCD display

The project aims in designing a digital notice board with display on LCD using a (general purpose computer) PC Hyper Terminal. We can implement this technology in schools, colleges, banks etc... After accessing every message it automatically resets and it displays the latest message on LCD.

This project consists of an onboard computer, which consists of number of input and output ports. These onboard computers are commonly termed as micro controllers. The input and output port of the controller are interfaced with different input and output modules depending on the requirements. In other words micro controller acts as a communication medium for all the modules involved in the project.

In this project we make use of a Micro Controller which acts as Control Unit, PC, and MAX 232 IC which is used to connect PC to the Microcontroller and LCD is used to display the notice given on PC.

User can send the messages from PC and displays them on LCD. Buzzer is horned for every new message displayed on the LCD. This process continues for every new message we send to it. The previous message will be automatically overridden by new message. The intelligent control software which has been developed using Embedded C programming language is used to display notices on LCD from PC.

Features:

1. Low power consumption.
2. Automatic display.
3. Easy to operate.

The project provides learning's on the following advancements:

1. Interfacing LCD and microcontroller
2. Interfacing PC and microcontroller
3. RS232 protocol implementation.
4. MAX 232 interfacing
5. Embedded C programming.
6. PCB designing.

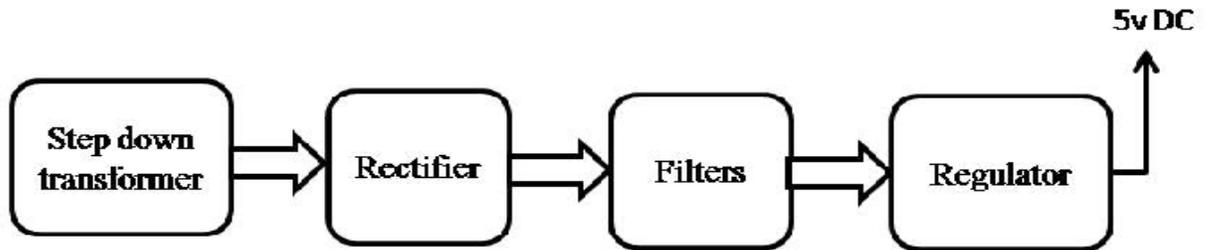
The major building blocks of this project are:

1. Regulated Power Supply.
2. Microcontroller.
3. LCD with driver.
4. Crystal oscillator.
5. LED indicators.
6. Buzzer with driver.
7. Reset.

Software's used:

1. PIC-C compiler for Embedded C programming.
2. PIC kit 2 programmer for dumping code into Micro controller.
3. Express SCH for Circuit design.
4. Proteus for hardware simulation.

Regulated Power Supply:



Block diagram:

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