

Electronic notice board using gsm



**ASSIGN
BUSTER**

At present, when information has to be updated In a notice board, It has to be done manually. Also In present electronic systems, no matter how many displays are present, only a single notice can be sent to all of the notice boards irrespective of their places. In order to overcome this disadvantage, multiple displays along with a decoder are used to select a particular display and the corresponding information is sent through an ARM controller by using GSM technology. The entries can be documented and a record may be maintained for future use by using visual basic.

The controller has Internal a real time clock used for synchronization of data. A resistive touch screen is used to access the previous notices and also progress details. The monitoring system consists of an image sensor which captures the images for the specified amount of time and the images can be transferred through an USB port too PC for storage purposes.

An embedded system is a combination of hardware and software and perhaps other mechanical parts designed to perform a specific function. A Notice Board is a very essential device in any institution / organization or public utility place like bus stations, railway stations and parks. The main aim of this project is to design an SMS driven automatic display which reduces the manual operation The information can in turn be updated instantly at the desired location. Updates can be done in individual displays without disturbing other displays.

The message to be displayed is sent as an SMS to a GSM receiver module. This message is then stored in PC and is sent to the LCD displays through the We preferred ARM over PICK because of its faster espouse I. E. It operates at

a speed of 60 MHz and also due to its interrupt priority feature. It consumes less power and is used in applications where miniaturization is of paramount importance. Since we are using both the Arts it is necessary to prioritize the event occurring in the controller. A real-time clock which operates at 32 KHz is in-built in the controller. B.

LCD A xx character LCD with black text on green background display is used. Being sufficiently wide it serves the purpose of a notice board display screen. It operates at 5V DC with a duty cycle of 1/16. Multiple SINS (Print) : 2278-8948, volume-2, Issue-3, 2013 58 LCD displays are used among which any one display can be chosen for displaying the notice. We use a maximum of three LCD in this project. Stylus. Tapping a specific point on the display will activate the virtual button or feature displayed at that location on the display. We have used a resistive touch screen along with the graphical LCD.

Thus the touch panel is used to scroll back and forth between the messages.

The previous messages are stored in the computer for future reference. C.

GRAPHICAL LCD Besides writing text, this serial graphic LCD allows the user to draw lines, circles and boxes, set or reset individual pixels, erase specific blocks of the display, control the backlight and adjust the baud rate. 128x64 LCD is divided equally into two halves. Each half is controlled by a separate controller present within itself. III. MODULES A. Module 1 In this module the controller is interfaced with displaying unit.

The displaying unit consists of LCD and a graphical LCD. The message for this unit comes from an authorized mobile phone using GSM technology. D.

SIMI 300 GSM MODULE A GSM modem is a specialized type of modem which

accepts a SIMI card, and operates over a obstruction to a mobile operator, Just like a mobile phone. From the mobile operator perspective, a GSM modem looks Just like a mobile phone. These GSM modems are most frequently used to provide mobile internet connectivity, many of them can also be used for sending and receiving SMS and MS messages.

We have used SIMIAN GSM module. It is an Advanced Low cost modem for wireless GSM communications which includes sending and receiving text messages. E. AUDIO DRIVER The ohm is the unit of measure for impedance, which is the property of a speaker that restricts the flow of electrical current through it. Typical speakers have The ohms rating of the speaker indicates how much energy it takes to drive it - the higher the ohms rating, the more difficult it is to drive. In our project we have used 8 ohms speaker to alert whenever an event takes place.

Fig. 1 : Block diagram for displaying F. IV TOOL Visual Basic (IV) [7] is a programming environment and language, which based the language on an existing version for beginning programmers, BASIC. Prior to IV, programmers wrote programs in the C or C++ programming language, which had no built-in support for accessing Windows functions. IV does have ouch support as part of its object-oriented programming approach. In our project we use IV for storing large amount of information. The controller gets the required information from the computer using IV.

The information will be in any one of the following form such as images, students mark and the messages received. G. TOUCH PANEL Touch-screens are typically found on larger displays, in phones with integrated PDA

features. Most are designed to work with either your finger or a special Fig. 2 : Flowchart 59 International Journal of Advanced Electrical and Electronics Engineering, (JAKE) B. Module 2 V. RESULTS This module consists of a speaker and a real time clock. The speaker is used to announce the event of arrival of new information.

An interrupt is generated every time a message is received and a pre-recorded message is announced by the speaker. A real time clock runs within the system which records the timing detail The code was written in Keel and then was simulated using Proteus simulator. The results were satisfactory we went about with the hardware implementation part. The hardware part was also implemented using a decoder board for the choosing among the multiple LCD and the speaker part was also implemented successfully.