

# USER ACCESS CONTROL SYSTEM WITH RESPECT TO THE SMART PHONE USING BLUETOOTH TECHNOLOGY

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## ABSTRACT

*This project "A Very Simple User Access Control Technique through Smart Devices Authentication using Bluetooth Communication" is a easy and relatively low cost large scale adoption of smart tool like clever cellular telephones for private usage have opened up an possibility to discover people via their device identities. This undertaking pursuit to put into effect simple technique of person's get right of entry to control through device authentication the use of a microcontroller board along with ARM processor that interacts with the smart tool the usage of Bluetooth generation which is sort of available in each clever tool. This technical manner is mentioned through the experimentally. As a methodology of secured verbal exchange, password safety is used inside the mobile apps. Some viable utility regions are discussed in which the proposed era may be used to allow appropriate offerings. The novelty of the work is presents an easy and occasional cost solution for users gets admission to in a secured included area. In addition, the proposed authentication mechanisms are intuitive and require minimum effort.*

**Keywords: - Arm 7, L293d Driver IC, Dc Motors, Bluetooth Module**

## I. INTERDUCTION

This Bluetooth technology is developed in security system. This security is required and proposed system with controlled home or office. If any devices operated with operating to Bluetooth controlling of hand rid mobile phone .so it will be connected with wire-less Bluetooth module.

## II. PROPOSED SYSTEM

In proposed system the user can access or control the devices remotely using Bluetooth communication, here Bluetooth is the device and the Bluetooth can be connected through mobile phone. Here Bluetooth device directly connected through controller of the project, and this Bluetooth interfaced wireless communication or Bluetooth communication, the devices are operated or controlled remotely wireless Bluetooth communication.

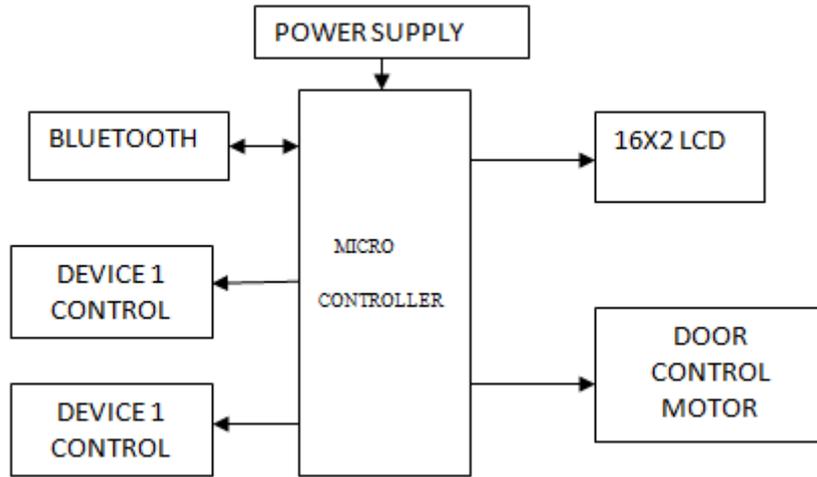


Fig : Block diagram

### III. LPC2148 MICROCONTROLLER

The ARM7 (advanced RISC machine) processors board primarily based whole on a 16/32-bit ARM7 its method of 16/32-bit ARM7 TDMI-S microcontroller, 8 computer memory unit to forty computer memory unit of on-chip static RAM and 32 computer memory unit to 512computer memory unit on-chip flash memory; 128-bit In- system Programming (ISP). 32-bit timers/outside event counters, PWM pulse width modulation unit (six outputs) and watchdog, Low strength of actual-Time Clock (RTC), more than one serial interfaces which has 2 UARTs , rapid I2C-bus (400kbit/. There are sixty four pins of ARM7 processor and 2 ports (port0, port1) 45 pins are input/output.

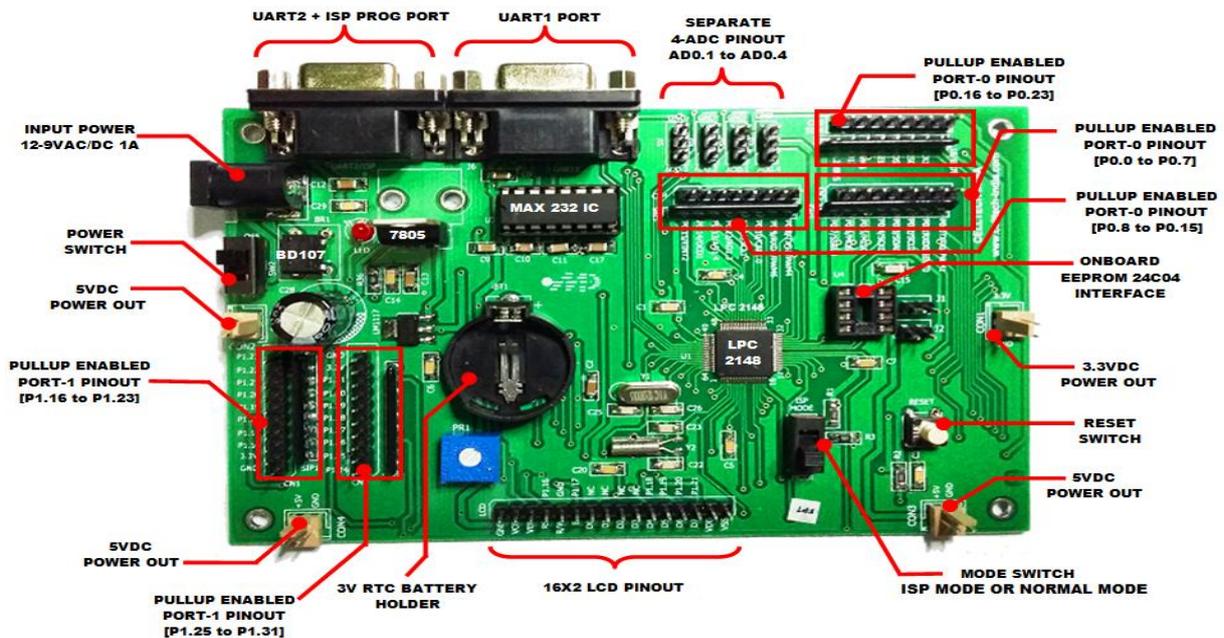


Fig 2: Arm 7 Board

### 3.1 Bluetooth

Bluetooth technology to convergence of data/voicedevice. Bluetooth is a wireless protocol utilizing short range communication technology of data transmission in fixed and mobile devices.in these Bluetooth devices in creating of wireless networks (PAN).these Bluetooth development was creation of single digital wireless protocol. Bluetooth uses a very robust radio technology called frequency hopping spread spectrum. It chops up the data being sent and transmits chunks of it on up to 75 different frequencies.

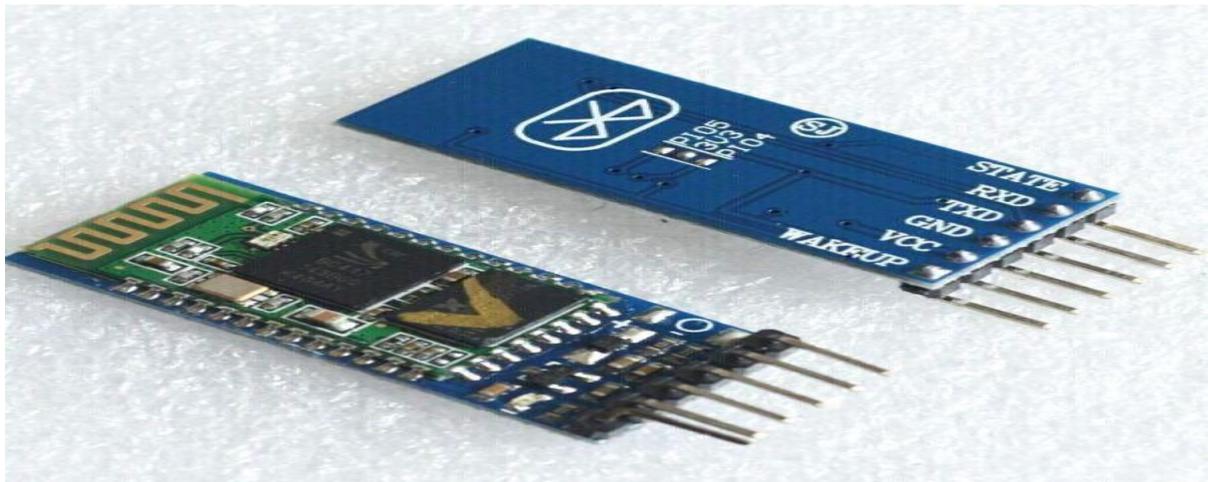


Fig 3: Bluetooth module

### 3.2 Relay

A relay is an electrical switch that opens and closes under the control of another electrical circuit. In the original form, the switch is operated by an electromagnet to open or close one or many sets of contacts. A relay is able to control an output circuit of higher power than the input circuit, it can be considered to be, in a broad sense, a form of an electrical amplifier.

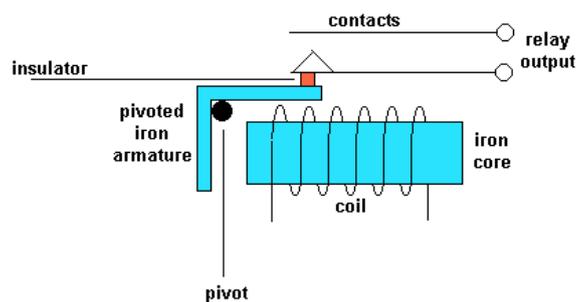


Fig4: relay

## IV. SOFTWARE DESIGN

To finish the undertaking on equipment need to installed programming on to the controller utilized as a part of this venture for that reason we need programming's similar to Kiel u vision and glimmer enchantment those are examined in given beneathCode are frequently adjusted and accumulated on a brisk host machine, (for example, a tablet or working framework workstation) and in this way the resulting feasible code will then be downloaded

to the objective to be tried. Cross compilers square measure helpful at whatever point the host machine has a ton of assets (memory, circle, I/O and so on) than the objective. Kiel compiler is one such compiler that backings a gigantic assortment of host and target blends. With this project you'll have the capacity to delete individual squares or the entire non volatile stockpiling of the microcontroller.

## V. WORKING OF PROJECT

This project “**User Access Control System With Respect To The Smart Phone Using Bluetooth Technology**” is an easy and large scale adoption of smart gadgets like android mobile phones for personal usages had unfolded an offer to identify individuals thru their clever device identities. This mission aims to put into effect very simple approach of person's access controlled through tool authentication the use of a microcontroller board such as ARM processor that interacts with the smart tool the use of Bluetooth technology that's total availability in every clever tool. The implementation manner is discussed through the experimentation. As a methodology of secured generation, password protection is used in mobile apps. A few viable application areas are mentioned wherein the proposed technology may be implemented to allow offerings. The finished of these paintings is to offer a simple and occasional price solution for users' get entry to in secured blanketed vicinity. Further, the proposed authentication mechanisms are intuitive and require minimal effort.

### 5.1 Results

Here the results are shown our project “User Access Control System With Respect To The Smart Phone Using Bluetooth Technology” whenever security device to simple user access to control door security and wireless to connect android mobile phone app with Bluetooth to control devices.

## VI. CONCLUSION

In these project user access control technique through smart device authentication has successfully designed and testing. In all hardware components it's developed by integrating features are used presence of every components reasoned placed carefully checkout in outputs. It's as highly advanced IC with help of technology the project has been successfully.

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