**ANTI-THEFT ALARM SYSTEM**

**DESCRIPTION:**

Security is the primary concern for everyone. This project is used to develop the anti theft alarm system using 8051 micro controller. This project is useful in all applications where we need security alert. Use of embedded technology makes this closed loop feedback control system efficient and reliable. Micro controller (AT89C51) allows dynamic and faster control. AT89C51 micro controller is the heart of the circuit as it controls all the functions.

Security is the major concern for everyone and everywhere. Even a common man tries to provide security to his wealth and bank accounts etc. This project uses the wireless concept IR to implement this application. The IR transmitters and receivers will be placed such a way that they face each other. That is, the IR receiver receives the light continuously emitted by the IR transmitter. Whenever any person enters into the room the receiver will not receive the light, then a buzzer will turn on. This kind of arrangement will be made at the entrance of the confidential rooms .Here we monitor two sensors status. The outputs coming out from various receivers will be sent to the micro controller.

The micro controller continuously monitors the status of the IR receivers. The system continuously monitors and immediately activates the buzzer system if any sensor trigger.LCD will be used to show the status of the sensors.

This project uses regulated 5V, 500mA power supply. 7805 three terminal voltageregulator is used for voltage regulation. Full wave bridge rectifier is used to rectify the ac output of secondary of 230/12V step down transformer.

# TECHNICAL SPECIFICATIONS:

**HARDWARE:**

Micro controller : AT89x series

Crystal : 11.0592 MHz

LCD : HD44780

IR transmitter

IR receiver

Buzzer

**SOFTWARE:**

Keil IDE

UC flash

Proteus

Power supply

Transformer : 12V step down

Filter : 1000uf/25V

Voltage Regulator : 7805, 7812

**APPLICATIONS:**

* Industrial applications
* House hold applications
* security applications

**BLOCK DIAGRAM:**

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IR receiver

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16X2 LCD

Power Supply

IR transmitter1

IR transmitter2

IR receiver 2

Buzzer

**POWER SUPPLY BLOCKDIAGRAM:**

Step down Transformer

Filter

Regulator

Output

Bridge Rectifier