**HIGH SECURITY WINDOWS USING MICROCONTROLLER**

**DESCRIPTION:**

Security is primary concern for everyone. There are many ways to provide security at homes or in industries. This Project describes a design of effective security alarm system that can monitor an Industry/Domestic by using various sensors for statement.

The project is designed and implemented in such a way that we interface IR sensors to the microcontroller. These IR sensors are attached to windows; the microcontroller continuously checks the status of the IR sensors. If the sensor activated by a person or any object entering through security windows, automatically it displays the status data on the LCD and a buzzer interfaces to the controller serves the purpose of the alarm. So the people can alert by warning sounds and can proceed further.

This project uses regulated 5V, 500mA power supply. 7805 three terminal voltage regulator 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 Sensors

Buzzer

**POWER SUPPLY**

Transformer : 12V step down

Filter : 1000uf/25V

Voltage Regulator : 7805, 7812

**SOFTWARE:**

Keil IDE

UC flash

Proteus

**APPLICATIONS**

* Industrial applications
* Household applications

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**BLOCK DIAGRAM:**

Power Supply

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16X2LCD

IR

SENSORS

BUZZER

**POWER SUPPLY BLOCKDIAGRAM:**

Step down Transformer

Filter

Regulator

Output

Bridge Rectifier