**ENERGY SAVING SYSTEM FOR RAILWAY PLATFORM**

**AIM:**

The main aim of the project is to save the energy for the railway platforms for the efficient energy usage with the entry and exit of time storage.

**PURPOSE:**

The purpose of the project is to on and off the lights when those are not necessary to be on for the railway platform with entry and exit time storage of last train for the display.

**HOME SECTION:**

**POWER SUPPLY**

**LCD DISPLAY**

**(16 X 2 LINES)**

**IR RX1**

**IR TX1**

**IR TX2**

**IR RX2**

**LEDs**

**PC**

**RTC**

**MICRO CONTROLLER**

**AT89S52**

**Power Supply:**

**STEP DOWN**

**TRANSFORMER**

**BRIDGE**

**RECTIFIER**

**FILTER**

**CIRCUIT**

**REGULATOR SECTION**

**DESCRIPTION:**

The main purpose of the project is to save the power for the railway with efficient usage. This project is best suitable for railway platforms. In this project generally Microcontroller will leave some of devices are in on state and some of devices in off state.so that power consumption in railway is saved. If the train is entering to the station, is identified by the IR sensor and sends the information to the microcontroller. In that case based on the conditions of the weather DAY or NIGHT all the bulbs on the platform OFF or ON are on by the controller. All the necessary devices based on either DAY or NOT will be on by the microcontroller. Whenever the train is leaving from the station, is identified by the IR sensor and sends the information to the microcontroller. Microcontroller will leave some of basic devices are in on state and some of them in off state. So that power on railway platforms is saved here.

**HARDWARE COMPONENTS:**

* Microcontroller(AT89S52)
* IR sensors
* RTC
* Power supply
* PC
* LCD
* LED’s

**SOFTWARE:**

1. Kiel U vision
2. Embedded ‘C’
3. Express PCB
4. ISP

**APPLICATIONS:**

* Railway platforms

**RESULT:**

By using this we can save the power for the railway platforms.