L&T Technology Services

Document History

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Auto Intensity Control of Street Lights

Introduction:

In this project i want to domenostrate how a street light intensity can be controlled using ldr(light dependent Resistor) and Rtc(Real Time clock) according to the time and environment.

REQIREMENTS:

High level Requirements

- it calculate intensity.
- It calculates the time.
- It should display time.
- it should have lights

Low level Requirements

Low Level Requirements for HL1

Llr1: It shall have the light sensor and calculate the intensity.

Llr2 : It connects to adc.

Low Level Requirements for HL2.

Llr1 : It shall clock and it calculate time

Llr2 : It connected to input pin

Low Level Requirements for HL3

Llr1: It have lcd and it display time

Llr2 : It connect to input

Low Level Requirements for HL4

Llr1 : It should have led relays

Llr2 : It connect to port.

Components Required

Power supply : it

LDR: Light dependent resistor is used to calculate the intensity of light

LCD: Lcd is used to display the time which read from ic RTC:

Real time clock is used for to calculate the current time.

LED: It gives the output according to the input from the cicuits

MICROCONTROLLER: it is used to control all the circuits..

4w's and 1H?

Where?

It should used in traffics and in highway roads, etc.. to control the intensity .

What?

It should controls controls the light.

When?

it will be used when we want to save the power in peak times.

WHY?

By using this we can save power.

How?

WE use this as a controller it control the intensity of light

Swoot Analysis?

strengths?

we can control 24/7.

it detects the intensity.

weeknees?

in some cases detects false intensity.

oppertunites?

we can save more more power.

Threats?

It may damages the microcontroller sometimes.

ldr may caluclates some false intensity.