

AC FAN SPEED CONTROL WITH PWM

AIM:

Design and Development of AC Fan Speed Control with PWM.

PURPOSE:

In many applications AC fans used. Especially for cooling applications like chillers, incubator cooling systems and many more. For cooling applications, heat should control according to requirement. To do this we should control AC fan speed. Here we are doing this with Arduino PWM. Here project title is AC Fan Speed Control with PWM.

DESCRIPTION:

This project includes three buttons, which are connected to Arduino digital pins. AC fan controlled by BT136 triac which is connected to Arduino digital pin.

WORKING:

Here we can control AC fan speed using Arduino PWM. PWM will vary based on buttons pressing at Arduino. We can increment and decrement speed values with buttons. Based on speed value PWM technique performed in Arduino code to regulate AC fan speed. There is stop button, using this we can OFF fan at any time. FAN speed information will display on 16X2 LCD display.

TECHNICAL SPECIFICATIONS:

HARDWARE:

Microcontroller	:	Arduino Uno
Crystal	:	16 MHz
LCD	:	16X2 LCD
AC FAN	:	230V AC
TRIAC	:	BT136
Power Source	:	12v 2 amp Adaptor

SOFTWARE:

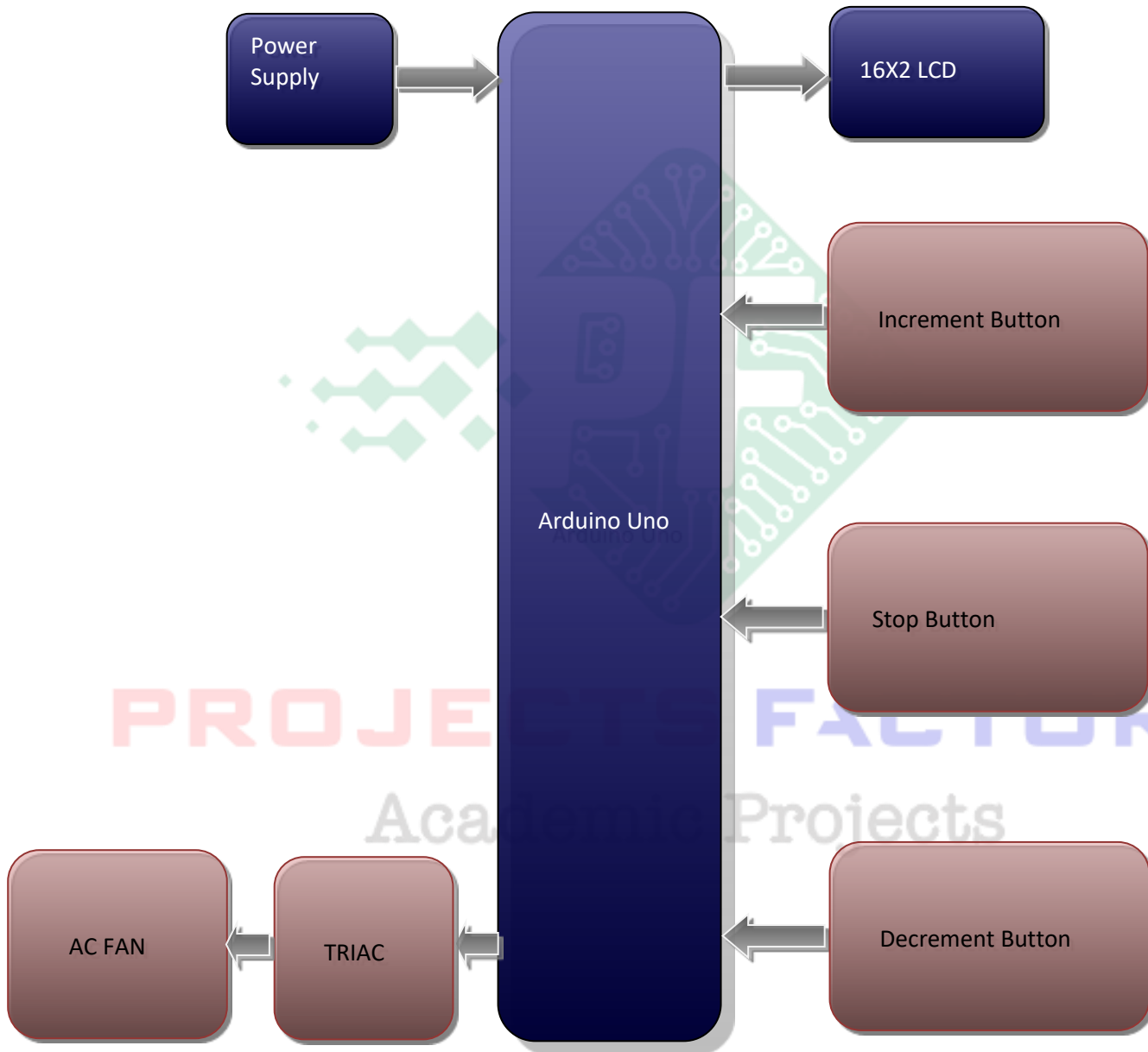
Arduino IDE
Proteus based circuit diagram

APPLICATIONS:

- Cooling Systems
- Chiller Applications

PROJECTS FACTORY
Academic Projects

BLOCK DIAGRAM:



POWER SUPPLY BLOCKDIAGRAM:



INTERFACES COVERD:

- BT136 TRIAC and AC Fan Interface



PROJECTS FACTORY
Academic Projects