AC FAN SPEED CONTROL USING ANDROID

AIM:

Design and Development of AC Fan speed control using Android.

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 Android Application. Here project title is AC fan speed control using Android.

DESCRIPTION:

This project includes Bluetooth module (HC-05), which is 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 Bluetooth. Bluetooth module can communicate with Android App. Android Application installed in smart mobile which has provision of few buttons. When we press buttons it will send commands to Bluetooth. Based on commands PWM technique performed in Arduino code to regulate AC fan speed. FAN speed information will display on 16X2 LCD display.

TECHNICAL SPECIFICATIONS:

HARDWARE:

Microcontroller	:	Arduino Uno
Crystal	:	16 MHz
LCD	:	16X2 LCD
Bluetooth Module	:	HC-05
AC FAN	:	230V AC
TRIAC	:	BT136
Power Source	:	12v 2 amp Adaptor

SOFTWARE:

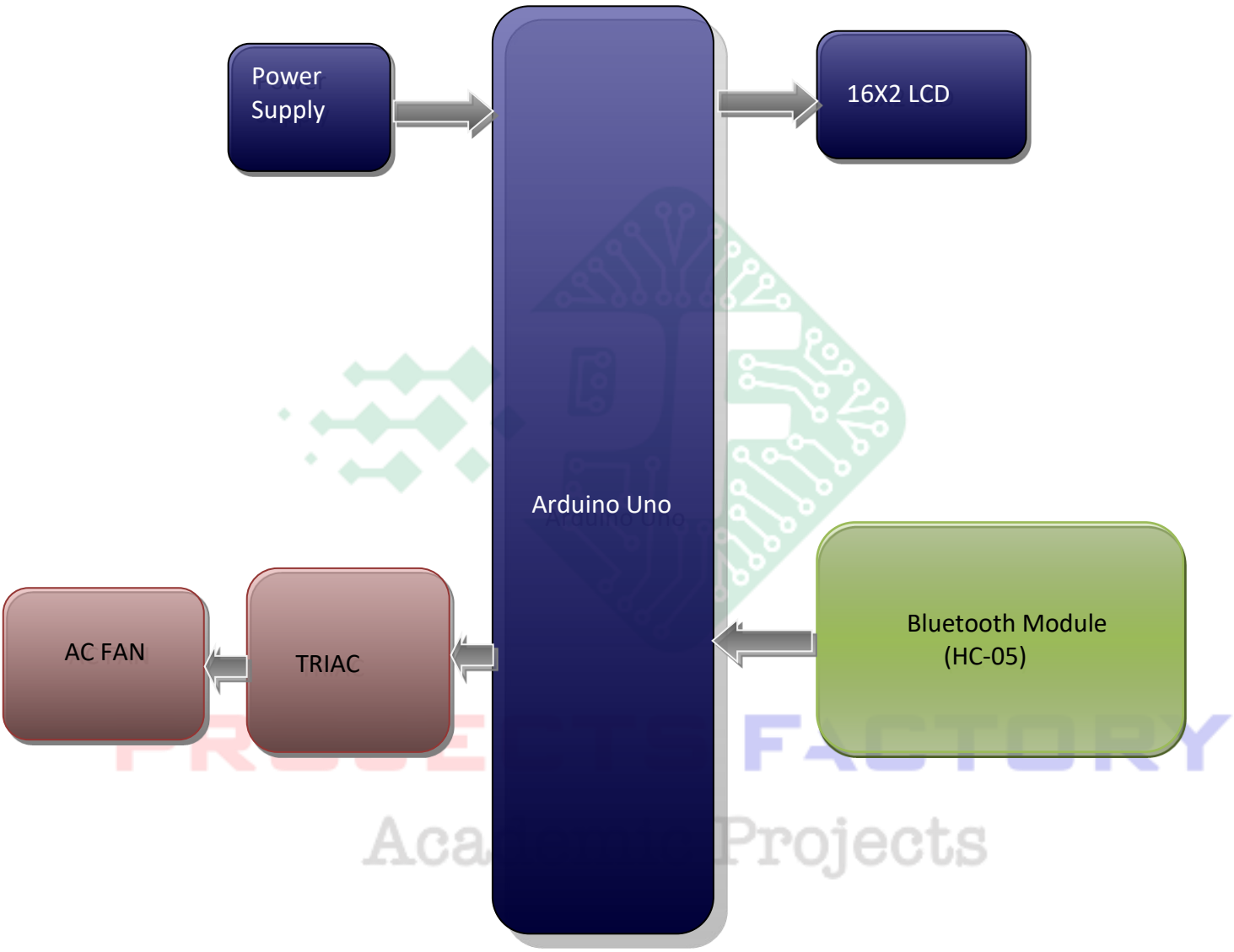
Arduino IDE

Proteus based circuit diagram

APPLICATIONS:

- Cooling Systems
- Incubator Applications
- Hydroponic applications
- Chiller Applications

BLOCK DIAGRAM:



POWER SUPPLY BLOCKDIAGRAM:

INTERFACES COVERD:

- We have covered Bluetooth module (HC-05) Interfacing
- BT136 Triac and AC Fan Interface