

GSM BASED AC FAN SPEED CONTROL WITH PWM

AIM:

Design and Development of GSM based 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 GSM Application. Here project title is GSM based AC fan speed control using PWM.

DESCRIPTION:

This project includes GSM module (SIM800C), 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 GSM. GSM module works with AT commands these AT commands establish communication between mobile networks to GSM modem. User has to send commands to GSM modem. 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
GSM Module	:	SIM800C
AC FAN	:	230V AC
TRIAC	:	BT136
Power Source	:	12v 2 amp Adaptor

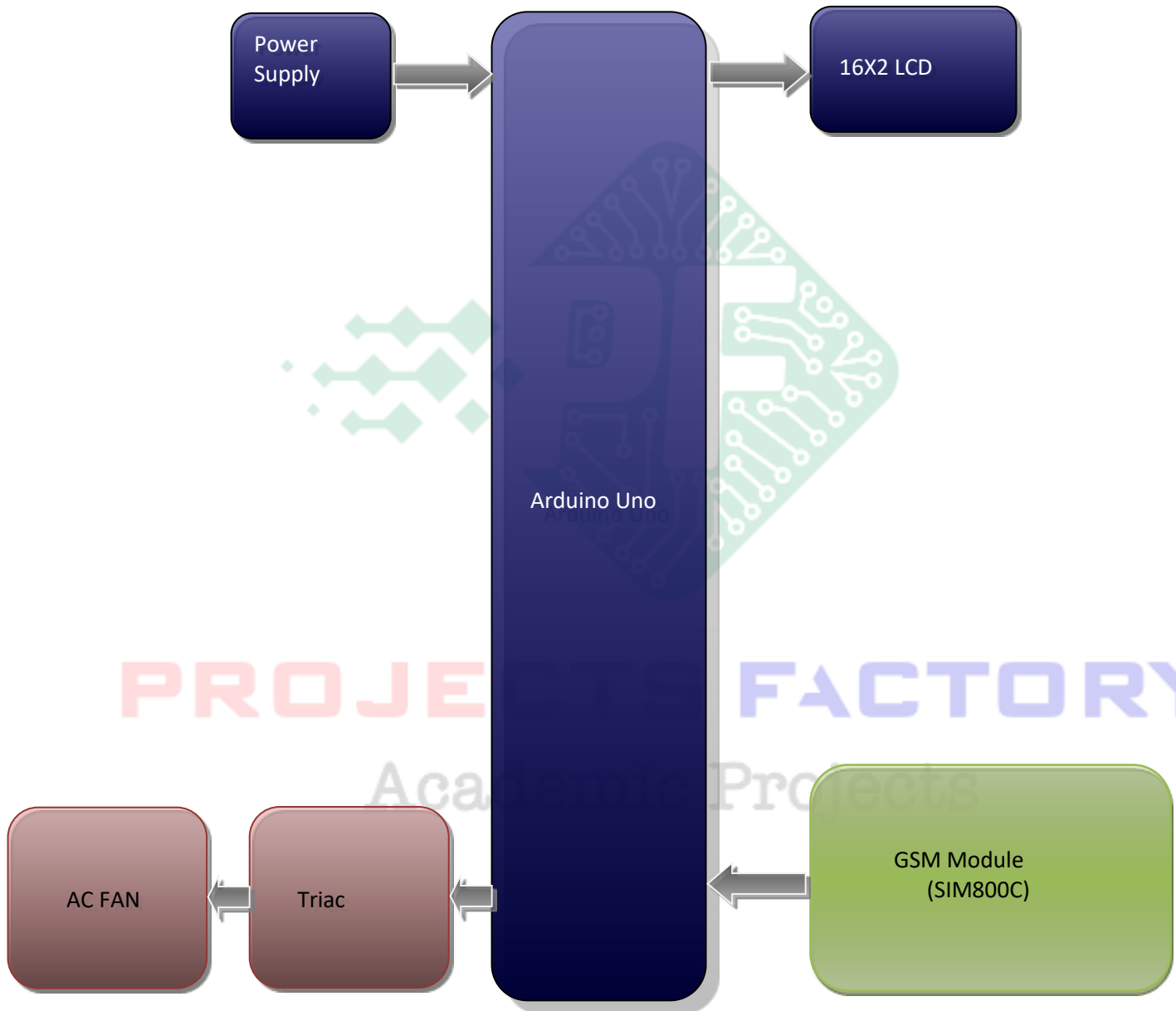
SOFTWARE:

Arduino IDE
Proteus based circuit diagram

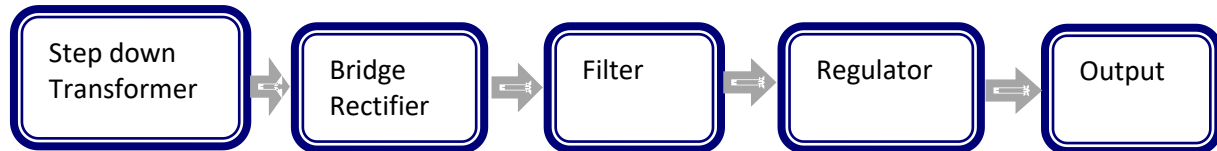
APPLICATIONS:

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

BLOCK DIAGRAM:



POWER SUPPLY BLOCKDIAGRAM:



INTERFACES COVERED:

- We have covered GSM module (SIM800C) Interfacing
- BT136 Triac and AC Fan Interface

PROJECTS FACTORY
Academic Projects