

## DTMF BASED AC FAN SPEED CONTROL

### AIM:

Design and Development of DTMF based AC fan speed control.

### 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 DTMF circuit. Here project title is DTMF based AC fan speed control using Arduino.

### DESCRIPTION:

This project includes DTMF module (CM8870), 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 DTMF. Mobile phone connected to DTMF circuit through audio cable. From another mobile call should establish to communicate with DTMF circuit. After answering call user can press dial pad buttons to control AC fan Speed. 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
DTMF Module	:	CM8870
AC FAN	:	230V AC
TRIAC	:	BT136
Power Source	:	12v 2 amp Adaptor

### SOFTWARE:

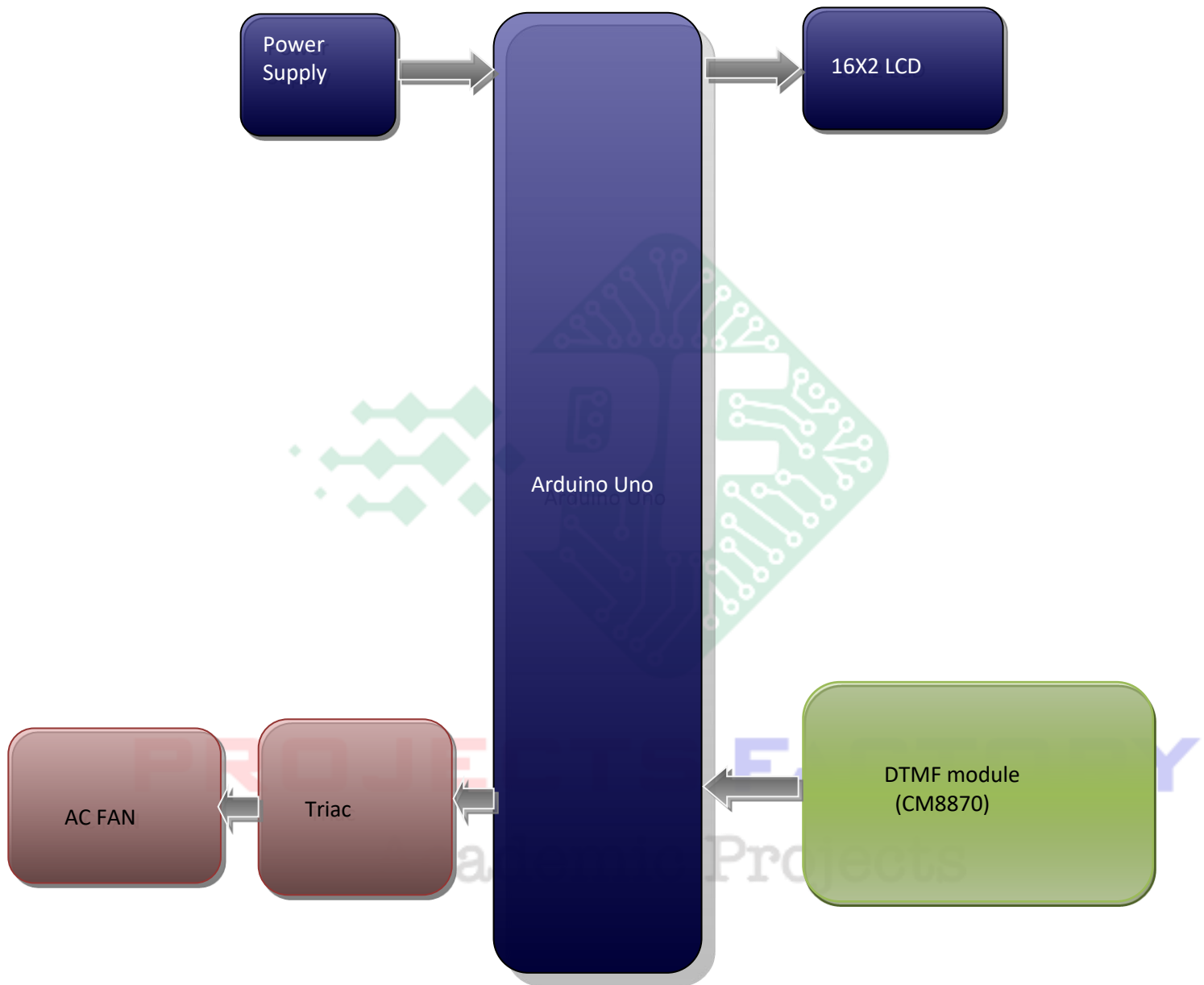
Arduino IDE  
Proteus based circuit diagram

### APPLICATIONS:

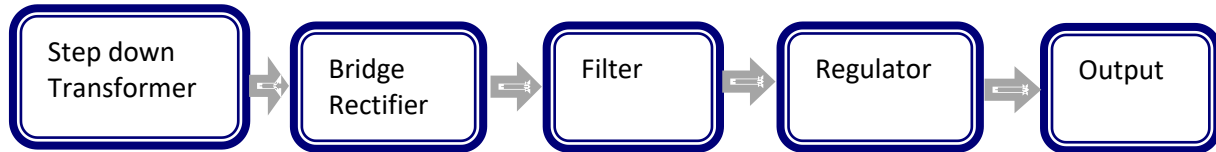
- Cooling Systems
- Chiller Applications

**PROJECTS FACTORY**  
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## BLOCK DIAGRAM:



## POWER SUPPLY BLOCKDIAGRAM:



## INTERFACES COVERED:

- We have covered DTMF module (CM8870) Interfacing
- BT136 Triac and AC Fan Interface



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