

ARDUINO VOICE CONTROL ROBOT

AIM:

Design and Development of Arduino voice control Robot.

PURPOSE:

Robotic applications play a major role in all fields. Especially for industrial applications, robots bring a lot of advantages. We can save a lot of time and money. Not only for industries, but also for home needs also. Voice control robots are very smart and work based on voice commands. Here we want to implement a wireless based Arduino voice control robotic car.

DESCRIPTION:

H-bridge L293d connected to Arduino digital pins. It can drive robot motors in various directions. Bluetooth module (HC-05) connected to Arduino serial port.

WORKING:

We can control the robot with voice commands. A Bluetooth app can convert voice signals to data and transmit to the Bluetooth module. This Bluetooth module is placed on the robot's Arduino board. The Bluetooth app performs its functionality in a smart phone. The Bluetooth app and Bluetooth module communicate through wireless. Robot moving direction information will be displayed on the LCD display.

TECHNICAL SPECIFICATIONS:

HARDWARE:

Microcontroller	:	Arduino Uno
Crystal	:	16 MHz
LCD	:	16X2 LCD
H-Bridge	:	L293D
Bluetooth Module	:	HC-05
Driving Motors	:	DC gear motor
Power Source	:	12v 2 amp Adaptor

SOFTWARE:

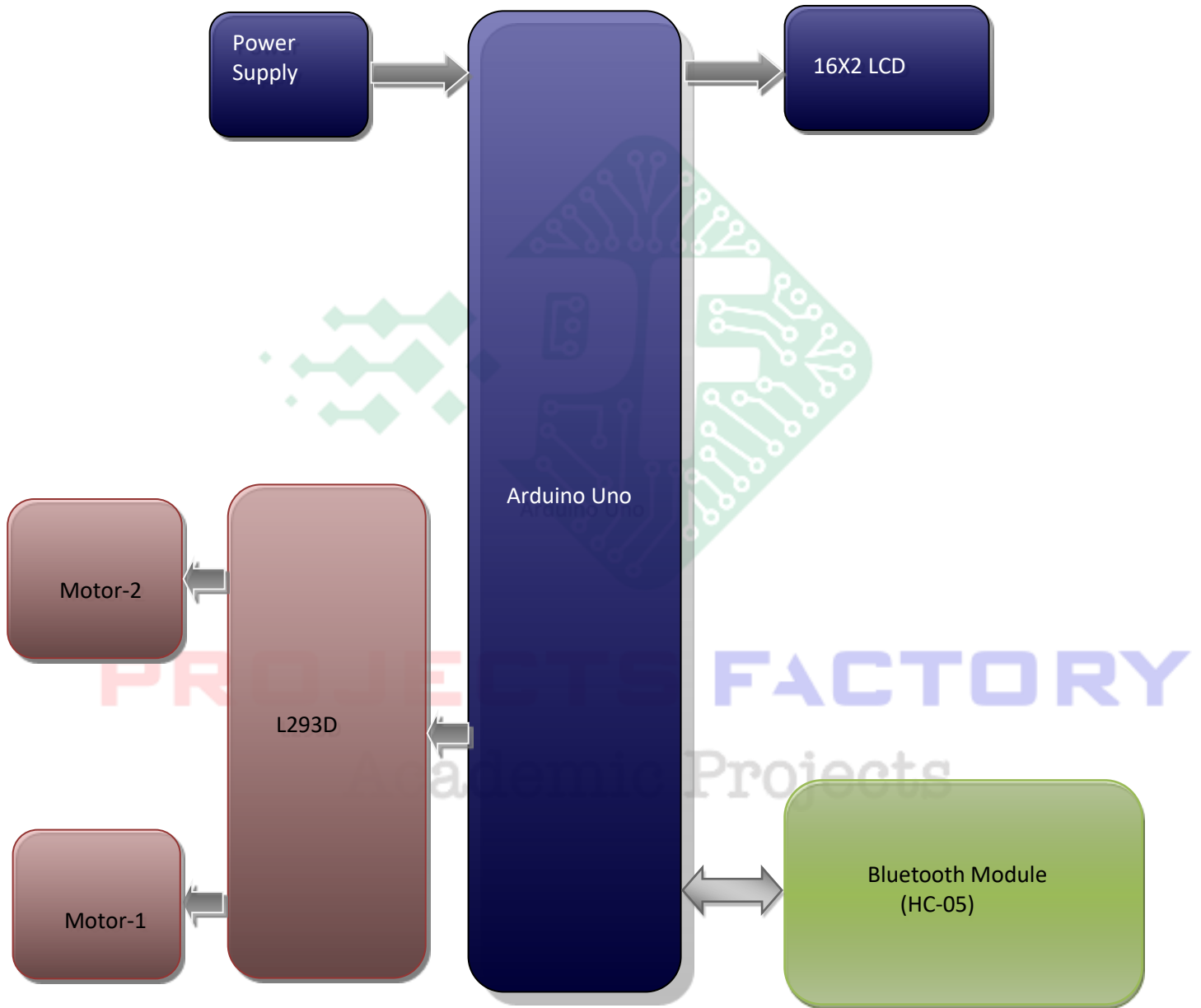
Arduino IDE
Proteus based circuit diagram

APPLICATIONS:

- Android Robot
- Voice control robot
- Bluetooth Robotic application

PROJECTS FACTORY
Academic Projects

BLOCK DIAGRAM:



POWER SUPPLY BLOCKDIAGRAM:



INTERFACES COVERED:

- We have covered Bluetooth module (HC-05) Interfacing
- H-Bridge and DC gear motors interface

PROJECTS FACTORY
Academic Projects