

## LIVE VIDEO MONITORING ROBOT CONTROLLED BY WEB

### AIM:

Design and development of live video monitoring robot controlled by web.

### PURPOSE:

Robotics plays major role in daily activities. Controlling of robot in different ways like RF, Zigbee and other wireless communications. Here we want to develop a robot that can stream live video along with controlling in same channel. To provide this we have used WIFI communication and that can provide both video transmission and robot control. Also it is very inexpensive and high reliable.

### DESCRIPTION:

This project includes ESP32-CAM and it was heart of the project. Two DC gear motors controlled by H-bridge. Here we used L293D as H-bridge. This L293D can drive motors in all directions. L293D connected to ESP32-CAM digital pins. ESP32-CAM placed on daughter board which can have power supply and Max232 DB-9 female connector.

### WORKING:

ESP32-CAM board consists camera and inbuilt WIFI module. Module can be connected to WIFI, through SSID and password. We can open web page with IP address of ESP32-CAM. In this web page video window displaying and controlling buttons to control robot in different directions like front, back, left, right and stop. We can know the Ip address of ESP32-CAM by android App.

## TECHNICAL SPECIFICATIONS:

### HARDWARE:

Microcontroller	:	Esp32-Cam
H-Bridge	:	L293D
DC gear motor	:	60 r. p. m
Power Source	:	12v 1 amp DC battery

### SOFTWARE:

Arduino IDE

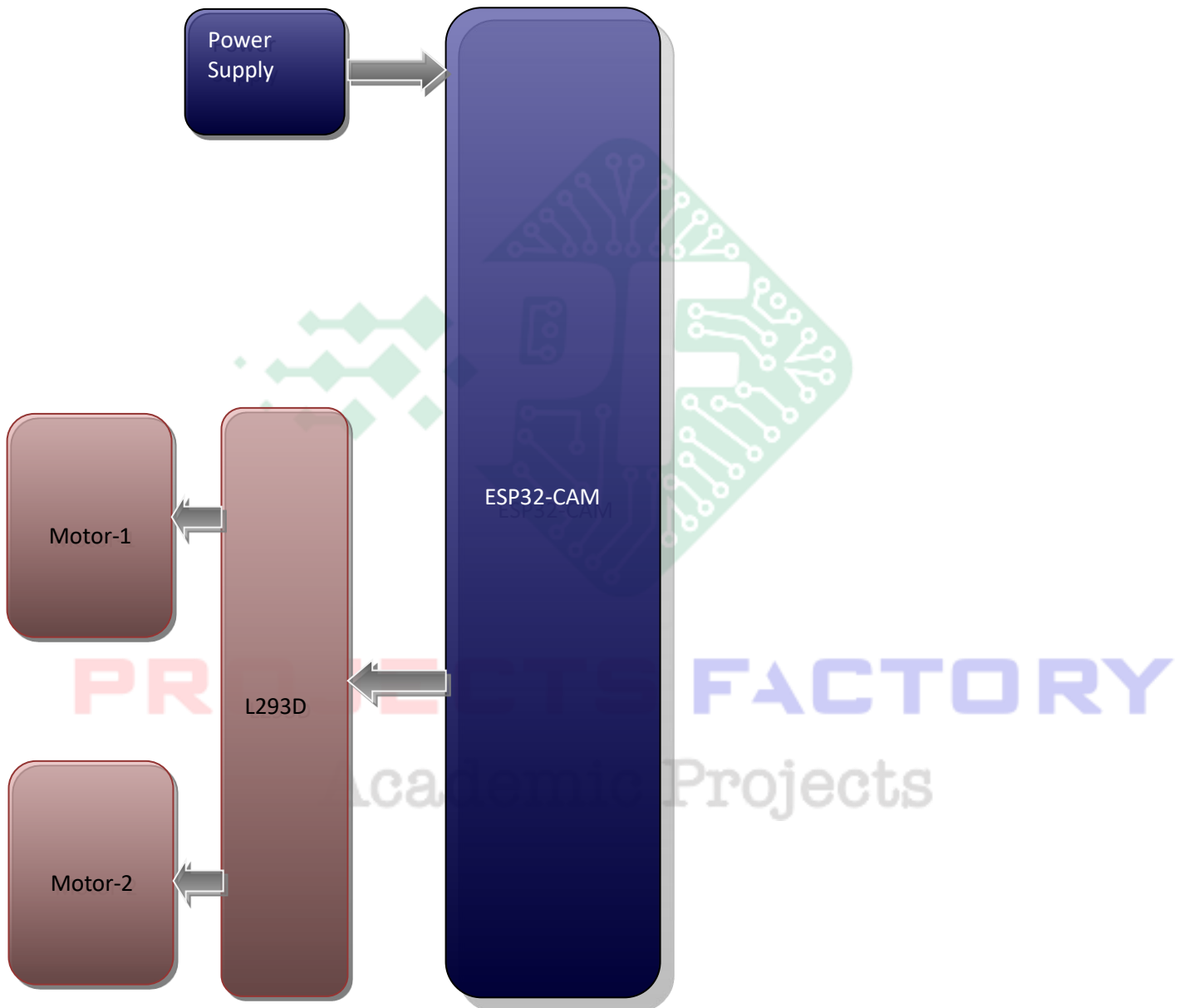
### APPLICATIONS:

- Robotic Applications
- Web page based robots



**PROJECTS FACTORY**  
Academic Projects

**BLOCK DIAGRAM:**



## POWER SUPPLY BLOCKDIAGRAM:



## INTERFACES COVERED:

- We have covered Esp32-Cam
- H-Bridge L293D and DC gear motors



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