DRIVER LESS VEHICLE NAVIGATION SYSTEM

ABSTRACT

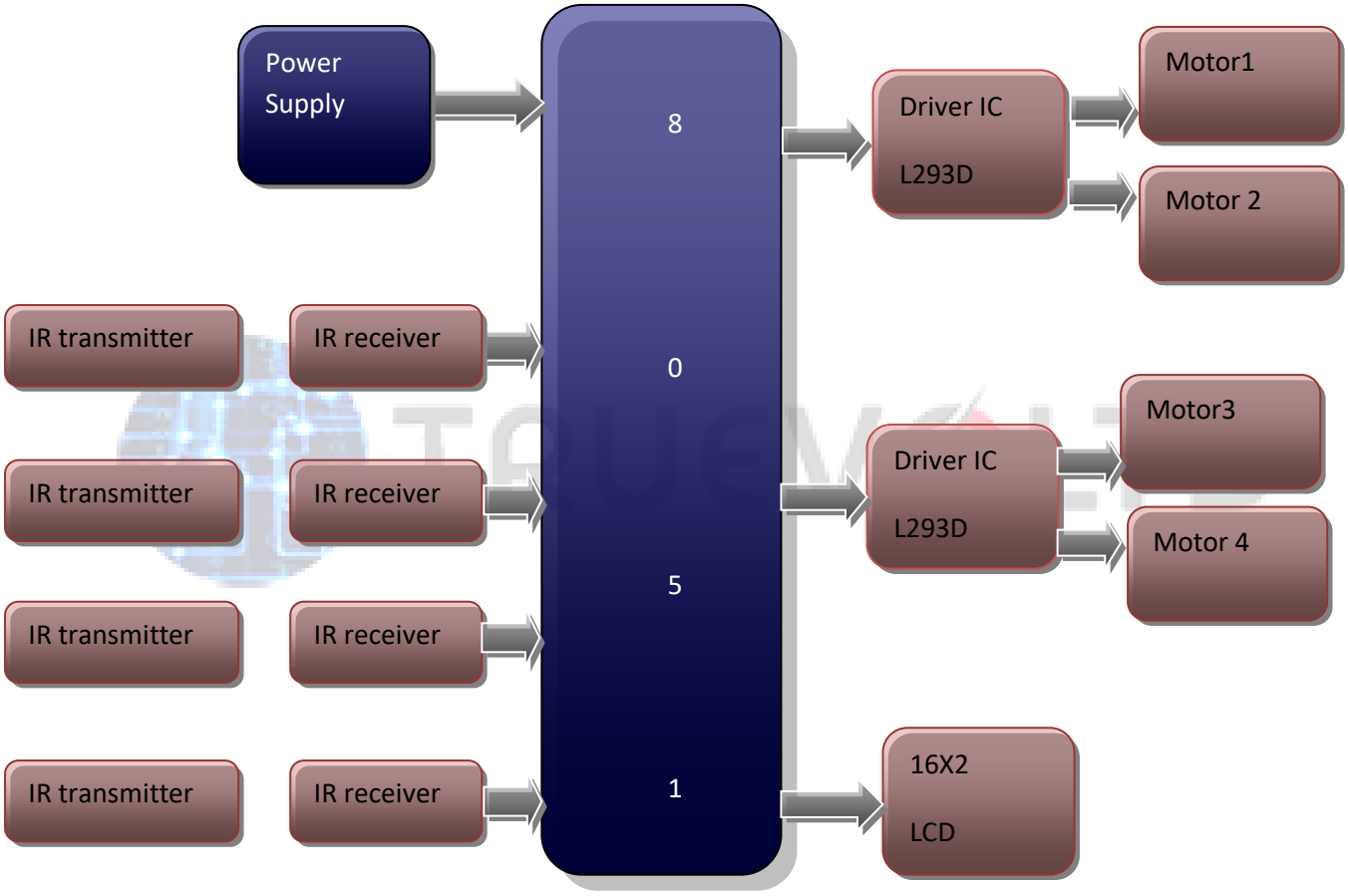
The project is aimed to design a driverless vehicle navigation system through which we can navigate the vehicle without any manual operation. The project is developed through wireless communication of IR. The development of the project involves the interfacing of four IR receivers to an 8051 microcontroller. We set this IR transmitter, receiver pairs at the four wheels of vehicle. At each and every wheel The IR transmitter and receiver pair set side by side. If any obstacle found in front of any wheel, the IR ray transmitted by the transmitter gets reflected and will be received by the receiver , there by the corresponding signal passes to the controller so that the controller is an intelligent device which takes a wise decision of changing the direction of vehicle. Likewise, the process repeats for the 4 wheels of the vehicle if any obstacle detects, to navigate the vehicle without a driver. Here the DC motors are interfaced to the controller through the driver IC L293D and LCD is provided to display the status of the vehicle.

This project uses regulated 5V, 500mA power supply. 7805 three terminal voltage regulator is used for voltage regulation. Bridge type full wave rectifier is used to rectify the ac output of secondary of 230/12V step down transformer.

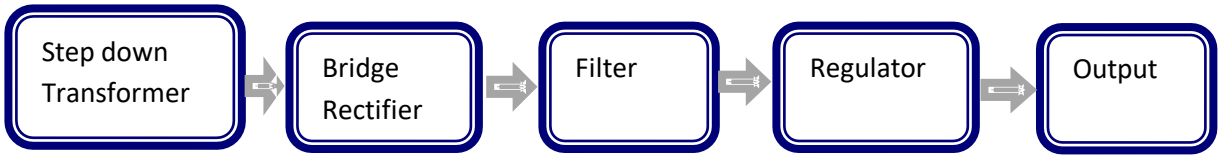
APPLICATIONS:

- Automation
- Driving for PHC

BLOCK DIAGRAM:



POWER SUPPLY BLOCKDIAGRAM:



A1, 2nd FLOOR, EUREKA COURT, KS BAKERY BUILDING, OPP. R.S.BROTHERS LANE, AMEERPET,
HYDERABAD,TELANGANA-500073.
Call: +91 9908665239 email: info@truevolts.com
Website: www.truevolts.com