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# THREE AXIS ROBOTIC ARM FOR INDUSTRIES

## ABSTRACT

The aim of this project is designed to pick the different objects using robotic hand and place it on a plotted place within its vicinity. Robot is a system that contains sensors, control systems, manipulators, power supplies and software all working together to perform a task. Designing, building, programming and testing a robot is a combination of physics, mechanical engineering, electrical engineering, structural engineering, mathematics and computing.

In this project the robot is fixed with a mechanical arm which acts like human hand. This robot is having a motor at bottom side to move the arm in Z-axis. Extra two DC gear motors are connected to arm, to pick and place any object from one place to another place that are X-axis and Y-axis. These three DC gear motors are controlled by RF remote. This RF remote is connected to microcontroller with array of eight switches. According to switches activation corresponding action will performed at the robot side. Every switch is specified for its own unique operation. These DC gear motors are controlled through L293D driver.

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.

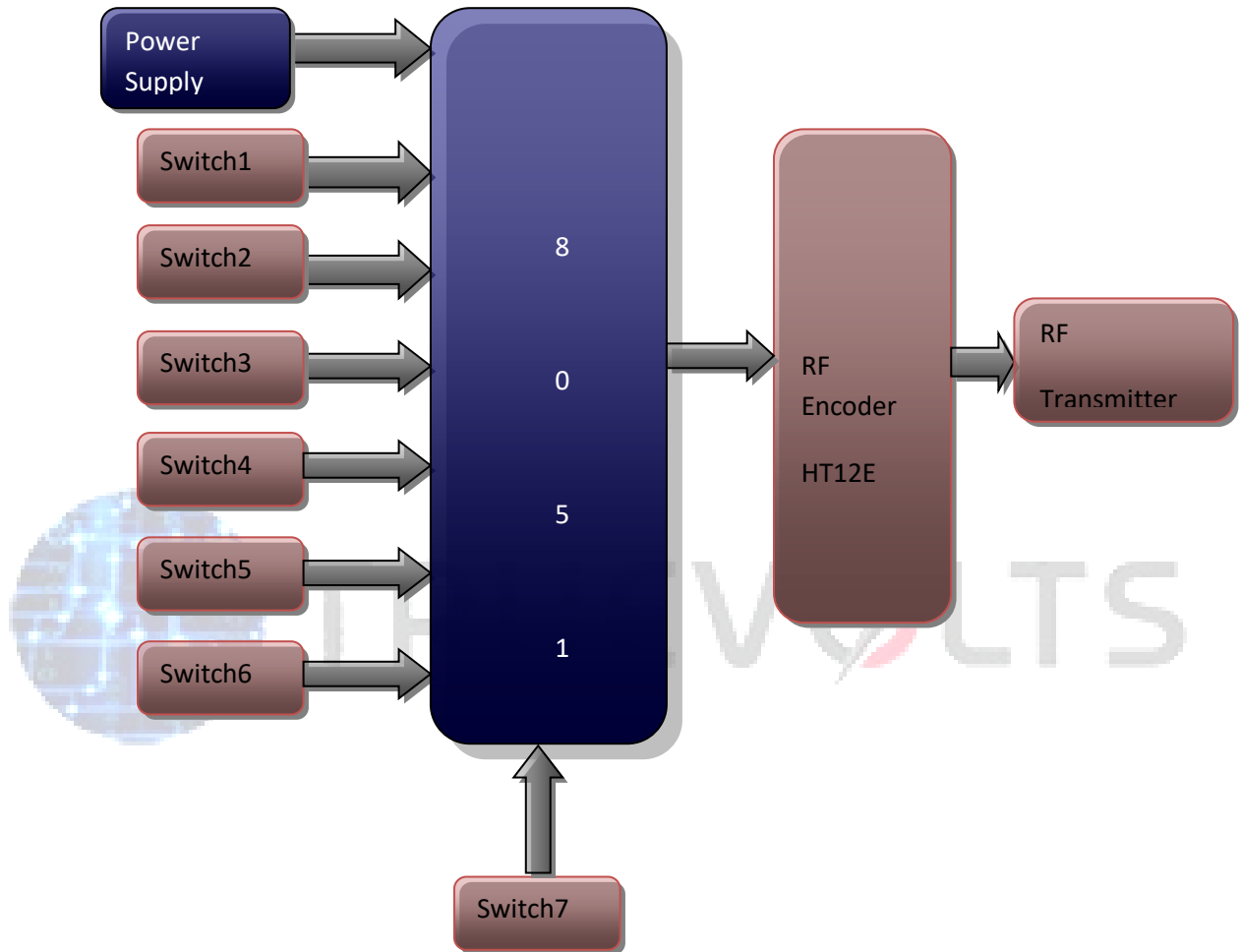
## APPLICATIONS:

- Industrial applications

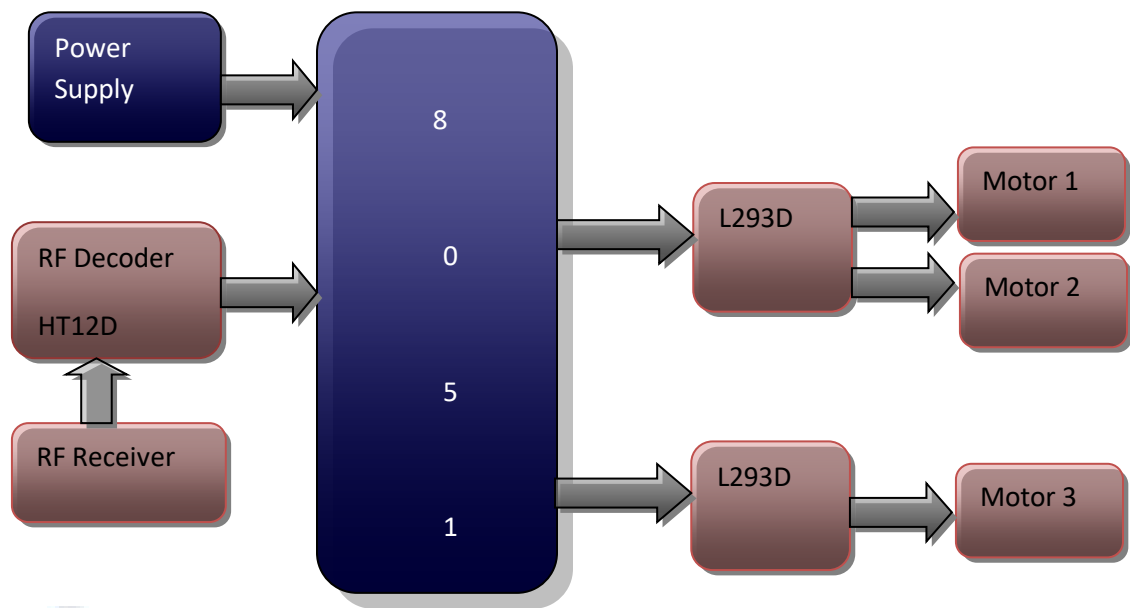
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## BLOCK DIAGRAM:

### TRANSMITTER SECTION:



## RECEIVER SECTION:



## POWER SUPPLY BLOCK DIAGRAM:

