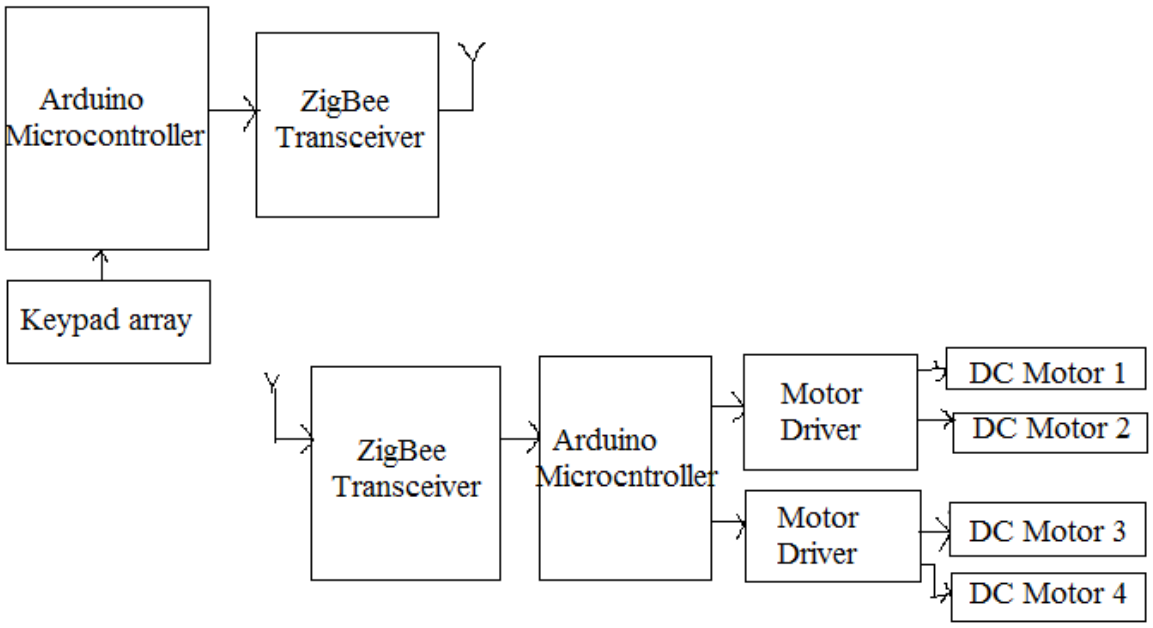
Abstract

Robots are getting common nowadays. The project aims to develop a ZigBee based robot. ZigBee software is aimed at addressing the market need for a cost-effective, standards-based wireless networking solution that supports low data-rates, low-power consumption, security, and reliability. The control of the robot can be designed with the help of a microcontroller.

Block Diagram



This project is a Omni-directional ZigBee controlled robot. User can use various commands like move forward, reverse, stop move left, move right and diagonal movements. These commands are sent from the ZigBee transmitter to the ZigBee receiver. A keypad array is interfaced to the microcontroller. The robot has a ZigBee receiver unit which receives the commands and give it to the microcontroller circuit to control the motors. The microcontroller then transmits the signal to the motor driver IC's to operate the motors.