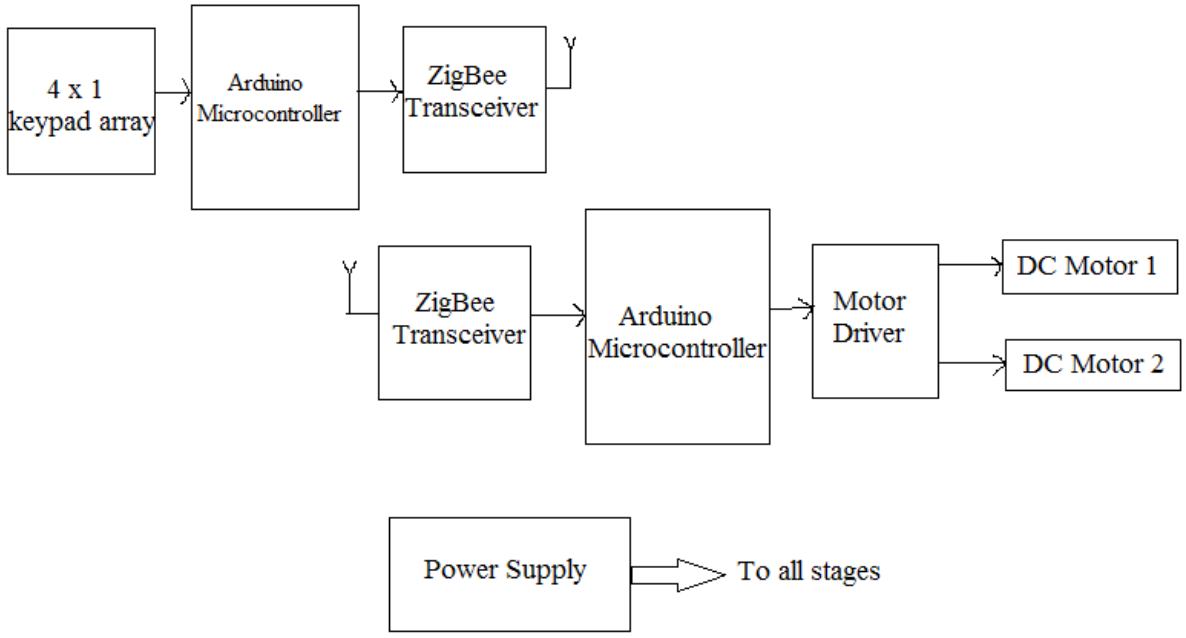
Abstract

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 ZigBee protocol stack is optimized for wireless networking. All-terrain robots are supposed to handle a wider variety of terrain than ordinary robots. Whatever type of terrain you prefer (tough terrain, steep slopes, sand, mud, etc.), these robots can provide maneuverability and stability on every point of the terrain.

Block Diagram



At the transmitter side, there is a 4 x 1 keypad array which is connected to a ZigBee transceiver. At the receiver side, there is a ZigBee transceiver, Arduino microcontroller, Motor Driver and two DC motors. On pressing the pushbuttons of keypad array, the two dc motors can be made to rotate in different directions.