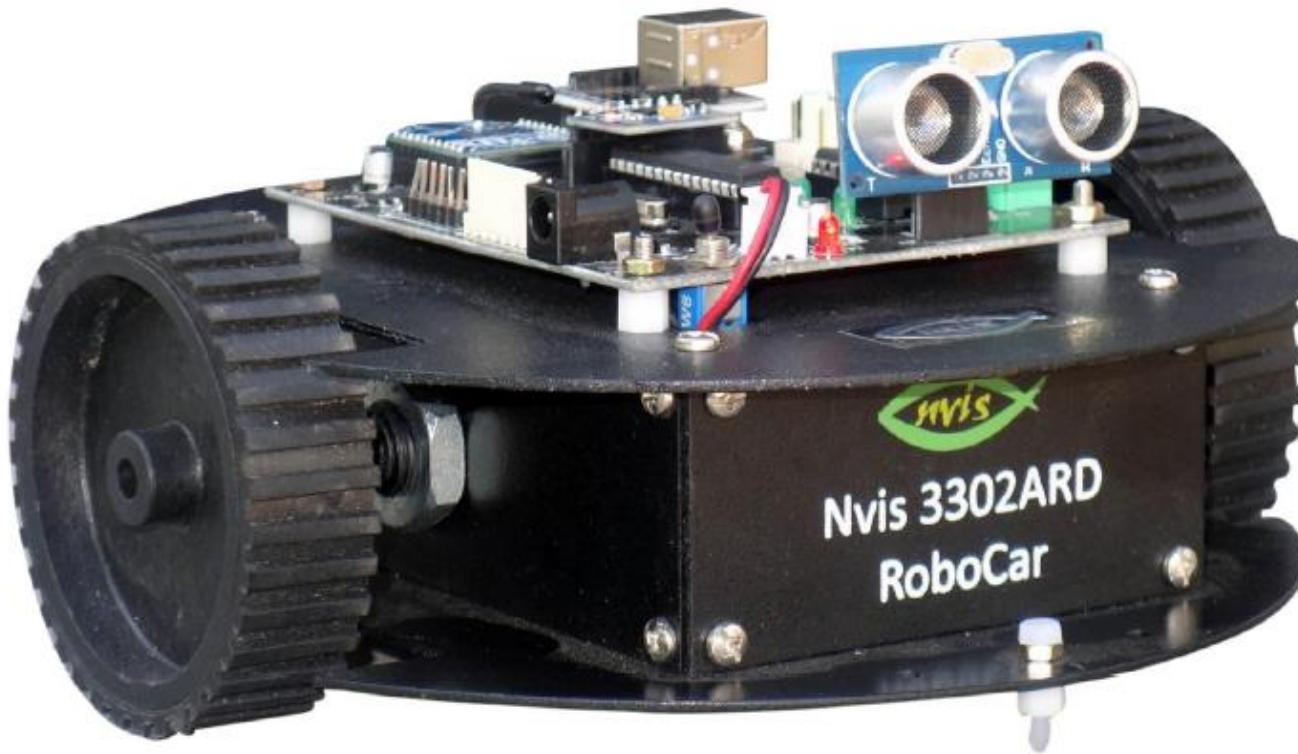


Nvis 3302ARD RoboCar

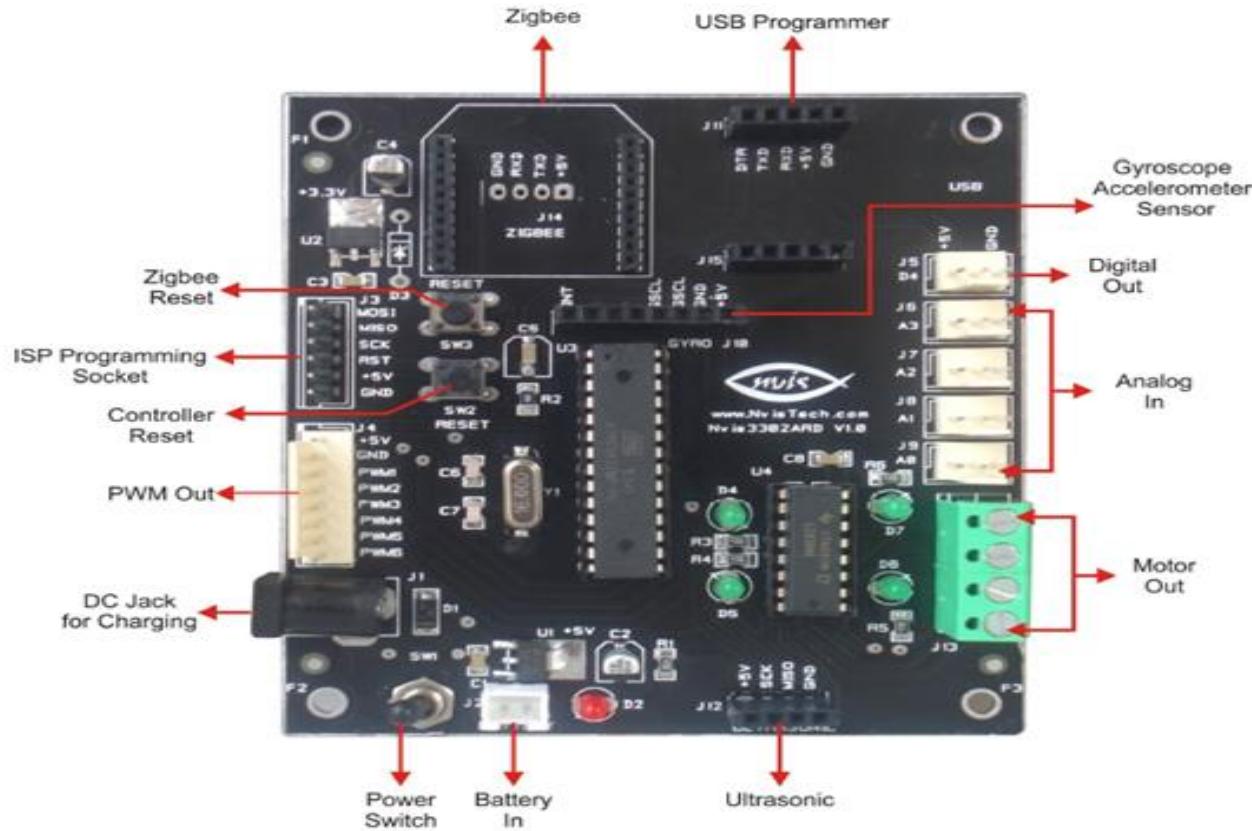
Physical Configuration

Ashutosh Mishra

Basic Configuration model



Board configuration and part name



DC Motor



- A motor is a machine that converts electrical energy into mechanical energy(rotation).
- DC motor we have only + and – leads.
- By reversing the polarity, the DC motor will move in the opposite direction.

Configuration Table of Pins:

J13-Phonex Pin Number	Port pin	Arduino Pin	Description
1	PD5	Digital 5	Right Motor Plus
2	PD6	Digital 6	Right Motor Minus
3	PD7	Digital 7	Left Motor Plus
4	PB0	Digital 8	Left Motor Minus

Basic functions of Robocar

- Forward
- Backward
- Right Move
- Left Move
- Clockwise rotation
- Anticlockwise rotation
- Stop

Arduino code for Motor Movement

```
void setup()
{
    PinMode(5,OUTPUT);
    PinMode(6,OUTPUT);
    PinMode(7,OUTPUT);
    PinMode(8,OUTPUT);
}

void loop()                                // Forward direction
{
    digitalWrite(5,HIGH);
    digitalWrite(6,LOW);
    digitalWrite(7,LOW);
    digitalWrite(8,HIGH);
}
```

//Backward

```
digitalWrite(5,LOW);
digitalWrite(6,HIGH);
digitalWrite(7,HIGH);
digitalWrite(8, LOW);
```

// Right Move

```
digitalWrite(5,LOW);
digitalWrite(6,LOW);
digitalWrite(7,HIGH);
digitalWrite(8, HIGH);
```

```
// Left
```

```
digitalWrite(5,HIGH);  
digitalWrite(6,HIGH);  
digitalWrite(7,LOW);  
digitalWrite(8, LOW);
```

```
//Clockwise rotation
```

```
digitalWrite(5,HIGH);  
digitalWrite(6,LOW);  
digitalWrite(7,LOW);  
digitalWrite(8, LOW);
```

```
// Anticlock-wise rotation
```

```
digitalWrite(5,LOW);  
digitalWrite(6,LOW);  
digitalWrite(7,LOW);  
digitalWrite(8, HIGH);
```

```
//Stop
```

```
digitalWrite(5,LOW);  
digitalWrite(6,LOW);  
digitalWrite(7,LOW);  
digitalWrite(8, LOW);
```

Thanks