Microprocessors Course Project Report  
3rd Year Computer Engineering

Project Title: [wheels]

Team ID: [Team-ID]

# 

# Team Members

|  |  |  |
| --- | --- | --- |
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# Project Objective

[Describe your project’s objective completely, providing inputs and expected outputs]

Our project about 4 wheels connected to an object contains 2 microcontrollers one connected to the flex sensor and the other connected to the LCD, Motors and IR sensor, The first microcontroller will transmit the value of the volt hence, we can detect the direction to the second microcontroller and the object will move , the LCD will display the volt and the direction and then the wheels will be moved by the motor in the direction detected by the volt of the sensor as the sensor has 3 directions according to the angle of the sensor, The first angle is 0 that makes the motors stop ,The second angle is 45 that makes the motors moves forward and finally the third angle is 90 that makes the motors moves backward.

# System Block Diagram

## Block Diagram

[Provide a Block diagram for your system (hardware block diagram)]

## Block Diagram Description

[Provide description of the above blocks and inner connections. Show each block’s purpose, what it does and what it contains. Also describe connections between blocks and how they are achieved]

# Schematic Diagram (Circuit Diagram)

[Provide here your full hardware schematic diagram]

# List Of Components

[Provide List of components used in the project. Item Type is the component name. Item Code Name is the item’s actual code. Purpose is why this item is required in the project. For example, Item Type: Temperature sensor - Item Code Name: LM35]

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **SN** | **Item Type** | **Item Code Name** | **Purpose** | **Quantity** |
| **1** | Sensor | Flex sensor | Detect bending motion | 1 |
| **2** | Sensor | IR | Stop the wheel | 1 |
| **3** | controller | Atmega32 | Control the circuit | 2 |
| **4** | motor | Simple DC motor | Make the wheel move | 4 |
| **5** | wheels | Robot Tire | move | 4 |
| **6** | IC | L293B | Control the motors | 1 |
| **7** |  |  |  |  |
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# Real-Time Hardware Photo

[Place a photo of your real-time hardware]

# Source Code

## Hardware-side source code

[Provide your full source code]

## PC-side source code **[if applicable]**

[Provide your source code and images of the GUI application running on the PC side]