LED Connection

|  |  |  |  |
| --- | --- | --- | --- |
| **LED Name** | **ATMEGA32a Pins** | **Pin Functionality** | **Reason** |
| Front-Left |  | GPIO | No overlap with PWM or Timer or ADC |
| Back-Left |  | GPIO | No overlap with PWM or Timer or ADC |
| Front-Right |  | GPIO | No overlap with PWM or Timer or ADC |
| Back-Right |  | GPIO | No overlap with PWM or Timer or ADC |

Motor-Driver Connection & Driver-Board Connection

|  |  |
| --- | --- |
| **Motor Terminal** | **Motor Driver Terminal** |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
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|  |  |  |  |
| --- | --- | --- | --- |
| **Motor Driver Pin Name** | **L293D Pins** | **Pin Functionality** | **Reason** |
| ENA |  |  |  |
| ENB |  |  |  |
| IN1 |  | GPIO | No overlap with PWM or Timer or ADC |
| IN2 |  | GPIO | No overlap with PWM or Timer or ADC |
| IN3 |  | GPIO | No overlap with PWM or Timer or ADC |
| IN4 |  | GPIO | No overlap with PWM or Timer or ADC |

Ultrasonic Sensor Connection

|  |  |  |  |
| --- | --- | --- | --- |
| **Ultrasonic Sensor Pin Name** |  | **Pin Functionality** | **Reason** |
| Trigger |  |  |  |
| Echo |  |  |  |

LDR Connection

|  |  |  |  |
| --- | --- | --- | --- |
| **LDR Name** |  | **Pin Functionality** | **Reason** |
| Left |  |  |  |
| Right |  |  |  |