**Connection to MSP432**

Motor Driver:

|  |  |
| --- | --- |
| IN1 – Right Wheel Backward | P4.0 |
| IN2 – Right Wheel Forward | P4.1 |
| IN3 – Left Wheel Forward | P4.2 |
| IN4 – Left Wheel Backward | P4.3 |
| ENA – Right Wheel PWM | P2.6 – TA0.3 |
| ENB – Left Wheel PWM | P2.7 – TA0.4 |

ESP8266:

|  |  |
| --- | --- |
| 3V3 | 3V3 |
| RST | P6.1 |
| EN | 3V3 |
| TX | P3.2 |
| RX | P3.3 |
| GND | GND |

HC-SR04 Ultrasonic Sensor

|  |  |
| --- | --- |
| 3V3 | 5V |
| GND | GND |
| Trig | P3.6 – TA0.2 |
| Echo | P3.7 |

Wheel encoder

|  |  |
| --- | --- |
| VCC | 3V3 |
| GND | GND |
| OUT (right wheel encoder) | P2.5 |
| OUT (left wheel encoder) | P2.4 |

IR line sensor

|  |  |
| --- | --- |
| VCC | 3V3 |
| GND | GND |
| OUT (right IR line sensor) | P5.1 |
| OUT (left IR line sensor) | P2.3 |