

Circuit Schematic: IoT-Enabled ESP32 Car

ESP32 Pin Mapping:

- Motor IN1: GPIO 27
- Motor IN2: GPIO 14
- Motor IN3: GPIO 12
- Motor IN4: GPIO 13
- Motor ENA/ENB: GPIO 22
- Ultrasonic Trig: GPIO 5
- Ultrasonic Echo: GPIO 18
- LCD SDA: GPIO 21
- LCD SCL: GPIO 22
- DHT11: GPIO 15
- Buzzer: GPIO 4
- Battery Voltage (via divider): GPIO 34

Power:

- Battery: 7.4V (2x 18650) or 9V
- Power L298N and ESP32 via Vin

Use voltage divider for battery monitoring (e.g., 100k & 10k resistors).