ESP32 SMART 4WD ROVER – WIRING POSTER

Code■Accurate Printable Wiring Reference

MOTOR DRIVER (L298N / L293D)

ESP32 GPIO	Motor Driver Pin
13	ENA
19	IN1
14	IN2
25	ENB
27	IN3
26	IN4

ULTRASONIC SENSOR (HC■SR04)

Signal	ESP32 GPIO
TRIG	18
ECHO (via divider)	17
VCC	5V
GND	GND

VL53L0X (I2C)

Signal	ESP32 GPIO
SDA	21
SCL	22
VCC	3.3V
GND	GND

IR LINE SENSORS

Sensor	ESP32 GPIO
Left	33
Center	32
Right	35

SERVOS (External Power)

Servo	ESP32 GPIO
X■Axis Signal	4
Y■Axis Signal	23
VCC	External 5–6V
GND	Common GND

MOISTURE SENSOR

Signal	ESP32 GPIO
Analog Out	34
VCC	3.3V / 5V
GND	GND

RELAY MODULE (Active■LOW)

Signal	ESP32 GPIO
IN	5
VCC	5V
GND	GND

STATUS LED

Signal	ESP32 GPIO
LED (+ via 220Ω)	2
LED (−)	GND

IMPORTANT NOTES:

• All grounds must be COMMON (ESP32, sensors, motors, servos).
• DO NOT power motors or servos from ESP32.
• Use voltage divider on Ultrasonic ECHO.
• Motor supply 7–12V, Servo supply 5–6V.