

Sarcos Robot Rover Movement - Wiring Connections

1. ESP32 Connections

- ESP32 TX → STM32 RX (PA3)
- ESP32 RX → STM32 TX (PA2)
- ESP32 GND → STM32 GND

2. BTS7960 Driver 1

- B+ → 24V 10A Battery
- B- → Battery GND
- VCC → STM32 3.3V
- GND → STM32 GND
- R_EN → STM32 3.3V
- L_EN → STM32 3.3V
- RPWM → STM32 PA4
- LPWM → STM32 PA5

3. BTS7960 Driver 2

- B+ → 24V 10A Battery
- B- → Battery GND
- VCC → STM32 3.3V
- GND → STM32 GND
- R_EN → STM32 3.3V
- L_EN → STM32 3.3V
- RPWM → STM32 PA6
- LPWM → STM32 PA7

4. BTS7960 Driver 3

- B+ → 24V 10A Battery
- B- → Battery GND
- VCC → STM32 3.3V
- GND → STM32 GND
- R_EN → STM32 3.3V
- L_EN → STM32 3.3V
- RPWM → STM32 PA8
- LPWM → STM32 PA9

5. BTS7960 Driver 4

- B+ → 24V 10A Battery
- B- → Battery GND
- VCC → STM32 3.3V
- GND → STM32 GND

- R_EN → STM32 3.3V
- L_EN → STM32 3.3V
- RPWM → STM32 PA10
- LPWM → STM32 PA11

