

Two wheel robot with WIFI remote control using android smartphone for remote control. Robot is designed around the STM8S discovery development board. Motor drivers utilize the Texas Instruments L293D H-Bridge IC. The WIFI is provided using the ESP8266 chip.

The pinout for the STM8S discovery board is listed below.

STM8S pin	External Device Pin	Description
CN1 pin 3	L293D pin 2	Left Motor
CN1 pin 4	L293D pin 7	Left Motor
CN1 pin 5	ESP8266 Ground	ESP8266 Ground
CN1 pin 7	ESP8266 VCC	ESP8266 Supply Voltage
CN1 pin 8	ESP8266 CH_PD	
CN2 pin 0	L293D pin 10	Left Motor
CN2 pin 1	L293D pin 15	Left Motor
CN4 pin 8	L293D pin 1	Left Motor Enable (PWM)
CN4 pin 9	L293D pin 9	Right Motor Enable (PWM)
CN4 pin 10	ESP8266 UART TX	ESP8266 Serial I/O
CN4 pin 11	ESP8266 UART RX	ESP8266 Serial I/O