

Arduino Pin Configuration for BI4DR

Pin Configuration:

Pin	Component Connection
D0 (RX)	Pixy2 Camera (RX for serial communication)
D1 (TX)	Pixy2 Camera (TX for serial communication)
D2	Motor Driver AIN1 (Motor 1 Control)
D3	Motor Driver AIN2 (Motor 1 Control)
D4	DS18B20 Temperature Sensor (Data pin)
D5	Motor Driver BIN1 (Motor 2 Control)
D6	Motor Driver BIN2 (Motor 2 Control)
D7	PowerBoost ENABLE through transistor 2A2222A
D8	APA106 LED (DIN) for controlling the LED strip
D9	Control Power Relay
D10	LED for robot feedback
D11	PowerBoost battery monitoring
D12	Motors Sleep
D13	Battery Charging
3.3v	Robot LED + Power relay
A0	Voltage Divider for battery level monitoring
A4 (SDA)	Proximity Sensor (SDA pin for I2C communication)
A5 (SCL)	Proximity Sensor (SCL pin for I2C communication)