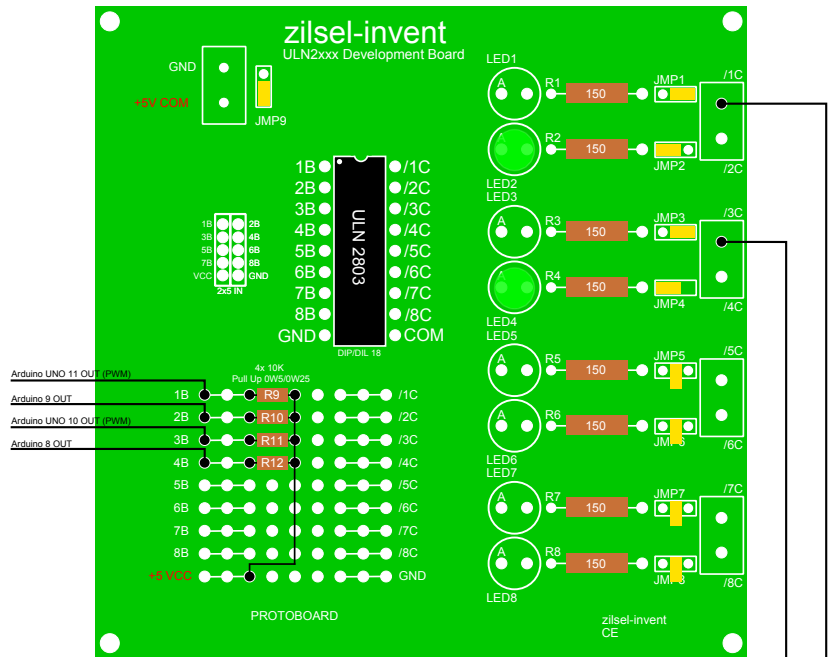
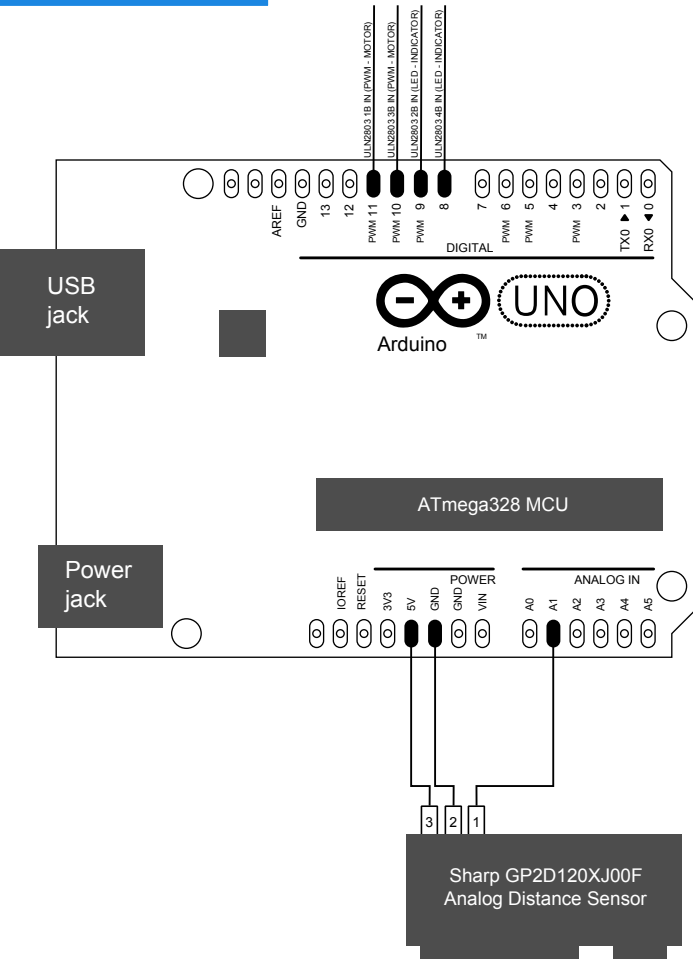


# ArduinoUNO Based Robot

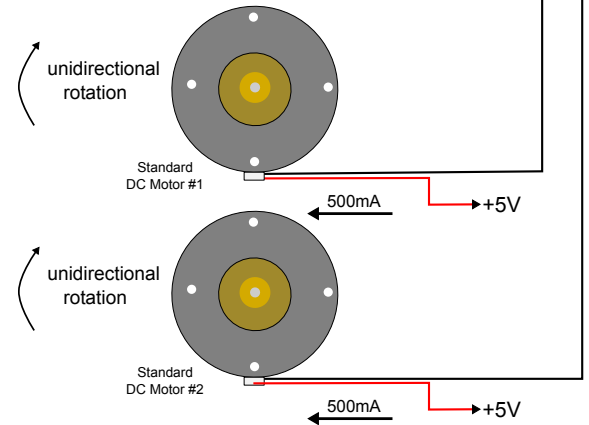
Motor Driver: Half Bridge Darlington ULN2803 TTL/5VCMOS

Perception (Sensor): Sharp GP2D120XJ00F

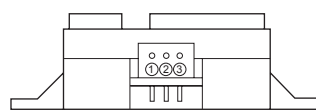
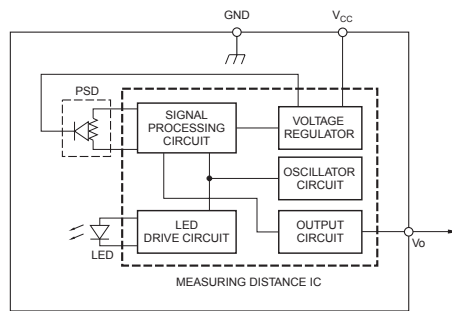
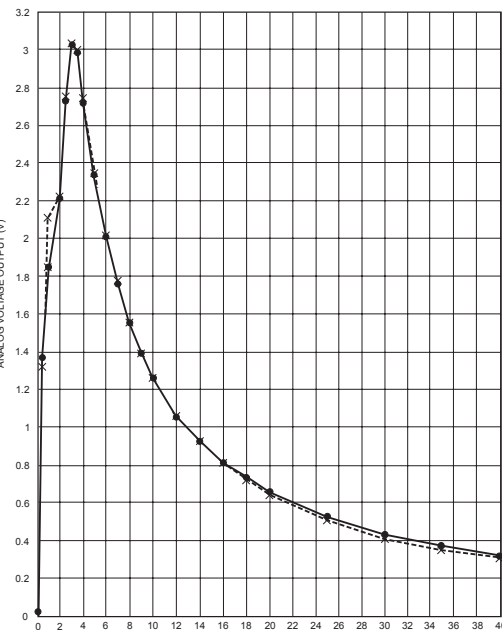
Robot Type: Mobile Differential - Unidirectional Movement



2x Gearmotor 90-Degree  
Operating Voltage Range: 3.0 - 12.0V



Sharp GP2D120XJ00F  
Analog Distance Sensor

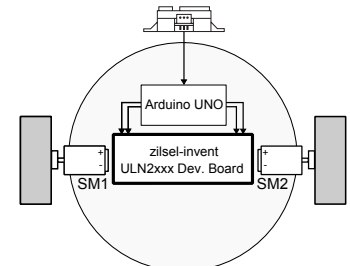


| PIN | SIGNAL NAME     |
|-----|-----------------|
| ①   | V <sub>O</sub>  |
| ②   | GND             |
| ③   | V <sub>CC</sub> |

DC Motor Control Signals:

- Arduino Pin11(OFF), Pin10(OFF) -> Stop
- Arduino Pin11(ON), Pin10(OFF) -> Spin (direction1)
- Arduino Pin11(OFF), Pin10(ON) -> Reverse Spin (direction2)
- Arduino Pin11(ON), Pin10(ON) - Forward movement

Mobile Differential Robot



NOTES:  
● White paper (90% Reflectance)  
--- Gray paper (18% Reflectance)