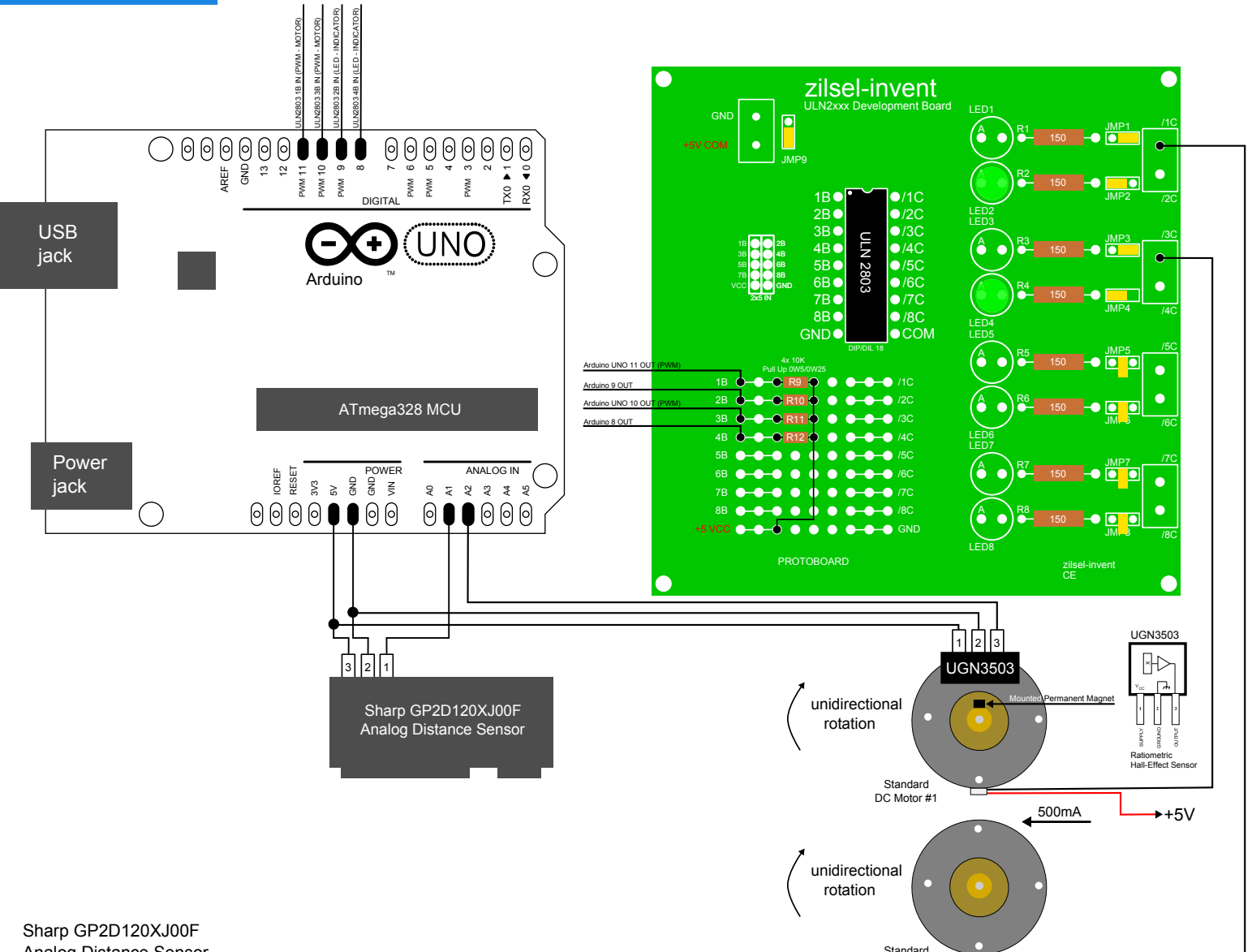


# ArduinoUNO Based Robot

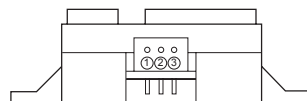
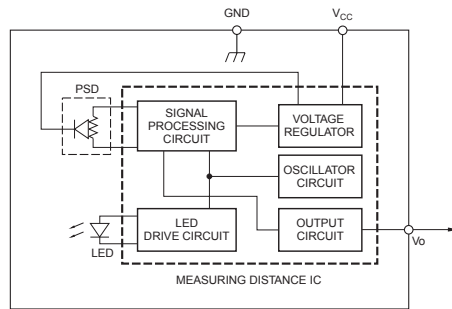
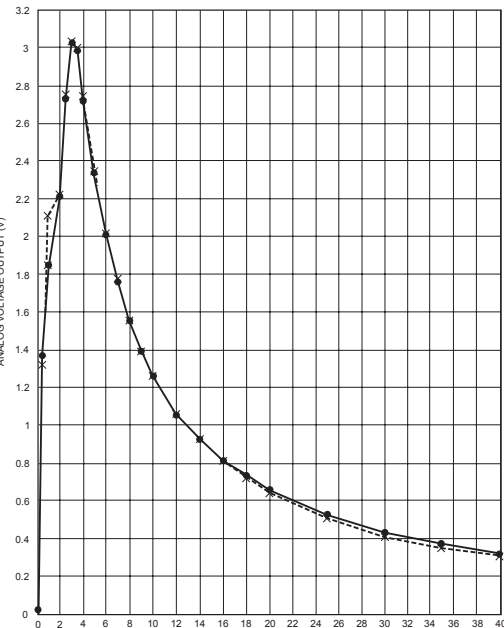
Motor Driver: Half Bridge Darlington ULN2803 TTL/5VCMOS

Perception (Sensor): Sharp GP2D120XJ00F, UGN3503

Robot Type: Mobile Differential - Unidirectional Movement



Sharp GP2D120XJ00F Analog Distance Sensor



PIN	SIGNAL NAME
①	V <sub>cc</sub>
②	GND
③	V <sub>cc</sub>

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

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

