

WinchBot

Circuit revision: v0.1

3x double photo sensors
e. g. TCST1103
Sensor out on motor 1 to A0 + A1
Sensor out on motor 2 to A2 + A3
Sensor out on motor 3 to A4 + A5

Servo 1 (platform Y axis):
Control line to Arduino pin 7

Servo 2 (platform X axis):
Control line to Arduino pin 3

Servo 3 (rotate gripper):
Control line to Arduino pin 10

Servo 4 (tilt gripper):
Control line to Arduino pin 4

Servo 5 (gripper):
Control line to Arduino pin 9

3x L298N double H bridge in parallel mode to get 3A output current:
Join OutA and OutC
Join OutB and OutD
Join InA and InC
Join InB and InD

Motor 1:
InA and InC to Arduino pin 8
InB and InD to Arduino pin 5
Motor 2:
InA and InC to Arduino pin 11
InB and InD to Arduino pin 12

Motor 3:
InA and InC to Arduino pin 2
InB and InD to Arduino pin 6

Source & info: www.HomoFaciens.de