OBJECT_DETECTOR
IR OBSTACLE SENSOR
www.TheEngineeringProjects.com
Infrared Sensor
OUT GND Vcc
+5V
TestPin

CONVEYOR
12V
OUT1 VS VSS IN1
OUT2 IN2
EN1
+5V
+12V
CONVEYOR_DRIVER
OUT3 EN2
OUT4 GND IN3
IN4
L293D

PIC
RA0/AN0   RC0/T1OSO/T1CKI
RA1/AN1   RC1/T1OSI/CCP2/UOE
RA2/AN2/VREF-/CVREF   RC2/CCP1/P1A
RA3/AN3/VREF+   RC4/D-/VM
RA4/T0CKI/C1OUT/RCV RC5/D+/VP
RA5/AN4/SS/LVDIN/C2OUT RC6/TX/CK
RA6/OSC2/CLKO   RC7/RX/DT/SDO
OSC1/CLKI

RB0/AN12/INT0/FLT0/SDI/SDA   RD0/SPP0
RB1/AN10/INT1/SCK/SCL   RD1/SPP1
RB2/AN8/INT2/VMO   RD2/SPP2
RB3/AN9/CCP2/VPO   RD3/SPP3
RB4/AN11/KBI0/CSSPP   RD4/SPP4
RB5/KBI1/PGM   RD5/SPP5/P1B
RB6/KBI2/PGC   RD6/SPP6/P1C
RB7/KBI3/PGD   RD7/SPP7/P1D

RE0/AN5/CK1SPP
RE1/AN6/CK2SPP
RE2/AN7/OESPP
VUSB   RE3/MCLR/VPP
PIC18F4550   VDD

COLOR_SENSOR
VDD
!OE   OUT
S0
S1
S2
S3
GND
TCS3200

+5V
100k
R2
WEIGHT

RED_FLAP
ULN2003A
7B 6B 5B 4B 3B 2B 1B
7C 6C 5C 4C 3C 2C 1C COM

BLUE_FLAP
ULN2003A
7B 6B 5B 4B 3B 2B 1B
7C 6C 5C 4C 3C 2C 1C COM

JAW
ULN2003A
7B 6B 5B 4B 3B 2B 1B
7C 6C 5C 4C 3C 2C 1C COM

+88.8   +88.8   +88.8

D1
LED-RED
R1
330R

FLAP_ADJUST
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Infrared Sensor
OUT GND Vcc
TestPin
+5V