

10k Resist  
for Level Shifter

P123 P124 P125 P16 P17 P112 P120 P136 5V  
3V P123 P124 P125 P16 P17 P112 P120 P136

-> Darlington (ULN2803A) or  
Level Shifter (SN74LVC245A)

DIR=P138

10k Resist  
for Level Shift

P126 P117 P113 P16 P15 P131 P19 P110 5V  
3V P126 P117 P113 P16 P15 P131 P19 P110

-> Darlington (ULN2803A) or  
Level Shifter (SN74LVC245A)

DIR=P138

0.1uF Cap

200k Resist

PCA9306

AE  
P12  
P13  
P14  
P17  
P127  
P122  
Gnd

Arduino DIP (ATMEGA328)

0.1uF Cap

App (LM555)

InR  
InGnd  
InL  
OutL  
OutR  
OutGnd

1k Resist

0.1uF Cap

10k Resist

Darlington Array (ULN2803A)

16MHz Oscillator

Short Or 10k Resist

Darlington Array (ULN2803A)

Open Or 22k Pull-down Resistors

Gnd  
A5  
A4  
A3  
A2  
A1  
A0  
AREf  
5V

Gnd 5V A5 A4 D0 D1 D2 D3 D4 D5 Gnd 5V D6 D7 D8 D9 D10 D11 D12 D13

FUSE