

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
Shifter

P16 P117 P113 P16 P15 P131 P19 P110 5V
3V P124 P134 P13 P16 P15 P131 P17 P110

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

DIR=P138

0.1uF Cap

200k Resist

PCA9304

AE
P12
P13
P14
P17
P127
P122
Gnd

0.1uF Cap

App
(LM555)

InR
InGnd
InL
OutL
OutR
OutGnd

Arduino DIP (ATMEGA328)

1k Resist

Short Or 10K Resist

16MHz Oscillator

0.1uF Cap

10K Resist

Darlington Array (ULN2803A)

Darlington Array (ULN2803A)

D5 - D13 Direct
Open Or 20k Pull-down Resistors

Gnd
A5
A4
A3
A2
A1
A0
AREf

5V

5V

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

FUSE