CIRC-01
Getting Started
Large Blinking LED

longer lead

10mm LED

560 ohm

to pin 13

to 5v

to Gnd

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CIRC-03
Spin Motor Spin (Transistor & Motor)

- Transistor (P2N2222A)
  - Emitter
  - Base
  - Collector

- Capacitor 220 uf
- Optional longer lead

- 2.2 Kohm resistor

- Diode

- To 5v
- To Gnd
- To pin 9
CIRC-04
A Single Servo
(Servos)

- **Gnd**
- **4.8v-6v**
- **Signal**

- **to pin 9**
- **to 5v**
- **to Gnd**
CIRC-05
8 More LEDs
(74HC595 Shift Register)
CIRC-07
Button Pushing (Pushbuttons)
CIRC-08
Twisting (Potentiometer)

Potentiometer (variable resistor)

- V+ (input)
- Wiper
- Gnd (ground)

560 ohm resistor

- To pin 13
- Then pin 9
- Longer lead

To 5v

To Gnd

Twisting (Potentiometer)
CIRC-10
Temperature
(TMP36 Precision Temperature Sensor)

Thermometer (TMP36)

10mV = 1 degree C (500 mV offset)

V_{out} \rightarrow \text{Gnd}

\text{to pin analog 0}

\text{to 5v}

\text{to Gnd}

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