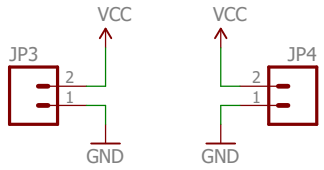
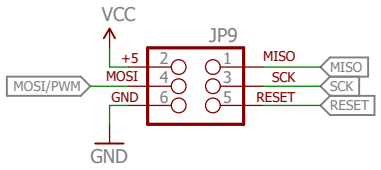
Power Input/ Daisy-Chain Output

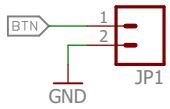


Expecting 5VDC power.
Current consumed is dependent on servo type and loading.

ISP Connection

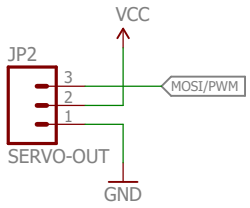


Button Connection

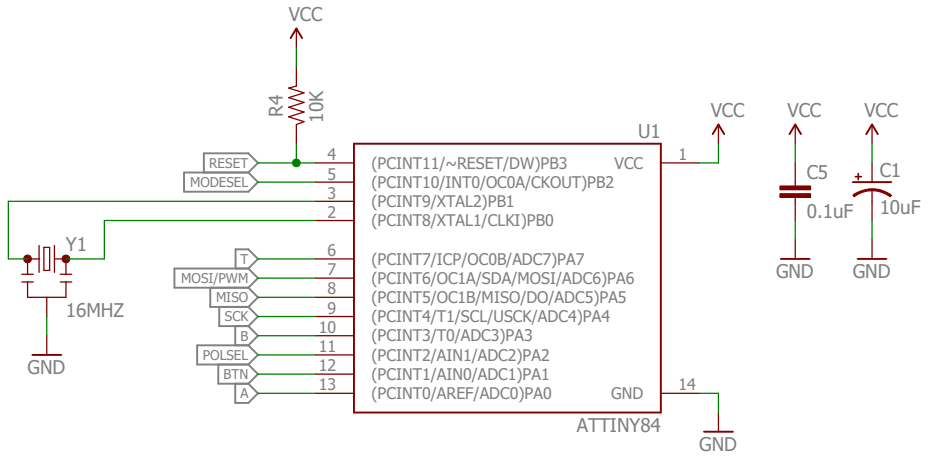


Pulled up internally in processor
Datasheet says Rup is in the 20K to 50K range.

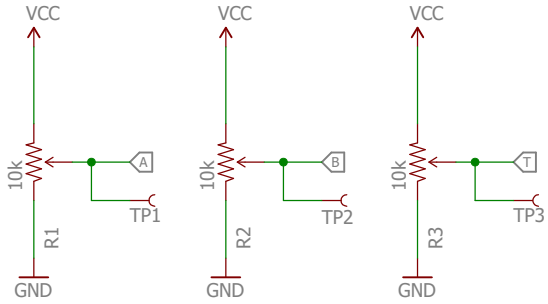
Servo Motor Output



Microcontroller



Control Potentiometers

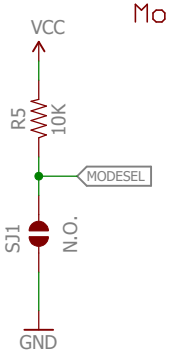


These pots control the servo position and timing.

For standard servo trigger:
"A" sets the default position if the servo.
"B" sets the position it travels to when the switch is actuated (whether it stays there or not is configured with the mode jumper).
"T" sets the time it takes to move from A to B and back, over a range of 0 to 10 seconds.

For continuous rotation servo trigger:
"A" sets the default speed & direction if the servo.
"B" sets the alternate speed & direction.
"T" sets the time it takes to move from A to B and back, over a range of 0 to 10 seconds.

Mode Configuration

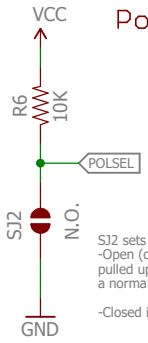


SJ1 sets mode
Variant of servo trigger is indicated in a check-box on that back of the PCB.

For "standard" servo trigger:
-Open, default, is bistable mode. While input is de-asserted, servo sits at A. While input is asserted, it goes to B, returning to A when input is deasserted. If servo travel takes longer then the input is held, cycle will be incomplete.
-Closed is one-shot mode.
When input trips, servo will cycle from A to B, then return to A.
It will always do the full cycle.

For "continuous rotoation" servo trigger
-Open selects toggling mode. On each actuation of input, trigger will switch to the other state - from A to B, or B to A.
-Closed selects bistable, same as the default for standard Servo Trigger, as described above.

Polarity Configuration



SJ2 sets input polarity
-Open (default) is active low, with switch input pulled up internally. Intended for use with a normally-open switch or active-low logic.

-Closed is for active high-logic.

open hardware

sparkfun

TITLE: SparkFun_Servo_Trigger_Con_Rot

Design by: Byron Jacquot

REV: V11

Date: not saved!

Sheet: 1/1