

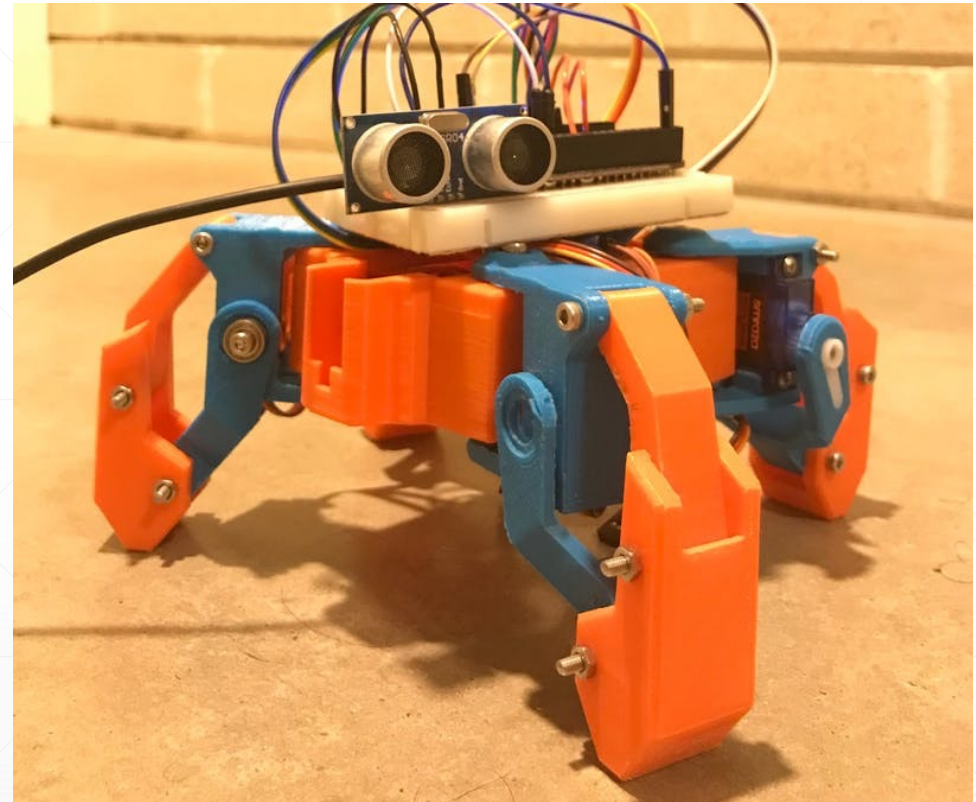
ENGI 301

Bubba PCB Proposal

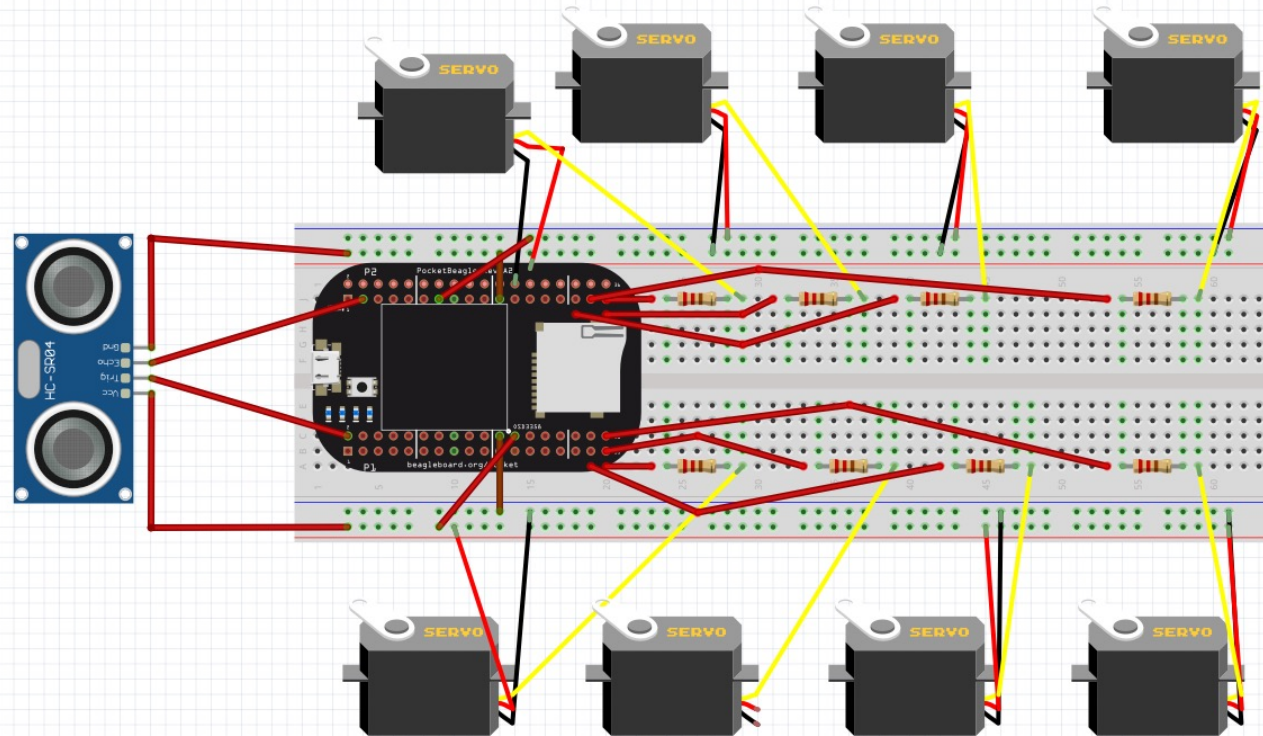
11/14/2021
Mantej Singh

Background Information

- What is being proposed?
 - Hackster Page
 - <https://www.hackster.io/ms146/bubba-the-quadrupedal-spider-robot-7b09ac>
 - Github Page
 - <https://github.com/MantejSingh21/ENGI301>



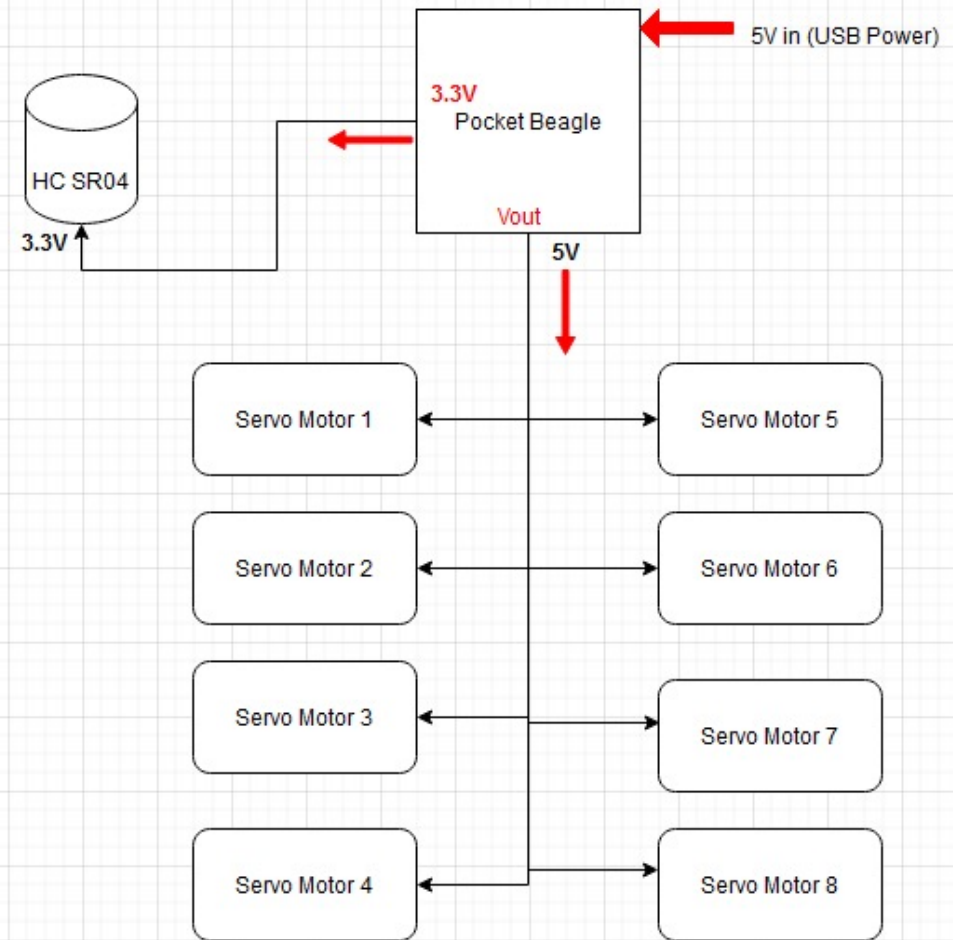
Fritzing Diagram



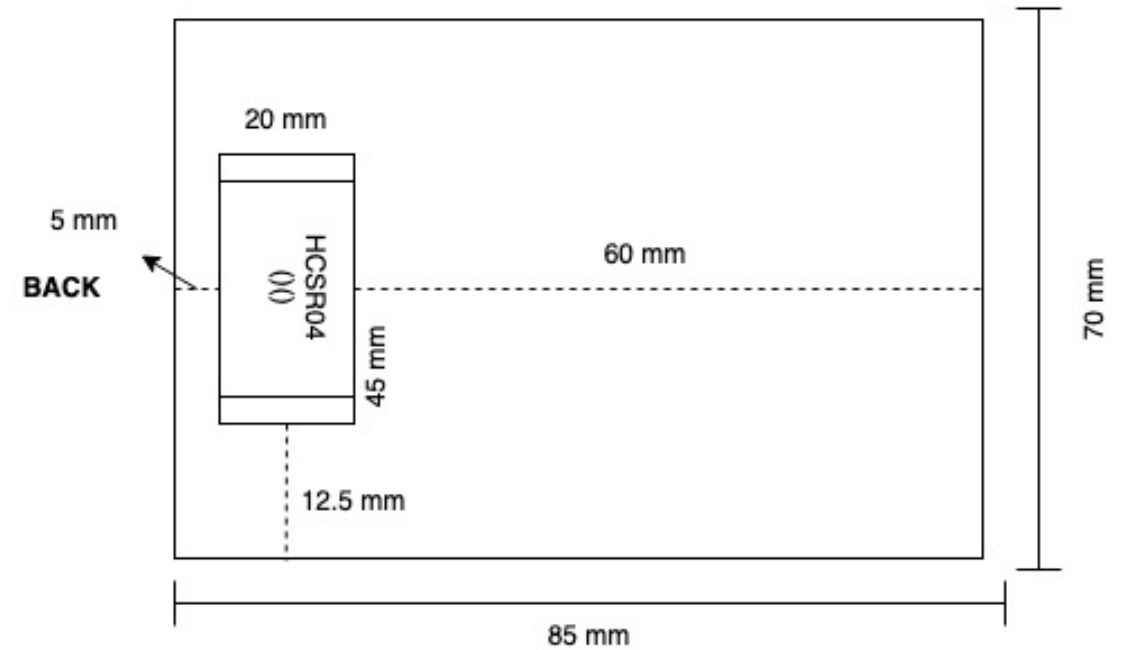
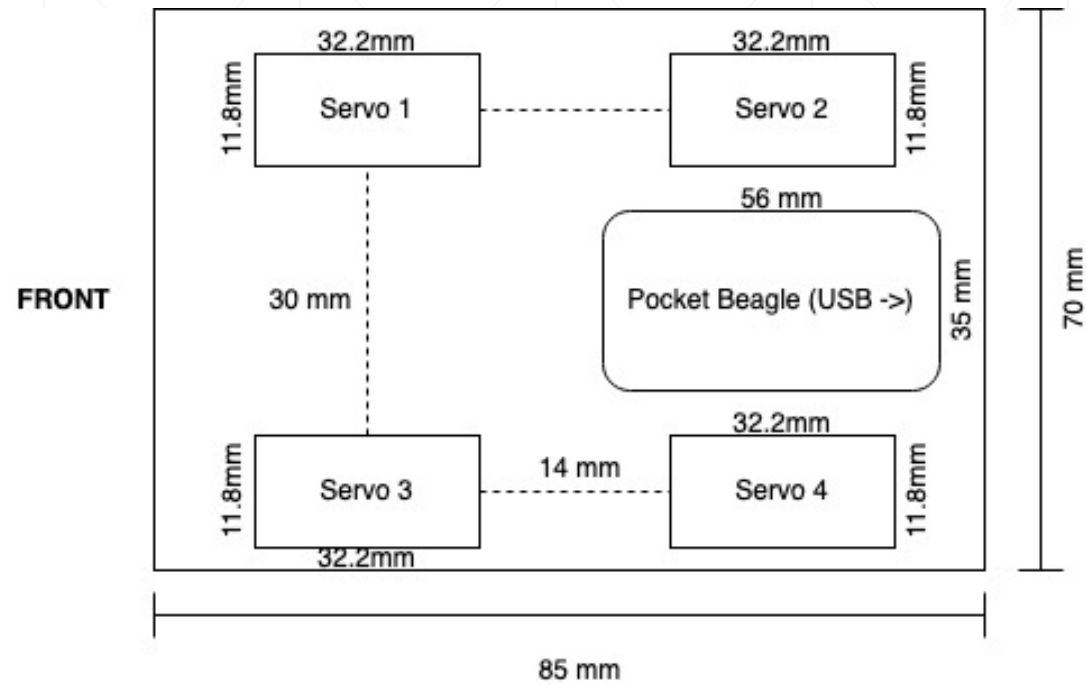
Black wires – GND
Red Wires – V_{out}
SG90 (Yellow wires) –
servo1 = "P2_1"
servo2 = "P2_3"
servo3 = "P1_36"
servo4 = "P1_33"

HCSR04
trigger = "P1_6"
echo = "P1_8"

System + Power Block Diagram



Mechanical Block Diagram



Components Required

- 1x Pocket beagle
 - 4x SG90 Servo Motors
 - 1x HCSR04 Sensor
 - 4x 3-pin 100-mil servo connector
 - 6x male-to-male jumper wires
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