

Final Presentation
June 8, 2018

Meet the Hyperloop CE Team

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Team Lead



Cameron Bijan

PCB Lead



Dylan Vanmali

Prototype Lead



Alex Jun

Test Engineer



David Donaldson

Software Engineer



Mark
Wu

SpaceX Hyperloop Competition

Concept proposed by Elon Musk

Pod in low-pressure tube from LA to SF



Competition to explore functioning prototypes

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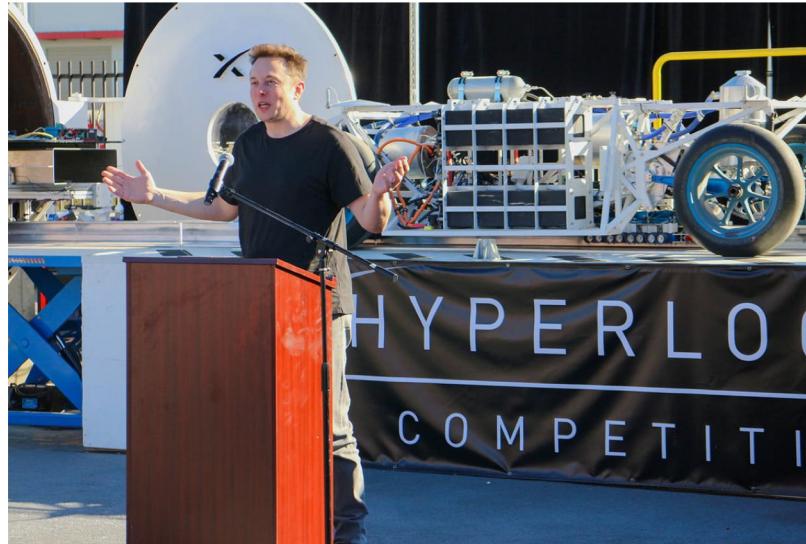
2018 Levitation Competition

There-and-back race on outdoor test track

Pod must **levitate** for entire duration of run

Fastest pod wins!

5 foot minimum pod length



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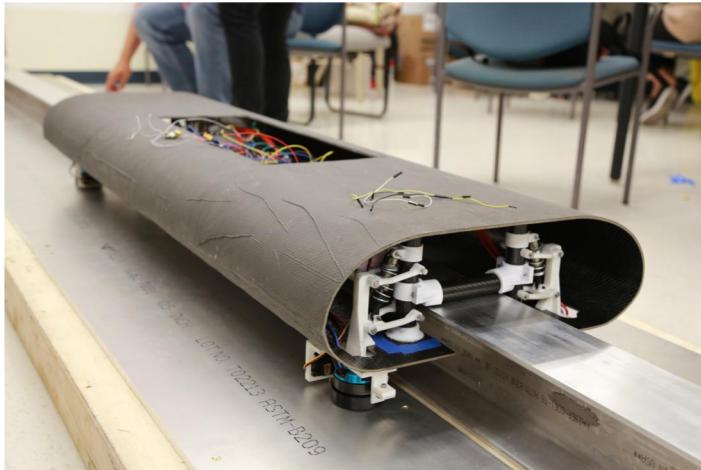
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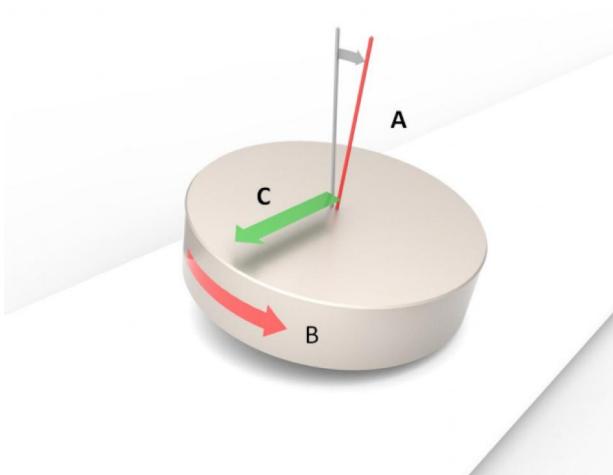
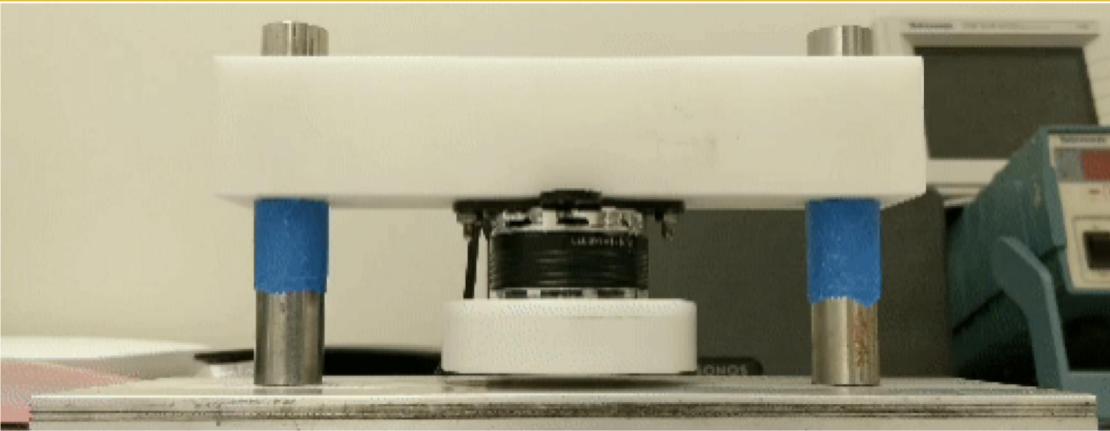
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UCSB Hyperloop Pod Design

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MagLev Overview



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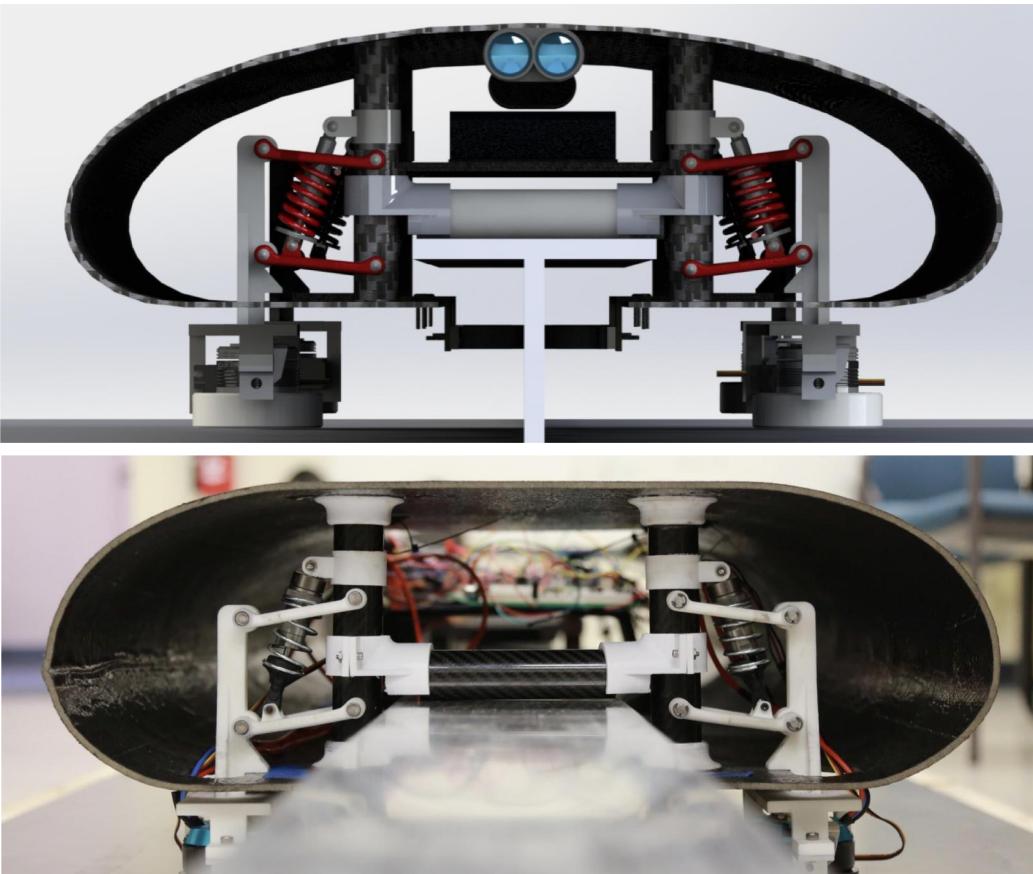
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Secondary Braking



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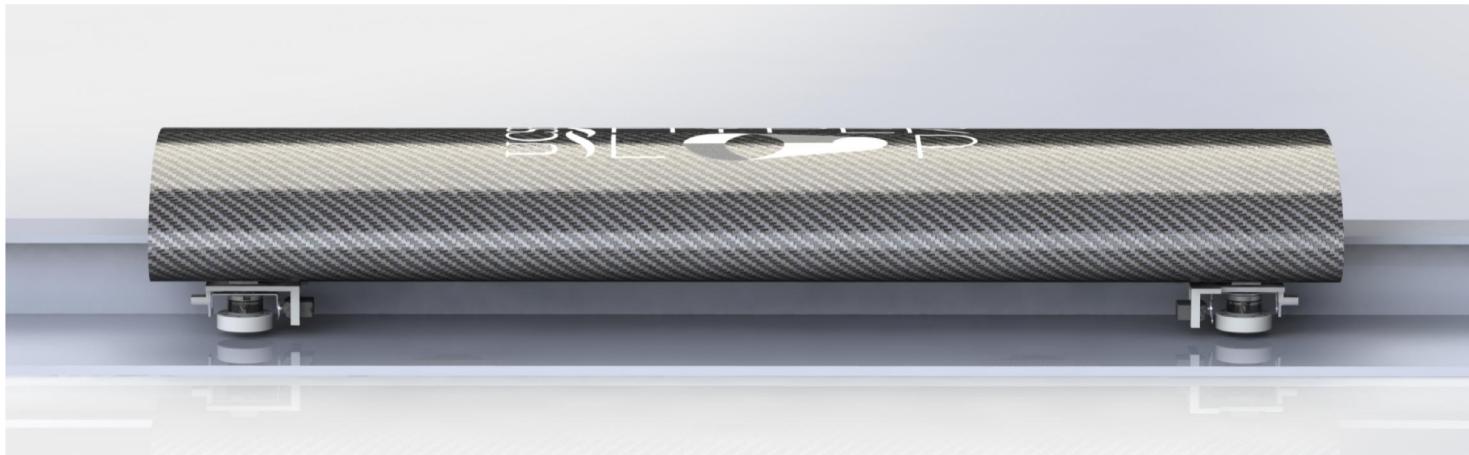
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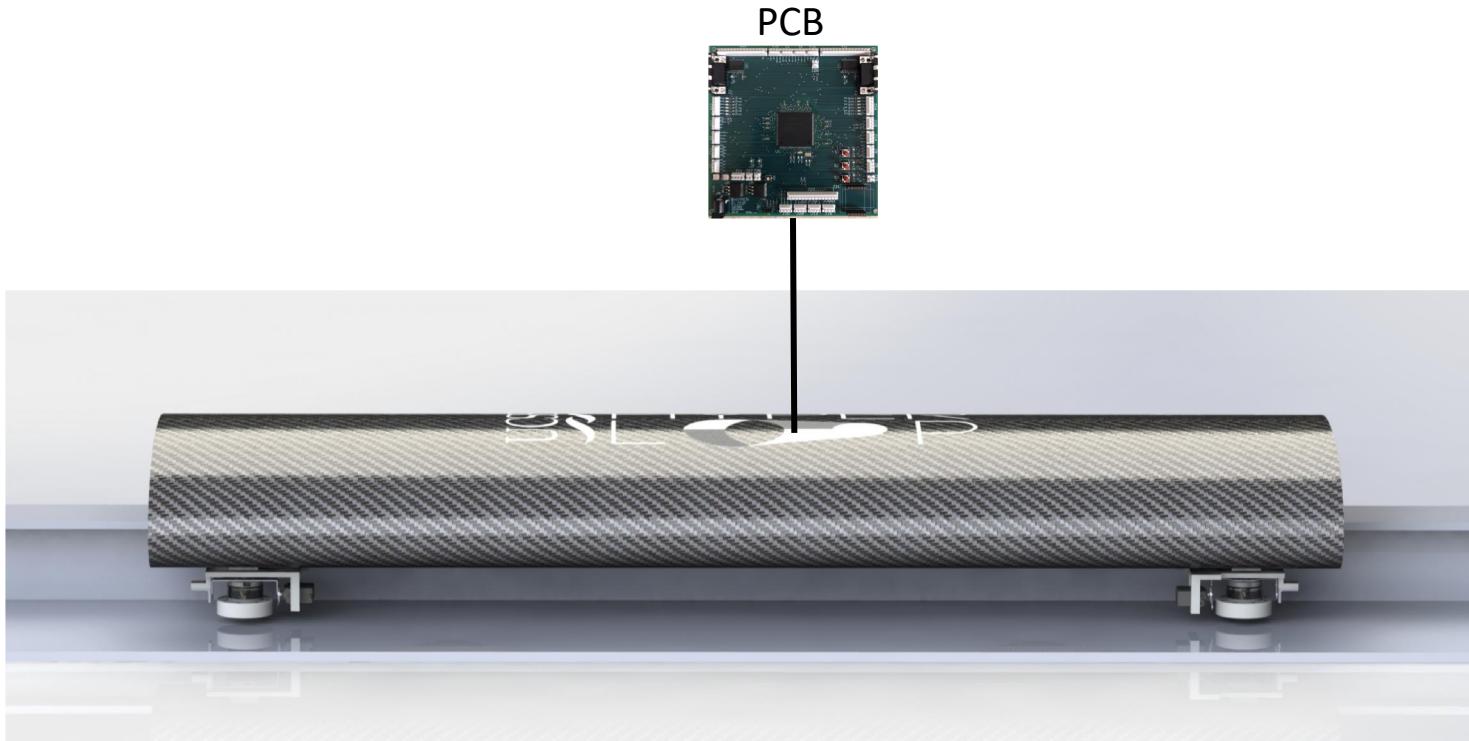
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Printed Circuit Board



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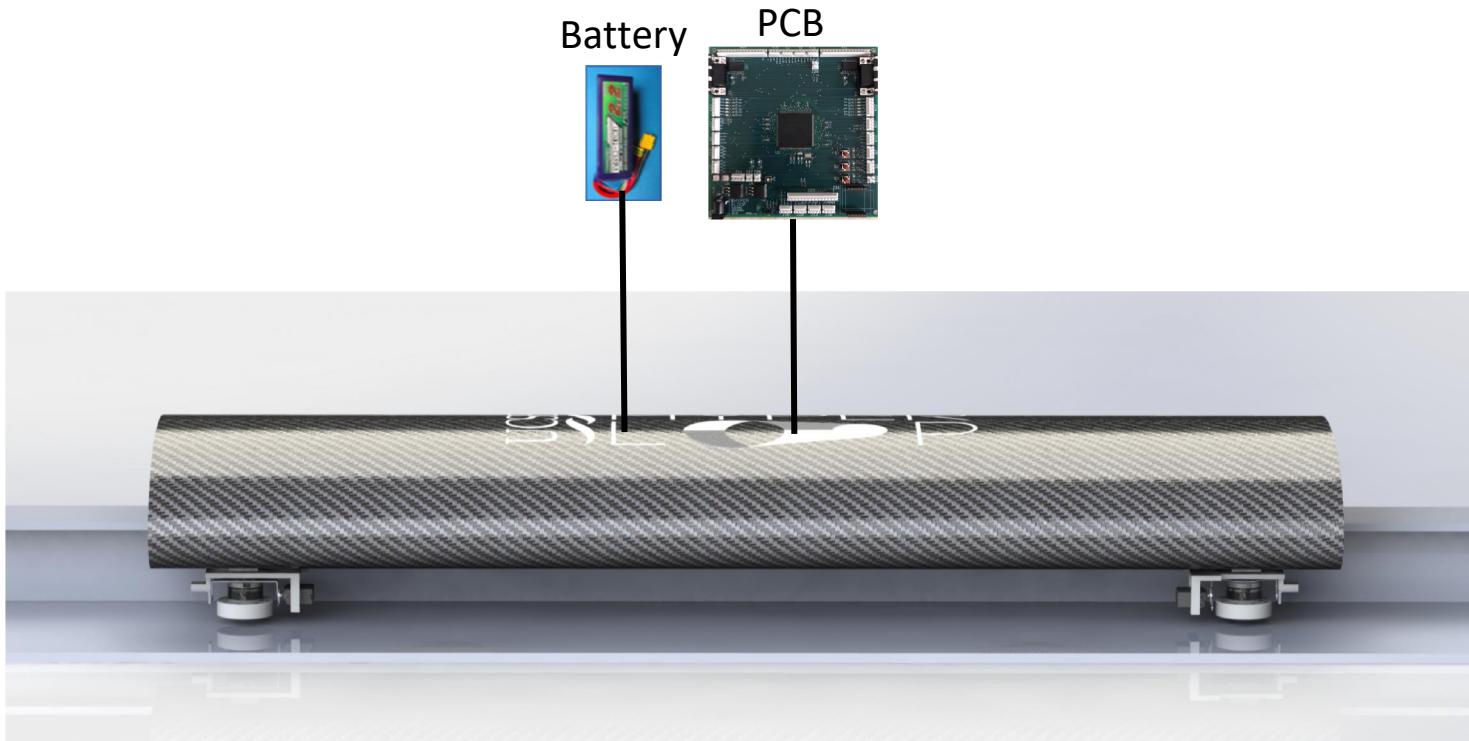
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Power Source



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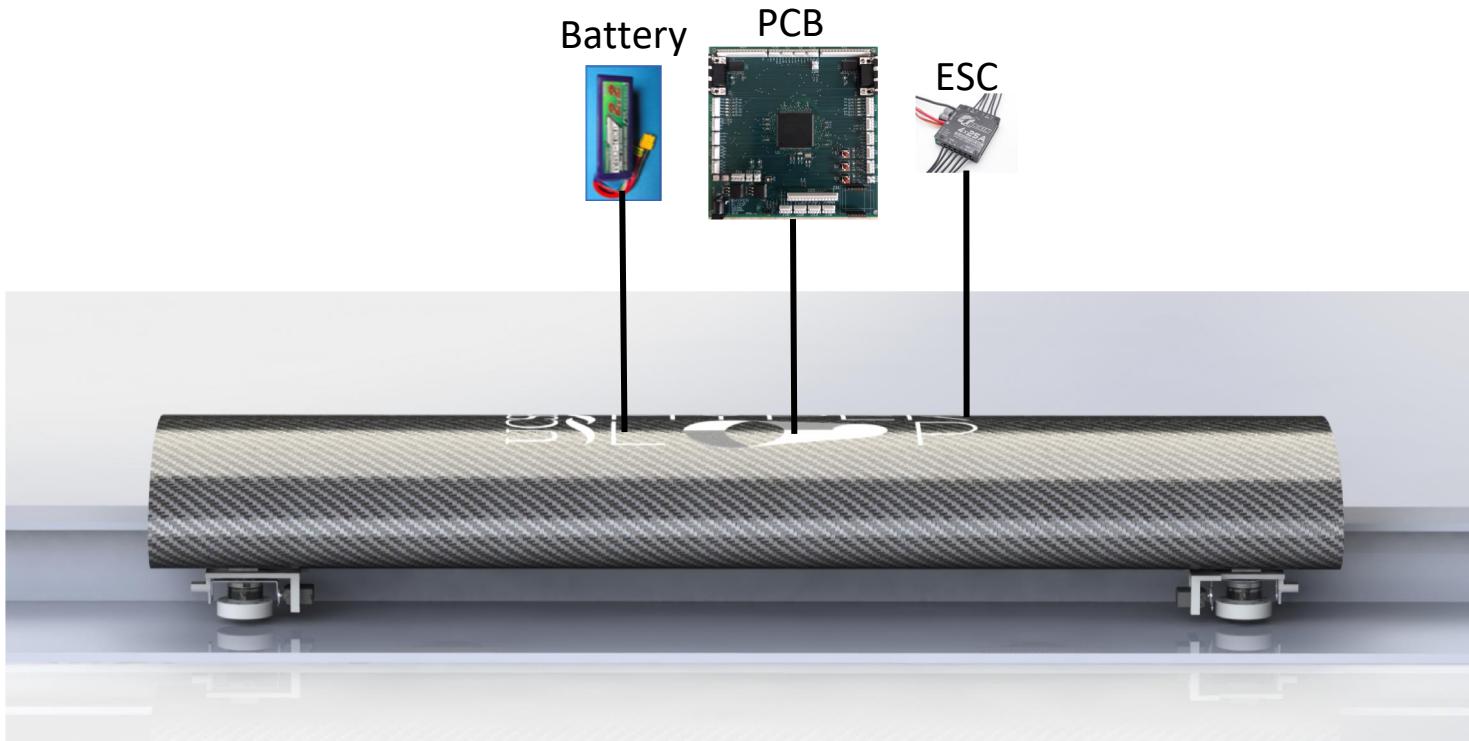
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Electronic Speed Controller



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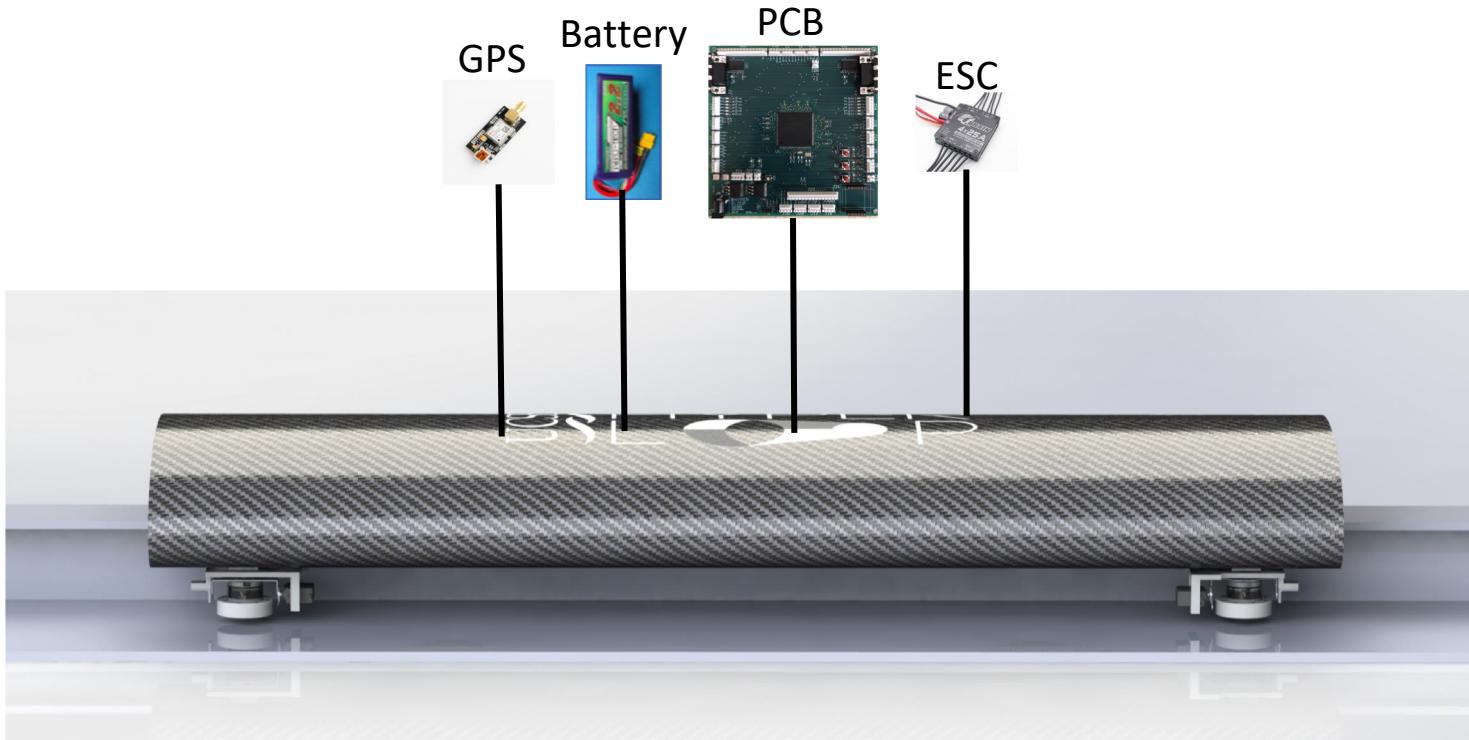
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Global Positioning System



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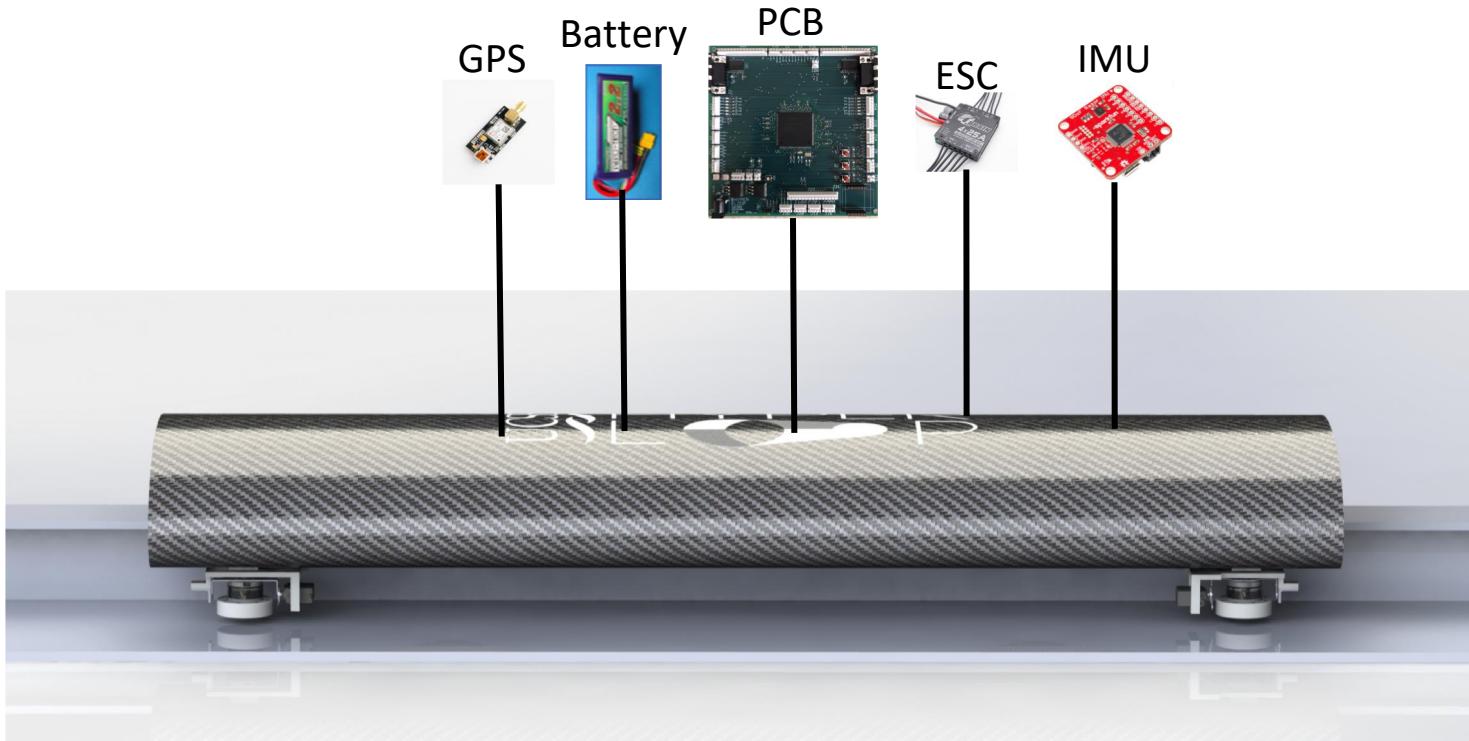
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Inertial Measurement Unit



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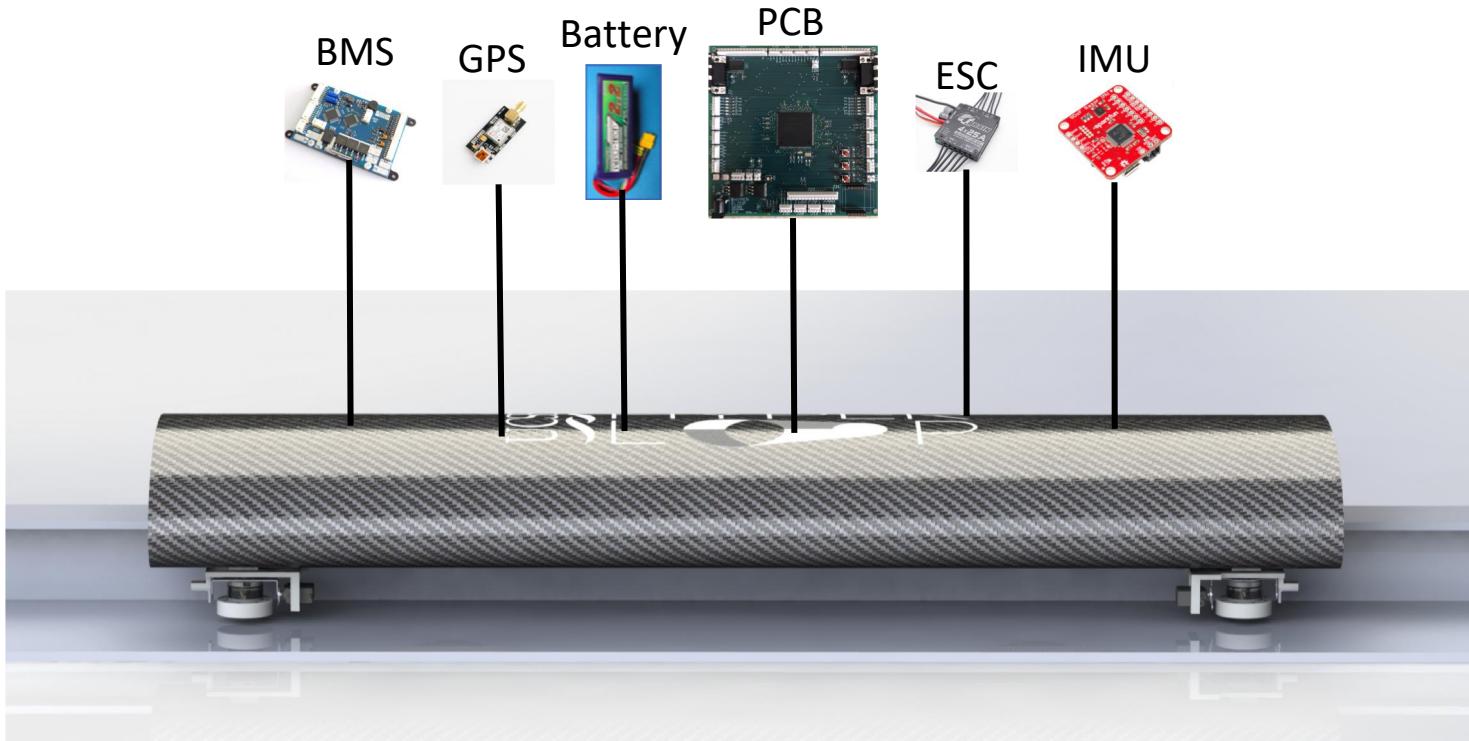
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Battery Management System



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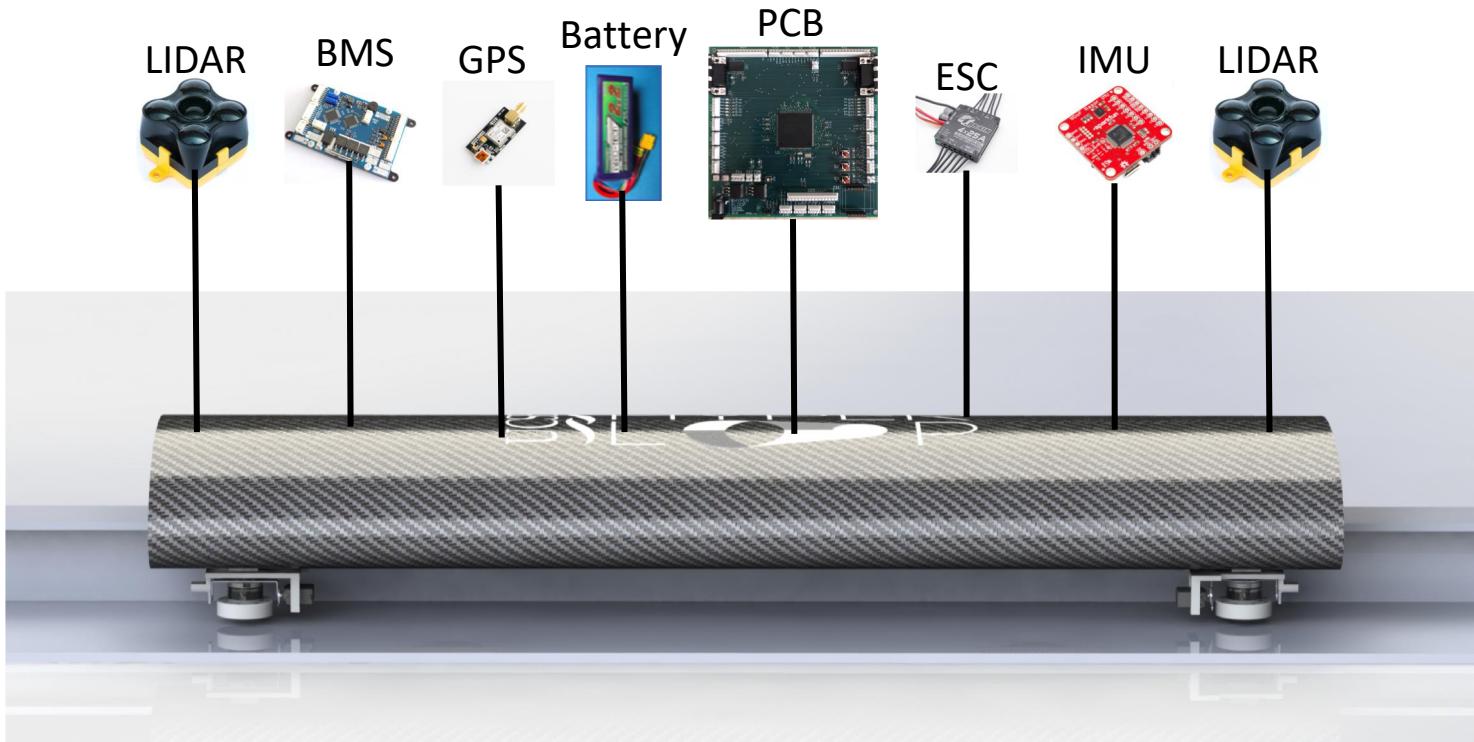
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Lidar Sensors



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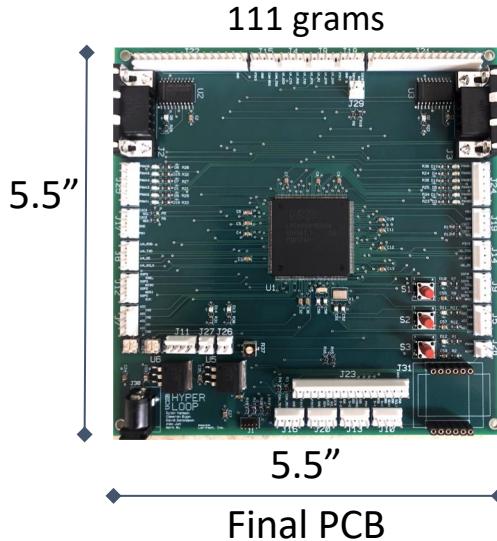
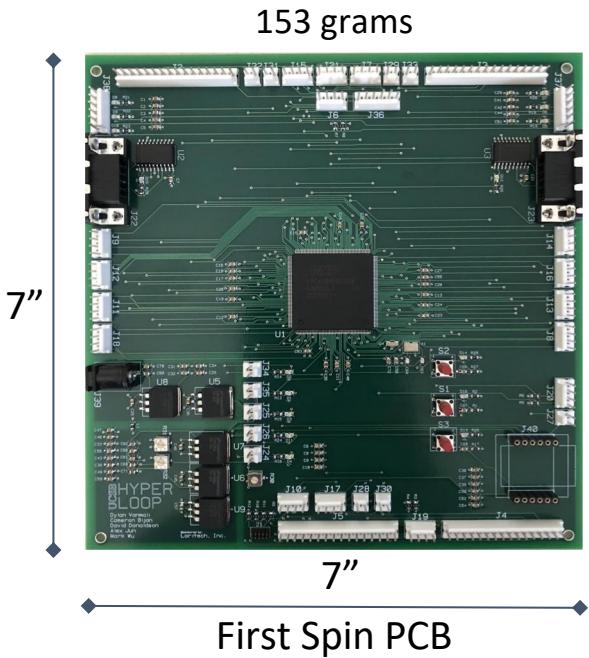
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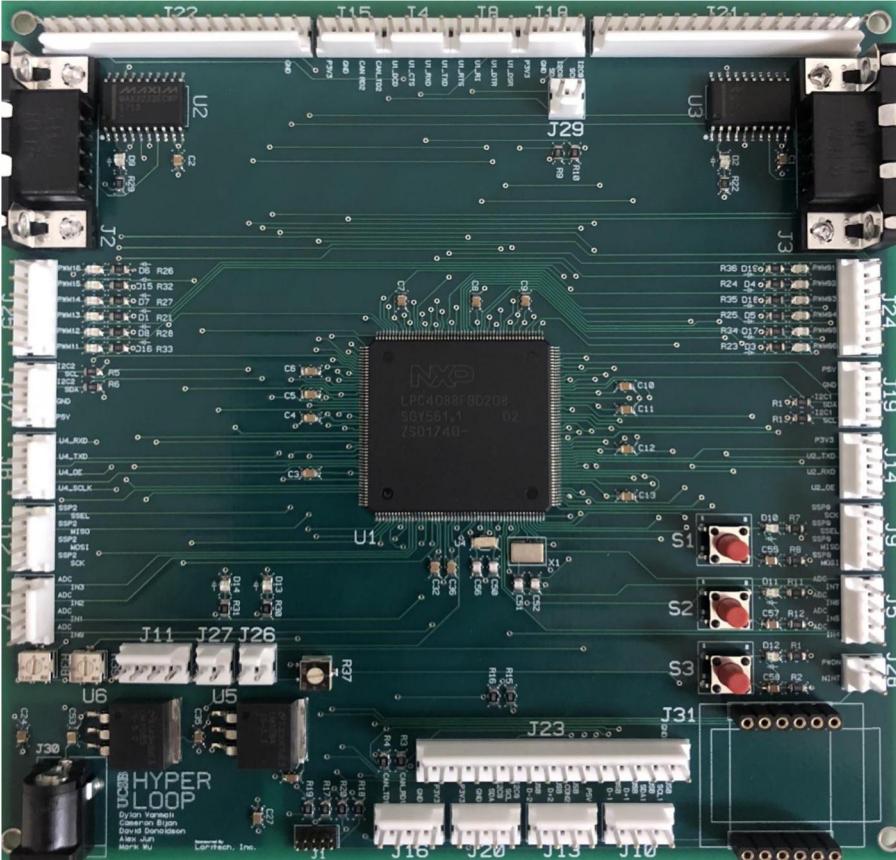
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PCB



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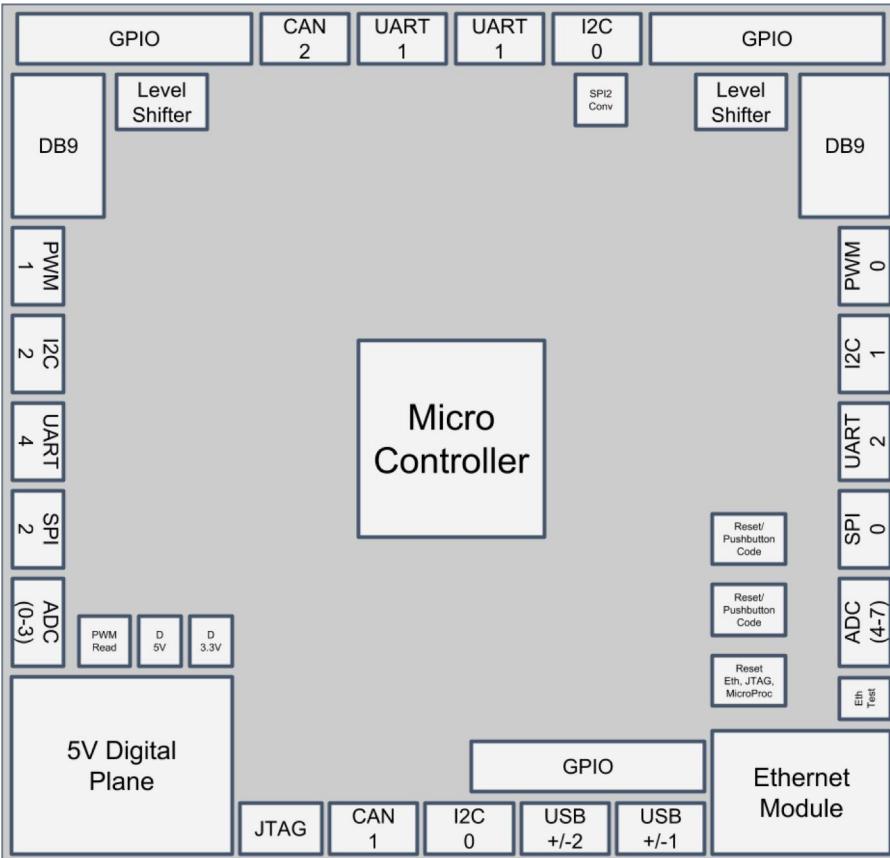
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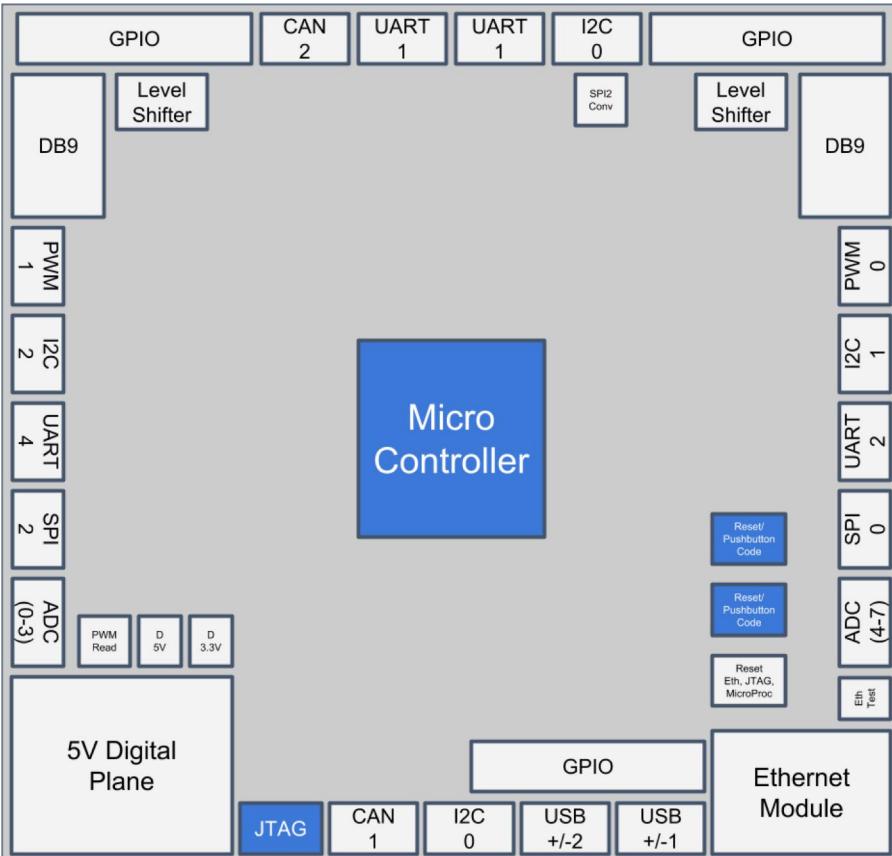
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Computing

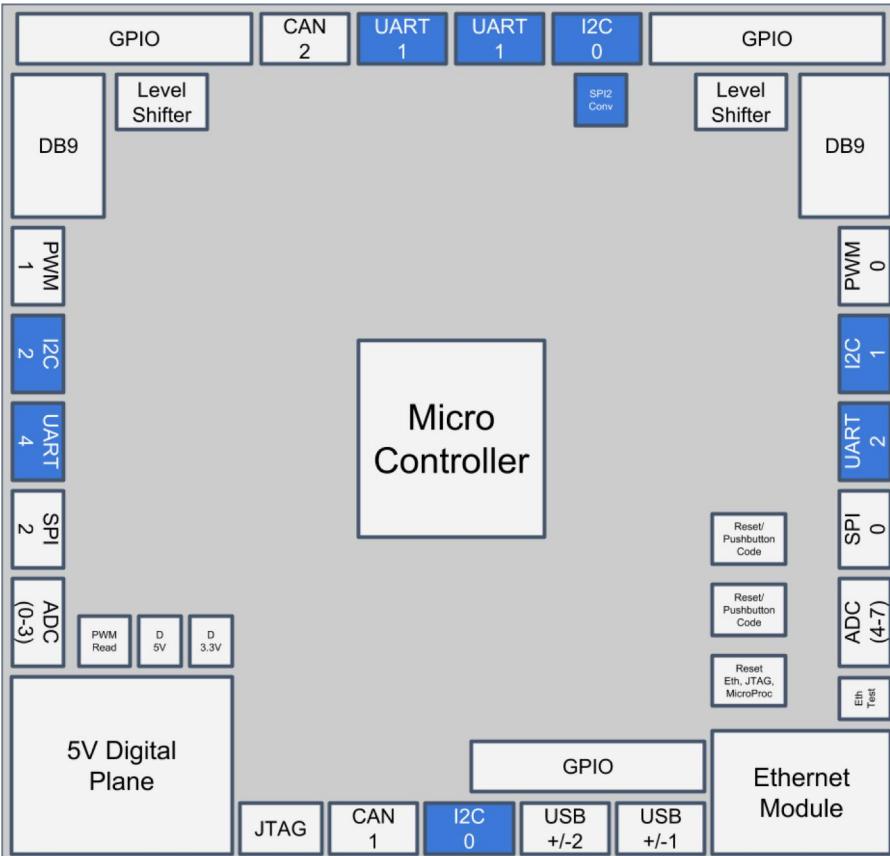
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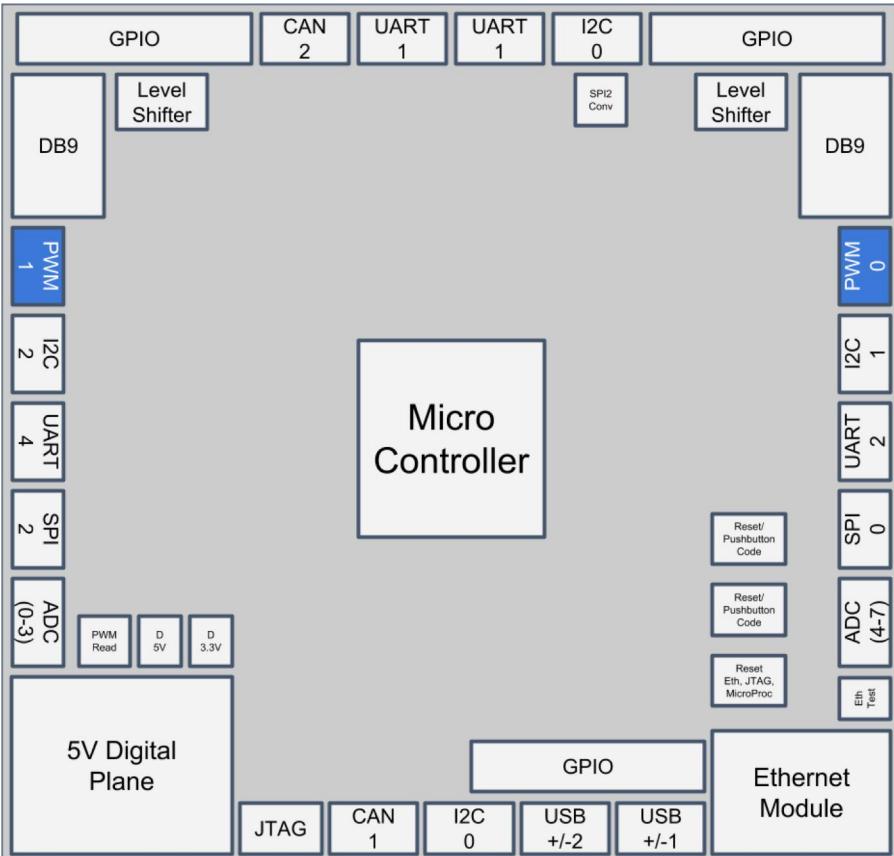
Sensor Ports

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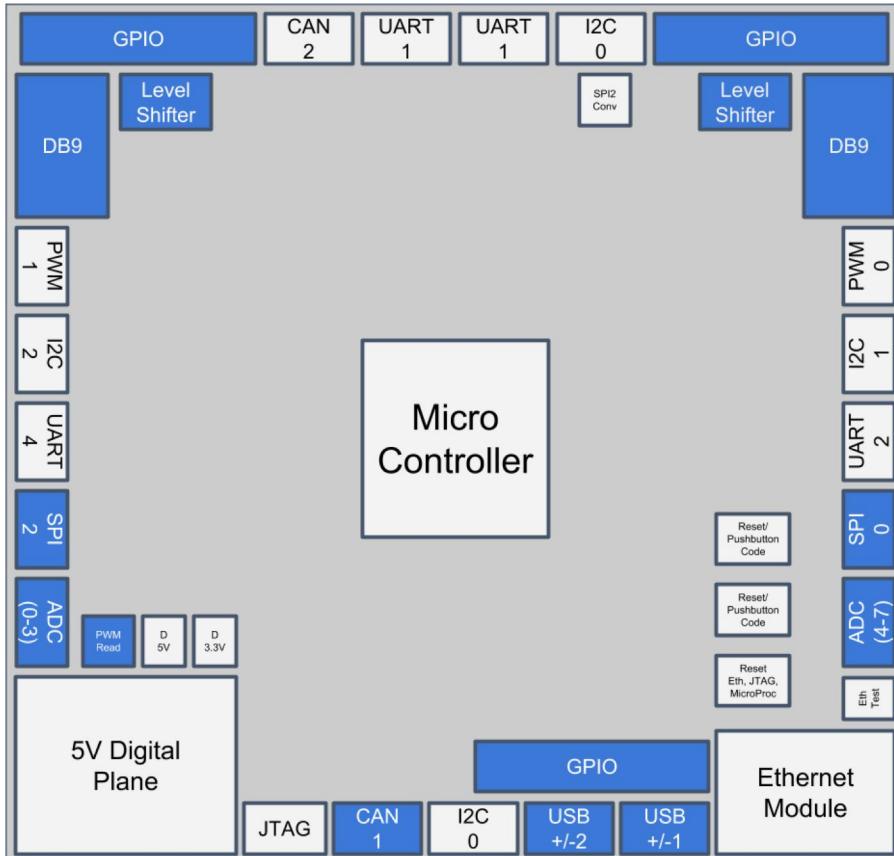
Motor Ports

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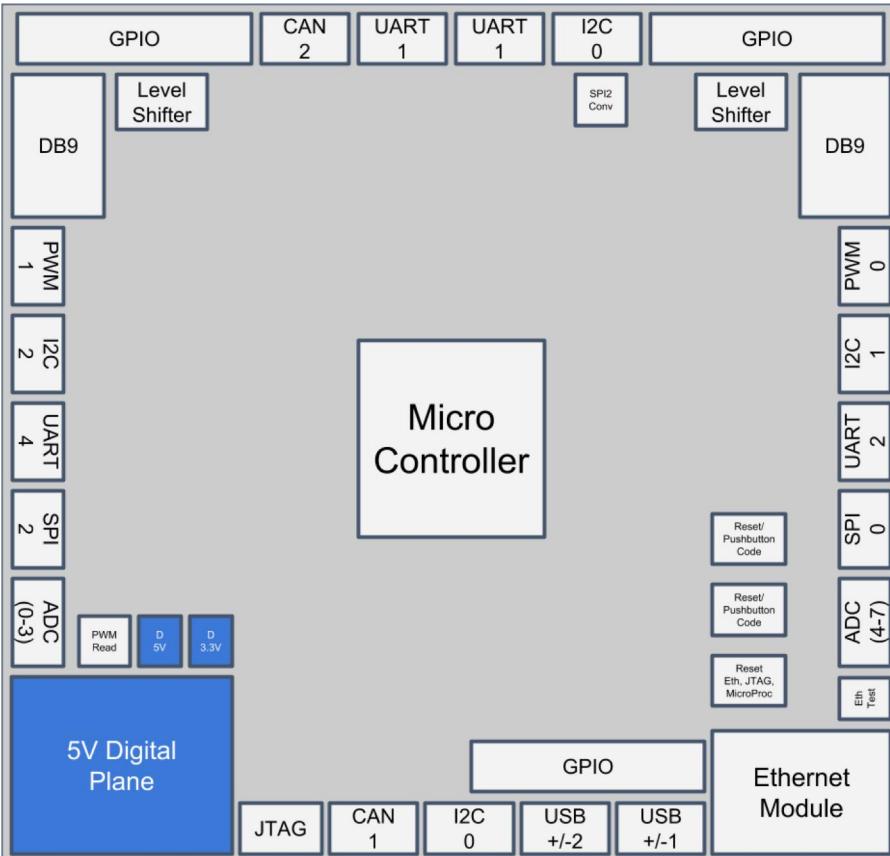
Communication Ports

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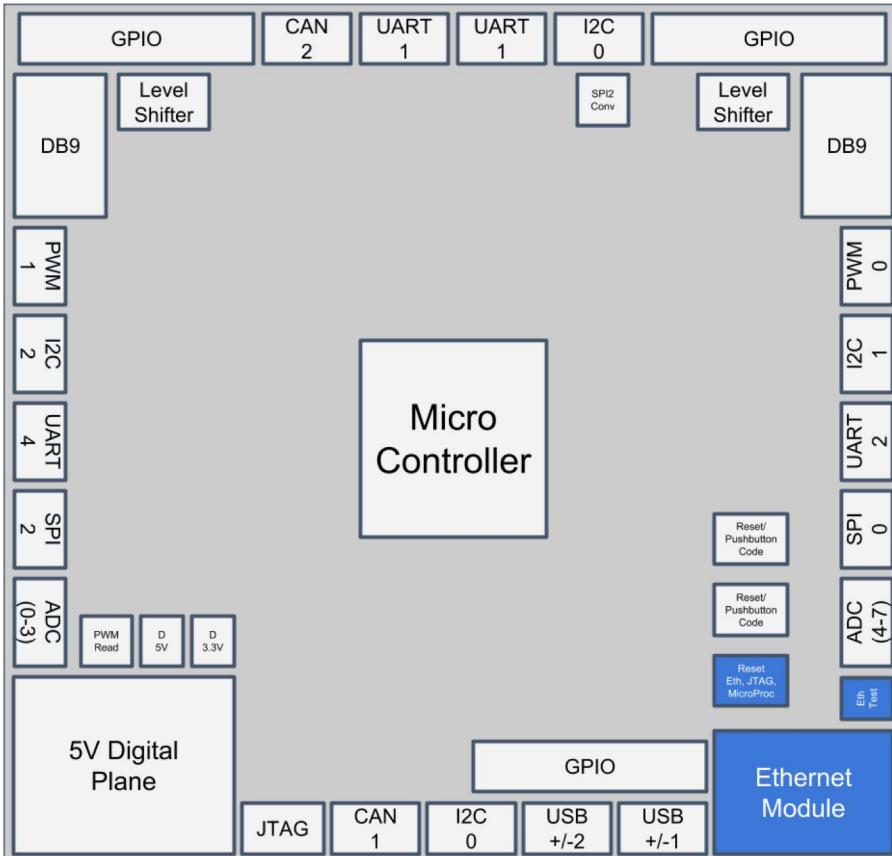
Power

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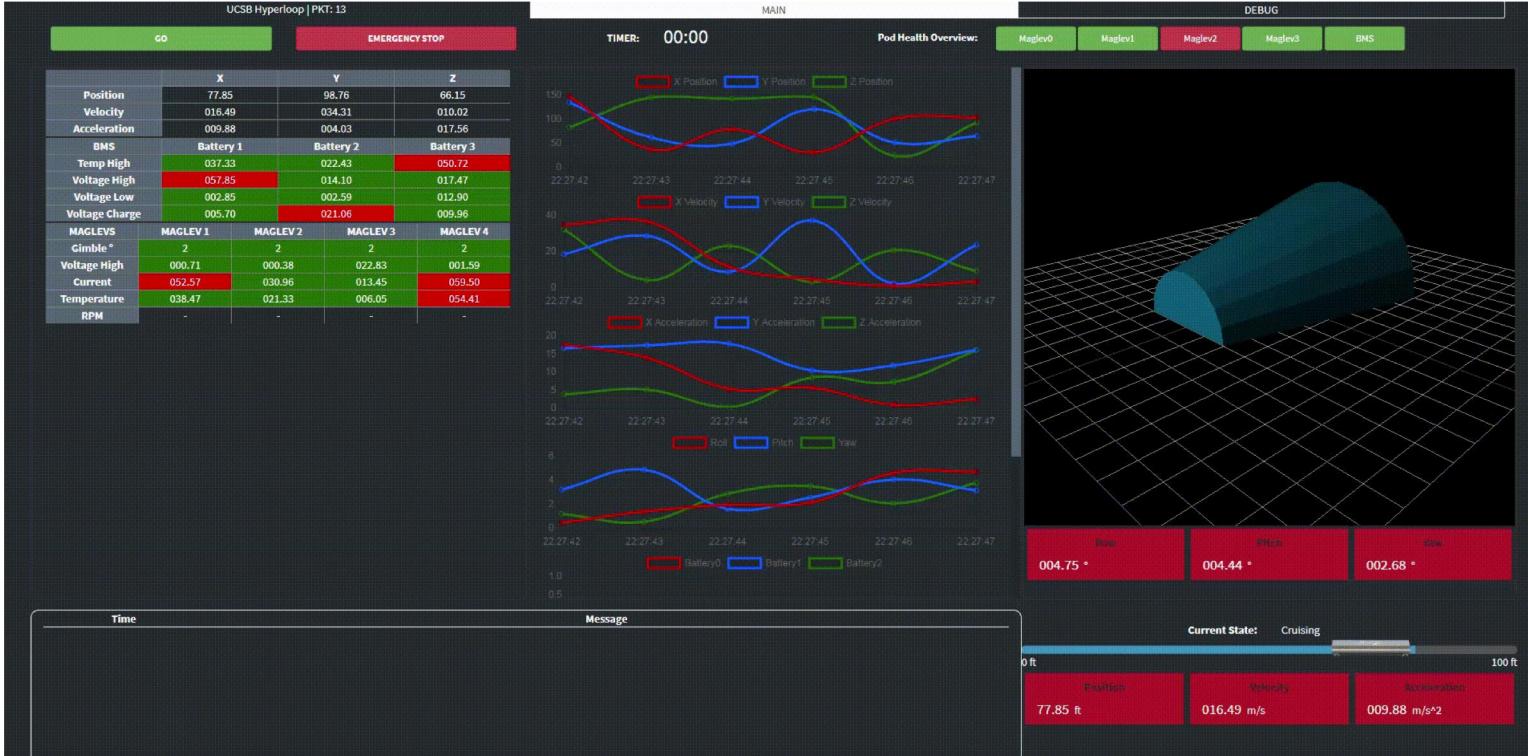


Wireless Ports

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Web App



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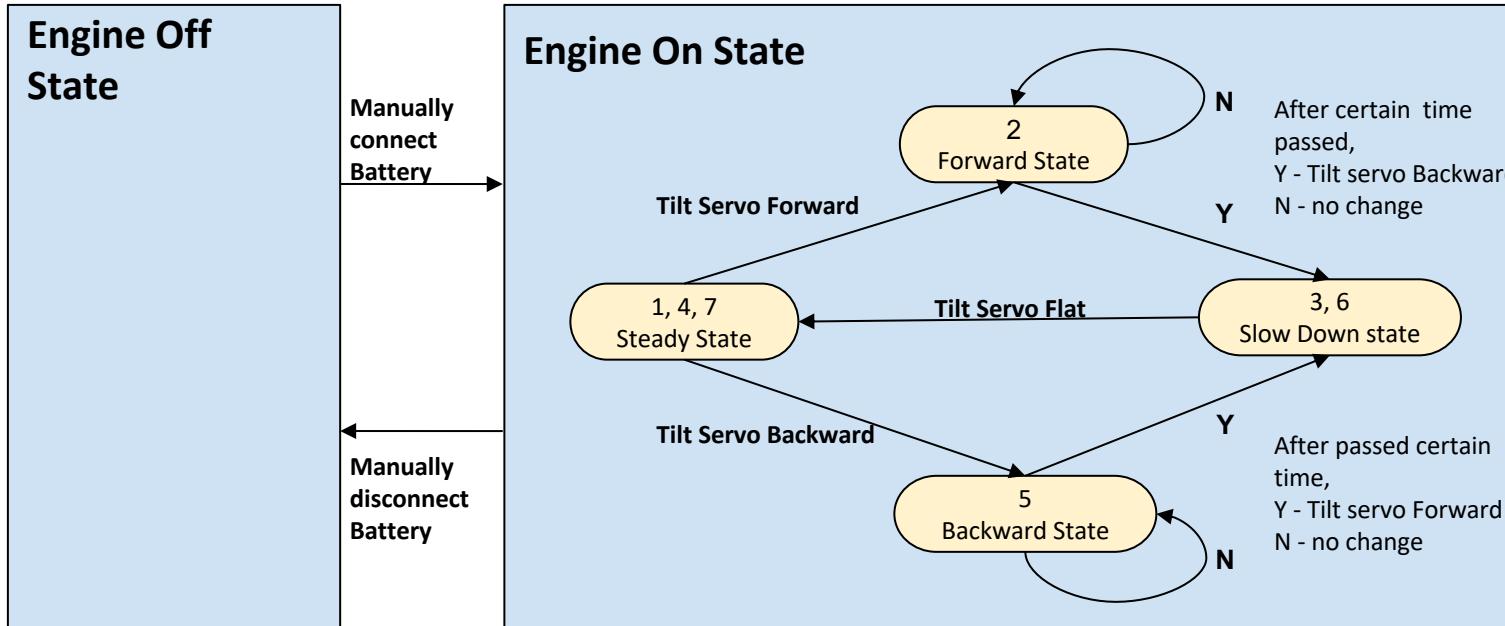
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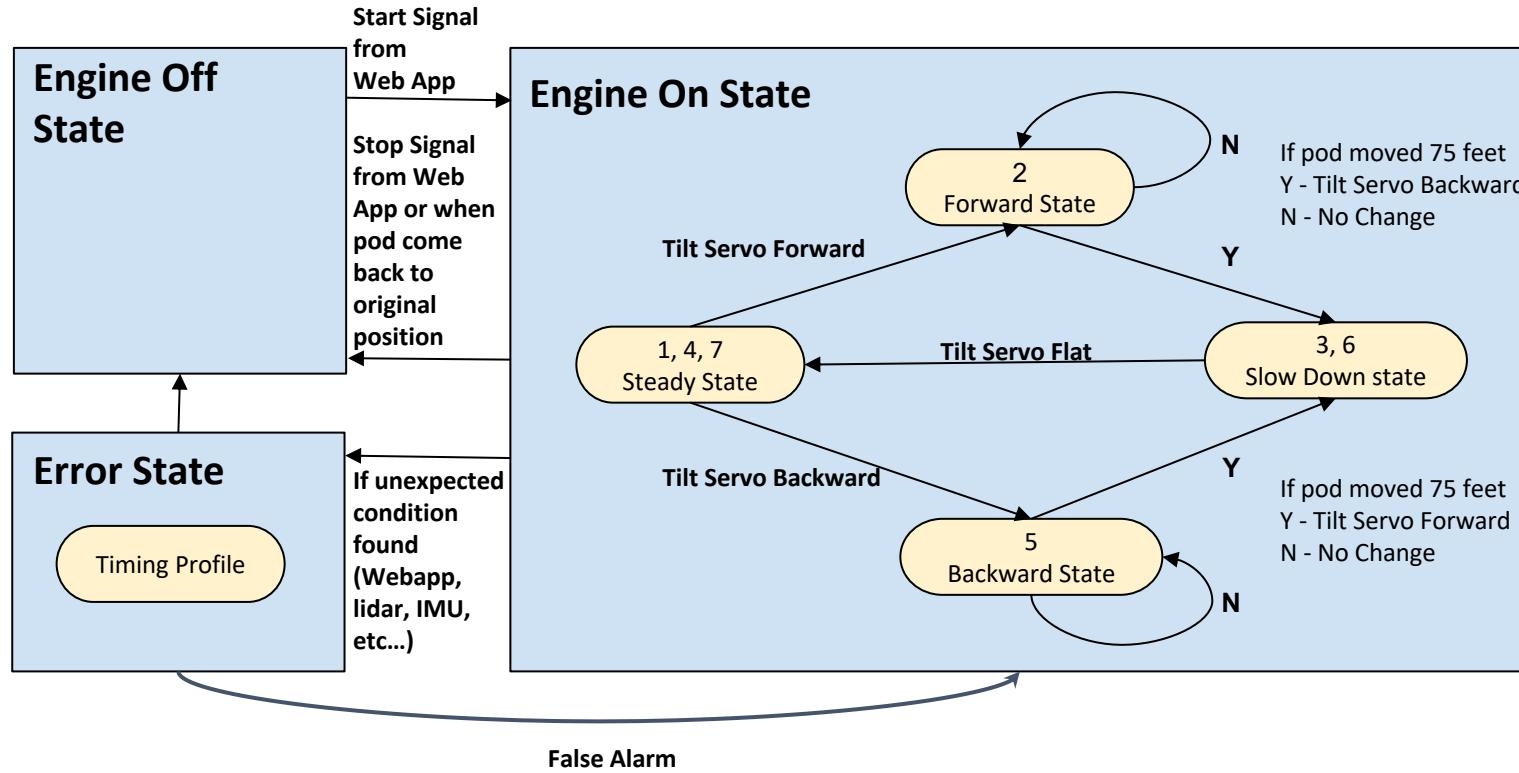
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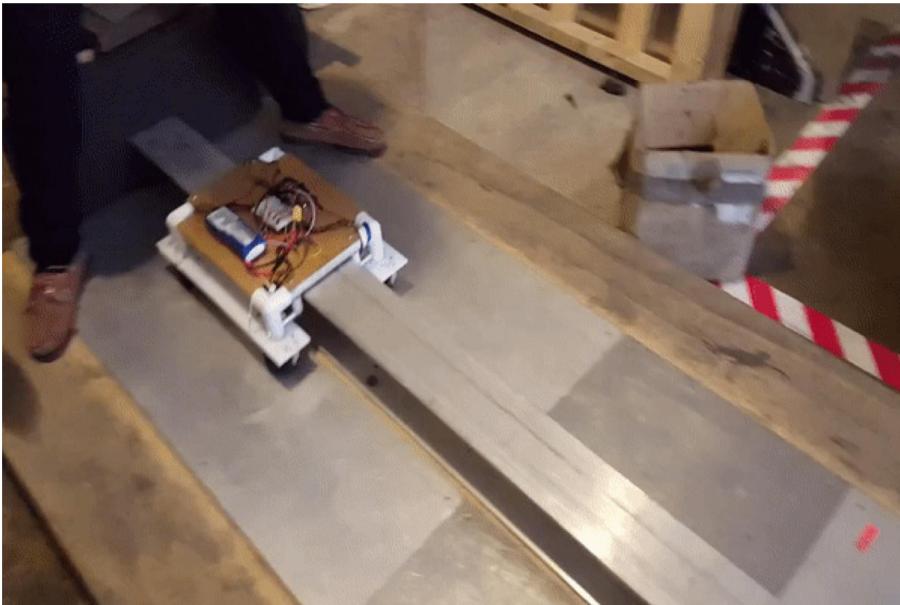
Timing Profile State Machine


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GPS based State Machine


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First Prototype



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Final Prototype



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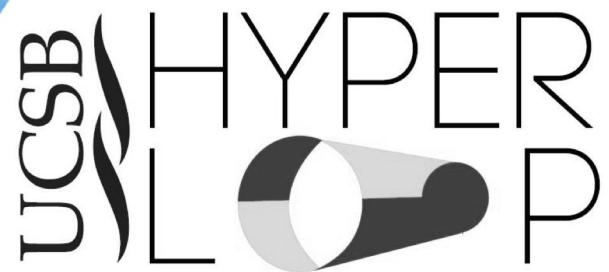
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