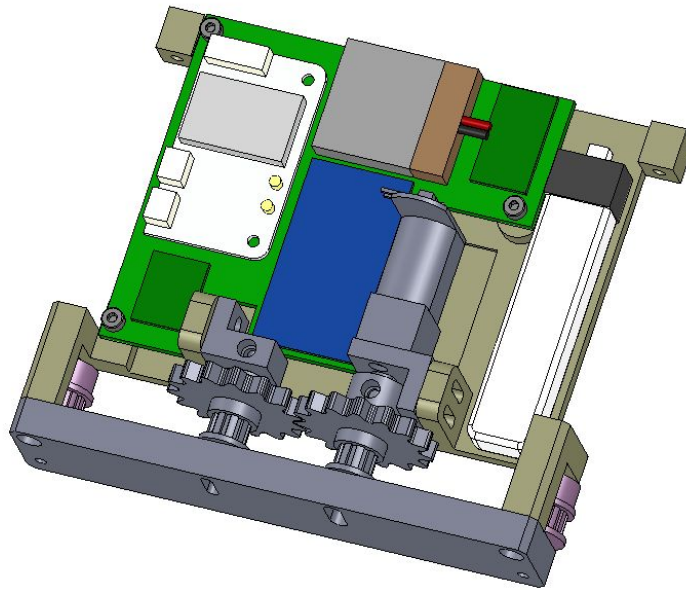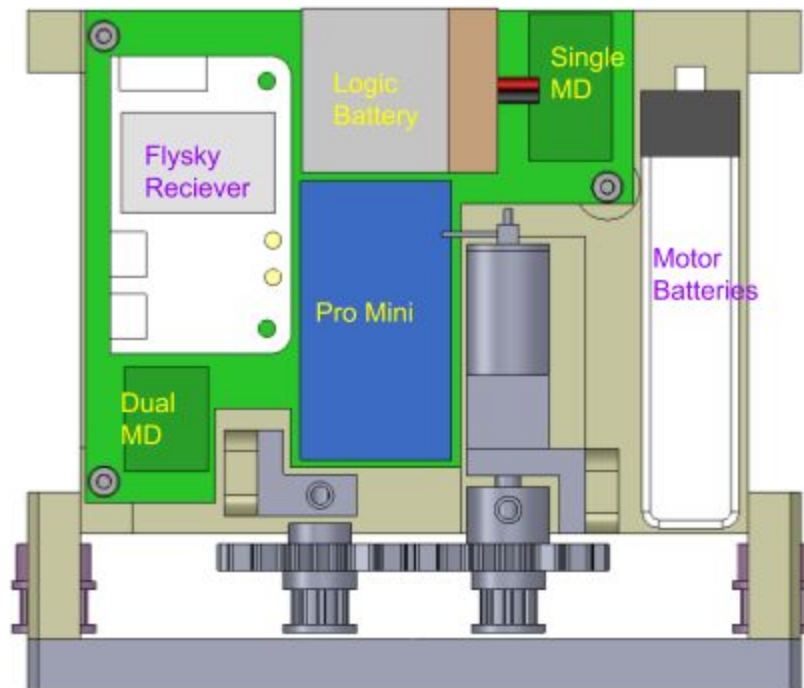This document is to help with the creation of the Protoboard (electronic circuit board, shown in green below) that can keep the STAR electronics compact and low profile. A drawing with the necessary dimensions for the Protoboard is included with the STL files.
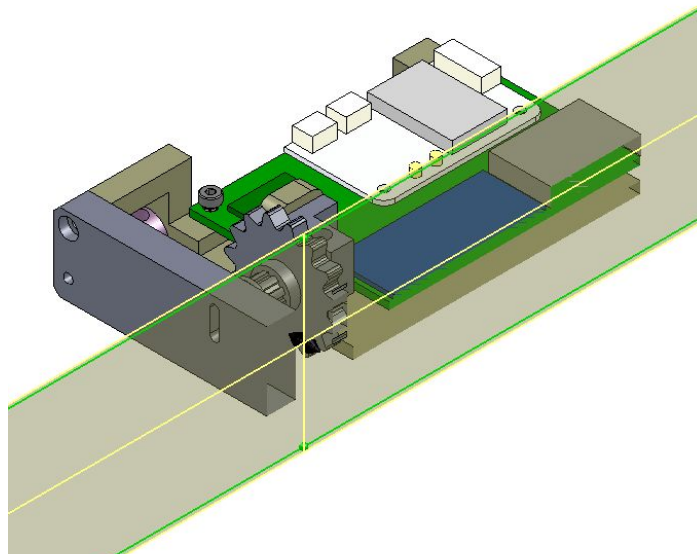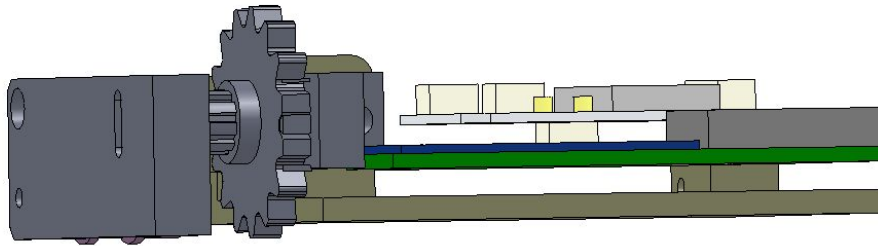

Iso View of Electronics Area

Top View of Electronics Area:
- Three screws hold Protoboard in place on raised bosses
- Note motor to the right of the Arduino Pro Mini (blue)
- Flysky Receiver wires can wrap around end and route under Protoboard
- Flysky Receiver held down by 2x screws and nuts, thru Protoboard
- Logic Battery held down with velcro and Motor Batteries with double stick tape

- The other two motors (not shown) will be to the left and right of the assembly shown
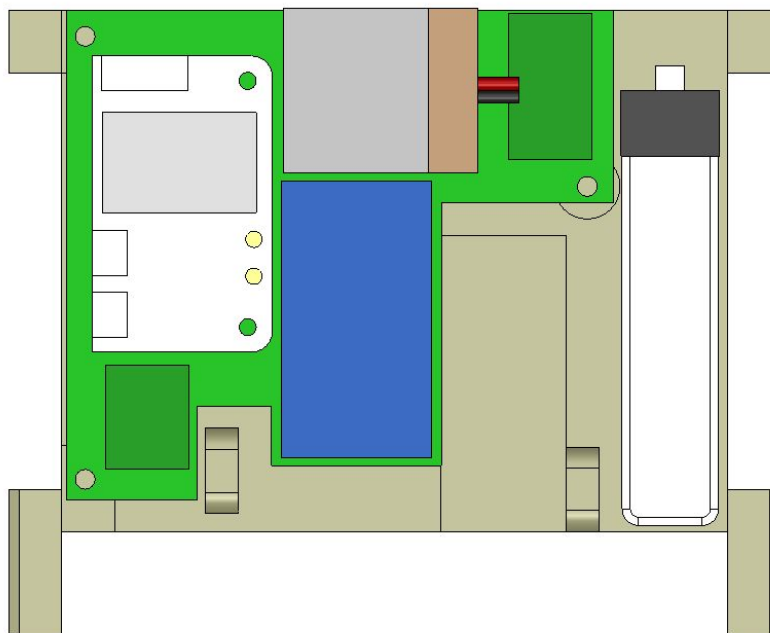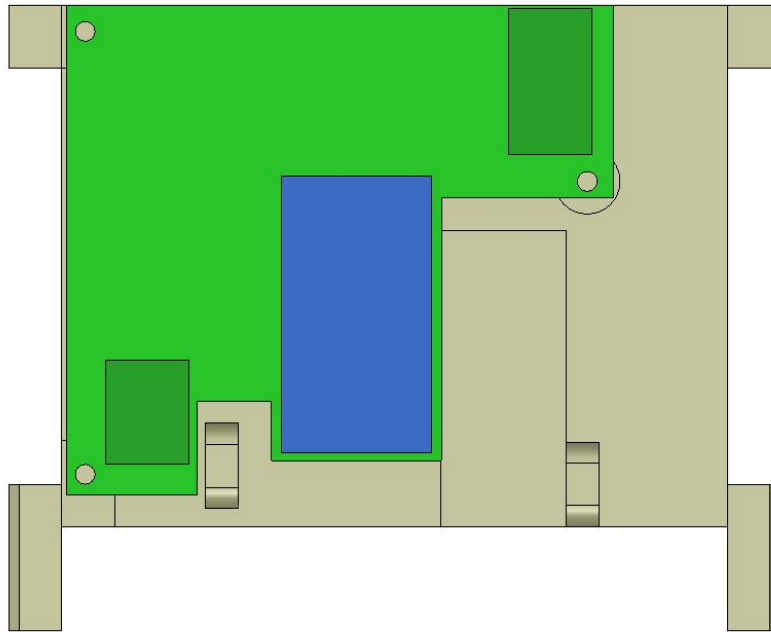

Section View (showing section plane)

Section View:

Note the gap under the Protoboard for running wires. Make sure to trim any headers below solder joints on the bottom, so the Protoboard can mount as low as possible.

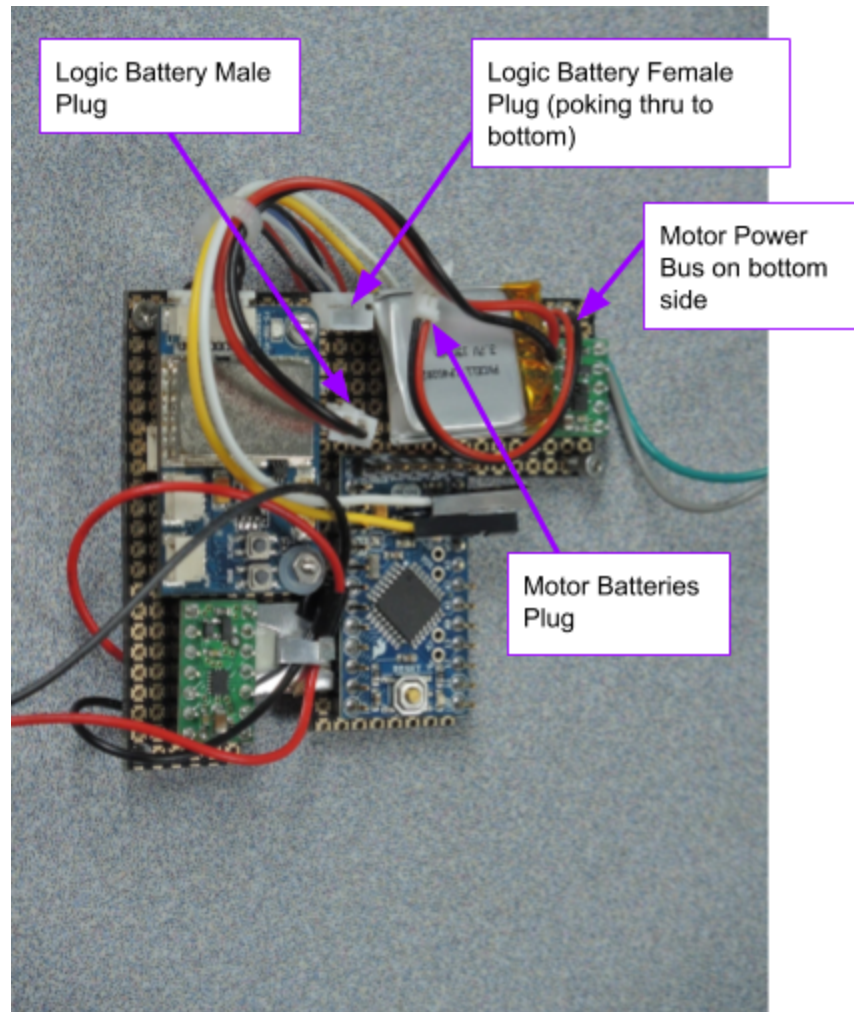Top View with All Electrical Components

Top View with Thru Hole Components Only
Arduino Pro Mini will need vertical header on the end, to be able to program it. This vertical header should be proud of the Pro Mini itself and is for use with the Sparkfun FTDI Basic Breakout.

On the next few pages are some views of the completed Protoboard.

Note: Motor Batteries in-series wire harness not shown.

Bottom View of Completed Protoboard

Motor Power Bus

Logic Power Bus (female connector directly above)

Single Motor Driver (for sprawl motor)

Dual Motor Driver