

Team America

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Minutes for Meeting #1

- Begin meeting with recapping what was accomplished last semester
- Design multiple boards for the multiple components of the system. This would allow for early testing as well as damage prevention of other critical parts.
- Last semester we determined how the MOSFET circuit drivers worked. Now we can just start designing the actual boards.
- Design specifications must be analyzed more before designing the MOSFET driver circuits. Early board ordering is acceptable.
- It would be best to design the entire system while keeping in mind how to run signal wires to the microcontroller board.
- How to connect high current wires to the PCB. Check parts catalog for connectors while keeping in mind that over specification is not a problem.
- Advantage and disadvantages of two microcontrollers
- What is the GPS telling us? Just satellite information. Is it possible to have a map type GPS? Look at documents from last year to see what parts they used.
- What is the maximum size of the board? 60in^2
- Remember all the parts are going to be soldered onto the board. It is possible to look for screw terminals for the MOSFET connectors.
- We may not need the heat sinks on the MOSFET. Check the sizing of the parts to see if they can handle the currents.
- Parts to order? No, work on the LLD. How are we going to sense the current and the voltages? This is a test vehicle, so monitoring as much as possible is a good idea.
- Measuring and monitoring trip information would allow for mapping all relevant data on the bulk storage.
- Parts needed to start the system. What do we need to put in the cab to start the system? Talk to professor Bauer to find out what the driver needs to know. Voltage on capacitors?