

Meeting Minutes

Leader: Tim

Note Taker: Sarah

1. Review status of parts ordered: All
 - a. Instead of nor gate – use change notice pins to signal when limit switch is pushed
 - b. Still need solenoid purchased – email Dr. Schafer
2. Power and XY Plotter: Tim and Elizabeth
 - a. Questions/concerns
 - Framing Wood Material Safety Questions
 - Mechanicals typically use HDPE with angled brackets
 - Unlikely going to get hot enough to set wood on fire – $2A * 12V = 24W$ which is not very hot
 - b. This week's action items
 - Get parts in
 - Ask Natalie if she has any wood we can use. If not, need to let Dr. Schafer know what we need exactly
 - Assemble XY plotter frame
3. Microcontroller and User Interface: Sarah and Kelsey
 - a. Update: last week's action items
 - Software
 - Turning off the motor: coast vs. brake.
 - Check if there is a frequency spec for the bridge. If frequency is too fast, motor will not move. Tune with testing.
 - To avoid blowing up motor: find a large resistor and place where motor goes. Look at resistor on scope. External voltage - V_{CEsat} .
 - Board design
 - Shouldn't use header pins unless using ribbon cable
 - b. Questions/concerns
 - Location of Surface Mount parts?
 - Not in closet
 - Check common parts list
 - c. This week's action items
 - Get parts in
 - Update software for kit board
4. 1st Design Review Questions:
 - a. At design review

- move motor
 - ADC for joystick
 - b. Clarify what is meant by “final report documentation, including the overall system requirements, and the portion of the document describing each subsystem.”
 - Very little documentation
 - Explain what we have already done (i.e. joystick and motor driver)
5. Other questions/concern: All
- a. Motor Voltages
 - Buck Converter is more efficient than voltage regulator