

Meeting Minutes: 360 Designs

Call to order

A meeting of 360 Designs was held in Dr. Beyerlein's office on 10/17/2019. Attendees included Tanner Sloan, Jake Metter, Dr. Beyerlein, and Trevin (EPC) via Webex.

Agenda

1. Call to Order
2. PowerPoint
 - a. Snapshot Day (5min) - Mark
 - b. Portfolio Documentation (1min) - Mark
 - c. Refining the Programmable Encoder design (5min) - Mark
 - d. Lead Screw/ stepper motor precision concerns (3min) - Mark/ Tanner
 - e. Stepper Motor Driver concerns (1min)
 - f. Revised Schedule (2min) - Mark
3. Future expectations, discussions (5min) - All

Reports

- Lead screw design has been decided (communicated last week to Trevin/EPC)
- Snapshot was two days ago, went well.
 - o Demonstrated animation of lead screw to visualize our design idea.

Unfinished business

- None

New Business

- Issues with hysteresis and repeatability of lead screw... need to make sure we have the correct lead screw that can allow us to measure accurately and repeatable.
- Mark has been checking out stepper drivers and motors
 - o May need one driver per motor

- Reviewed revised schedule
 - No meeting thanksgiving break
 - Visit EPC first week of december to present final 25SP design.
 - *CORRECTION*: not needed to visit epc, use Webex to display prototype(s)
- Have a “randomised success routine” so that not everyone that sees the module doing the same thing every time. Random “reward for success,” to keep it exciting
 - Roulette wheel spins upon length reached
 - Light bulb
 - Dunk tank
- Coarser lead screw may be better
 - Finer may be too accurate at a lower resolution
- Need to buy a linear actuator/lead screw asap and begin prototyping.
 - Refine the design later
- Trevin would like us to present a formal design review before our finalized project. Design review date can be flexible.
- Next meeting : discuss when EPC shall send the next encoder model.

Announcements

- None

Adjournment

The meeting was adjourned.

Tanner Sloan - 10/10/2019

Secretary