

Team: P16201

Engineer: Leslie Bowen

Entering Phase: Subsystem Build and Test

What do I plan on doing to ensure that Team P16201 has a successful Subsystem Build and Test review?

1. Assist with manufacturing power and I/O cables for the motors (Friday 2/12 1 hour, Saturday 2/13 2 hours)
2. Daisy Chain motors and run on a single power supply (Friday 2/19 3 hours)
3. Run the Teensy through the level shifter PCB (Friday 2/12 1 hour)
4. Continue up-keep of the task list and adherence to 3 week plans of other team members (Ongoing)
5. Create demo program to run at least two motors from one power supply for the week 5 review (Friday 2/12 1 hour, Saturday 2/13 2 hours)
6. Assist in building up joints from aluminum pieces, wherever possible (Ongoing)

You will answer these three questions when you submit at the end of Subsystem Build and Test

1. What did I actually do?
 - a. During this phase, I cut one power cable on Saturday 2/13 and discovered that the tin crimps we gathered for free from surplus were not the size for our wire gauge. I then found samples online for the parts specified in the Teknic motor manual and ordered free samples to test. I attempted to run the Teensy through the surface mount level shifter and the performance was inconsistent, so we are re-attempting it with a different chip and board without flying leads.
 - b. This test was successfully completed and the level shifter function verified. In addition, I wired two motors together and attempted to run them when the fuses of the power supply blew. I ordered more fuses and will try again for the next phase.
2. What did I learn?
 - a. Always check the specs from the manual before placing orders or gathering parts. Be specific when requesting parts from team members. It is possible to code without having the motors connected and should save some time.
3. What do I plan on doing to ensure that Team P16201 has a successful Integrated Build and Test review?
 - a. Answered on Bowen - 3 Week Plan Phase II.