Kyle Skey

Date Range: 10/4/2016-10/18/2016

Touch Screen Smart Mirror - Project Status Report

**Planned Work:**

* **Order another Teensy 3.2 and test ADCs (Left over from last week)**
* Determine if any transmission line effects on boards
* Start RX Schematic layout
* Figure out good demo-day presentation that doesn’t involve duplication of efforts
* Order LV138 & LV164 chips for experimentation

**Work Results:**

* Ordered two additional Teensy 3.2 boards
* Determined frequency will not produce any transmission line effects. I will add pads for capacitors if needed to be safe
* Finished initial Rx and Tx Schematics in ExpressSCH
* Finished initial Rx and Tx PCB layouts in ExpressPCB
  + **Need to fix attachment of ground pins to ground plane**
  + **Need to make sure Netlist Maps are correct**
* Made board interconnect layout in LTSpice to aid with corner board layout
* Constructed a transmitter circuit on breadboard and tested microprocessor code (fixed bugs)
* Started bread-boarding circuit for Demo Day

**Future Activities:**

**Short Term:**

* **Test ADCs on new Teensy 3.2s (left over from previous weeks)**
* Finish bread-boarding circuit for Demo Day
* Write microprocessor code for Demo Day – should be same code for final project
* Align LEDs and test code
* Get mouse interface working with computer for Demo

**Long Term:**

* Update schematic and PCB layout to reflect changes made while constructing Demo circuit
* Schematic and layout review with peers/instructors
* Order boards and BOM items
* Construct LED alignment and bending jig – crucial for successful assembly
* Disassemble 32” TV to be used for mirror to determine what is needed for frame
* Order 2-way acrylic sheet