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Date Range: 9/27/2016-10/3/2016

Touch Screen Smart Mirror - Project Status Report

**Planned Work:**

* Order another Teensy 3.2 and test ADCs
* Re-design circuit to work at 3.3V instead of 5V (Benefits of Teensy 3.2 board as an HID device outweighs source voltage selection)
* Pick logic chips that work a 3.3V (LS138 & LS164)
* Pick new resistor value for Tx LED
* Board review and Order PCB for Demo-Day board

**Work Results:**

* Changed chip family from LS (5V) to LV family (3.3V) to accommodate power supply change
* Changed Tx LED resistor to 16-Ohms and verified 100mA LED current through reading on a bench power supply.
* Created Tx board schematic on ExpressSCH for mapping onto ExpressPCB
* Tried to prototype on PERFBoard but spacing is not ideal for my application. Still leaning towards a PCB.
* Created I/O mapping/simulation in LTSpice to determine amount of I/O lines needed per board and corner board pin-to-pin mapping

**Future Activities:**

**Short Term:**

* **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