



Coyote Controller



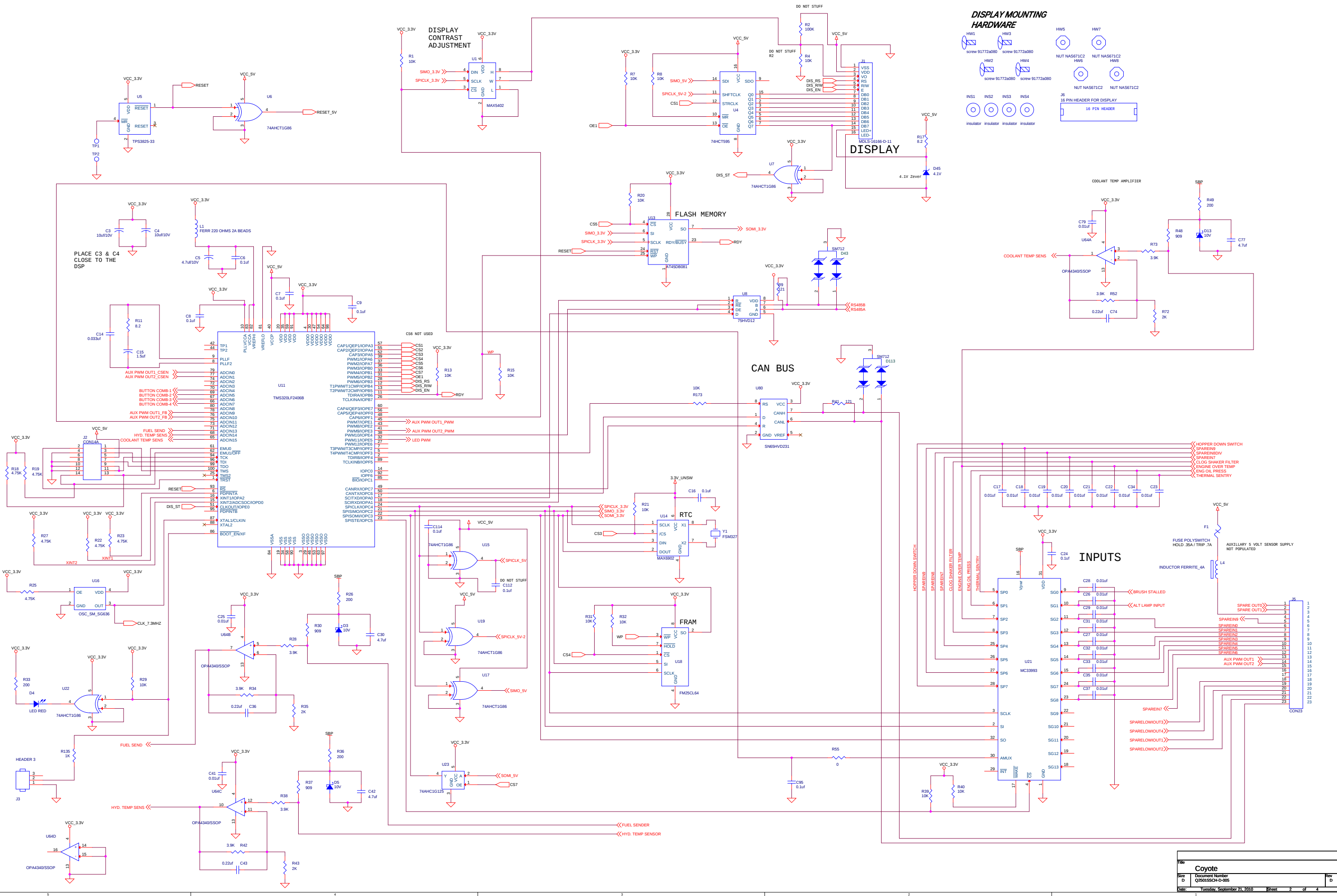
PAGE1: COVER SHEET
PAGE2: DSP, FLASH, EEPROM, RTC, RS485, DISPLAY, MULTIPLESWITCH DETECTION INTERFACE, INPUT CONNECTOR, ANALOG SIGNAL CONDITIONING.
PAGE3: POWER OUTPUT DRIVERS, OUTPUT CONNECTOR.
PAGE4: POWERS SUPPLIES, LED DRIVERS, KEYPAD, PWM OUTPUTS.

NOTES:

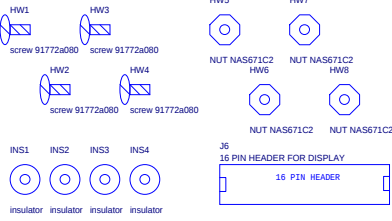
1. The PCB shall be four layers (Power, Ground, Top and Bottom).
2. PCB material shall be FR4.
3. 2oz Copper for Top and Bottom layer, 3oz copper for Power and Ground.
4. Silkscreen and Solder mask on both sides, solder mask over bare copper.
5. All traces and spaces between traces shall be 10mil trace X 6mil spacing except stated otherwise.
6. All filter caps shall be placed very close to the component they're filtering. (see Ux-values).
7. Follow all general PCB design layout guidelines.
8. Ground and Powers pins shall be dropped straight to Ground and Power planes unless otherwise not possible.

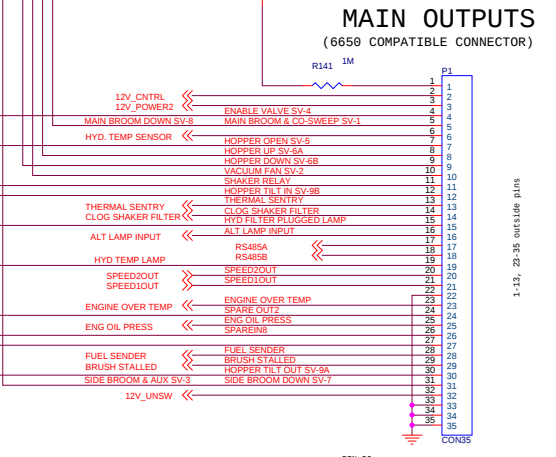
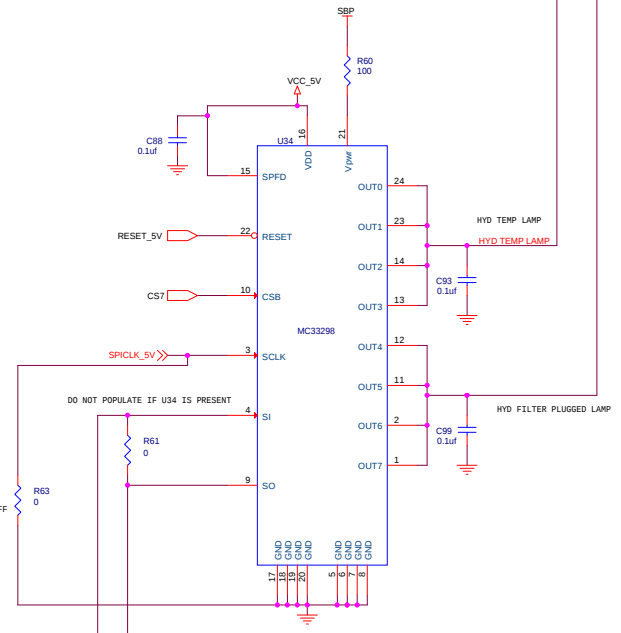
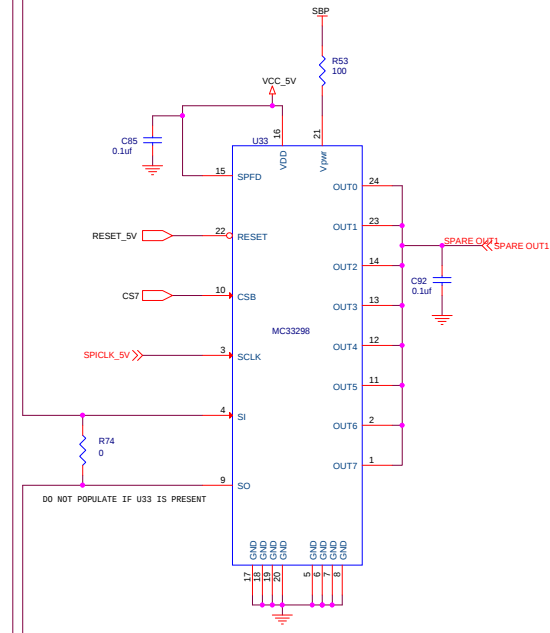
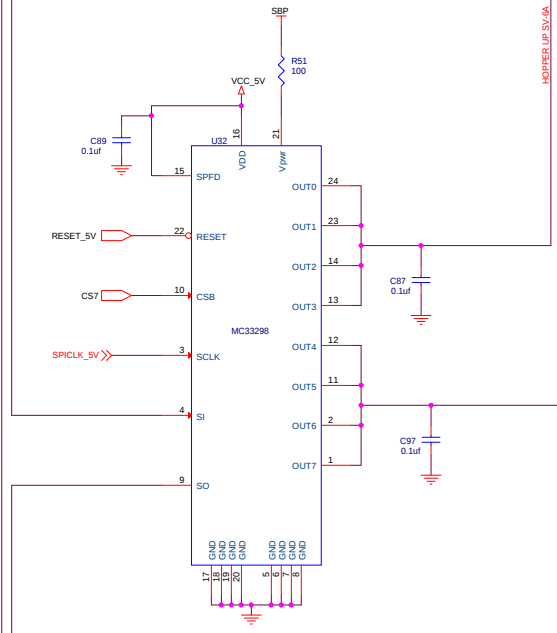
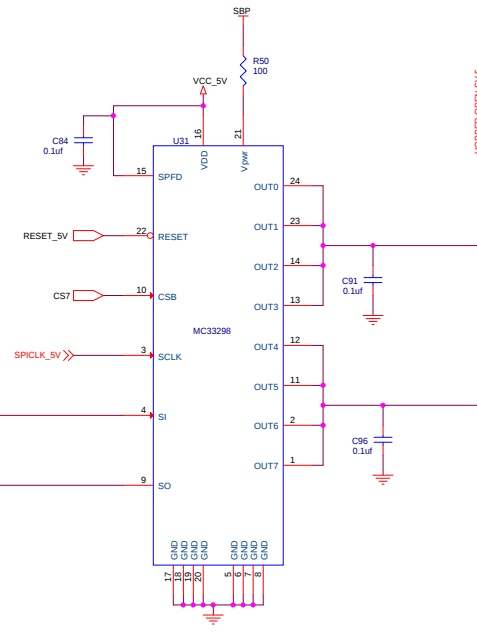
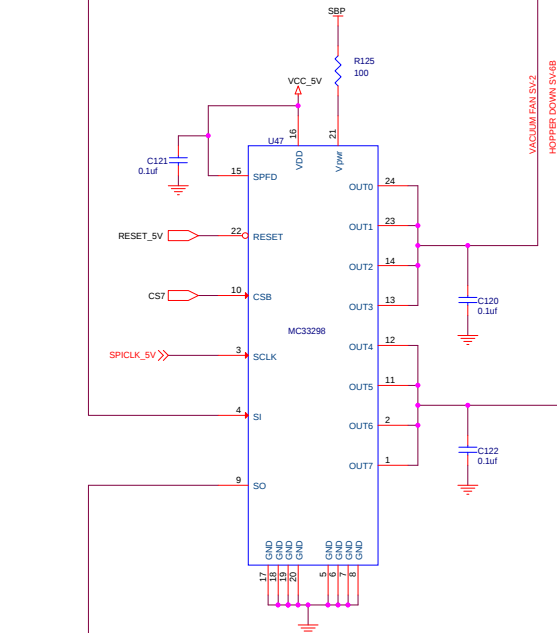
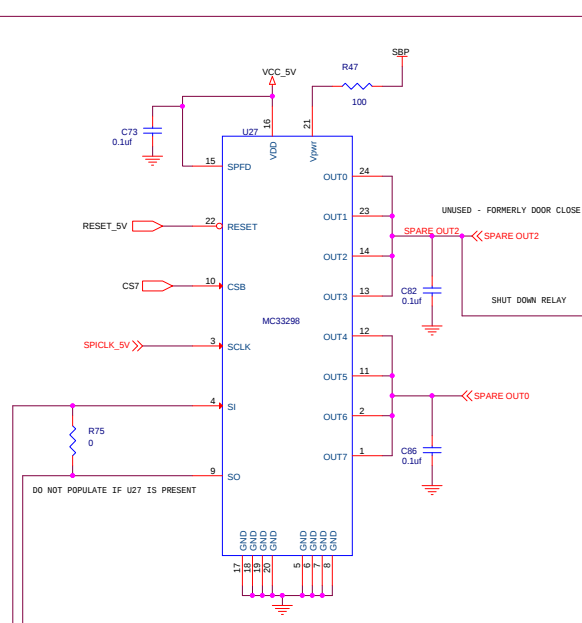
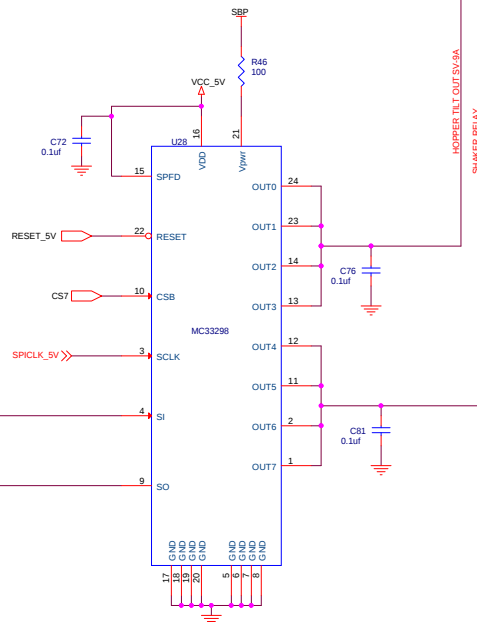
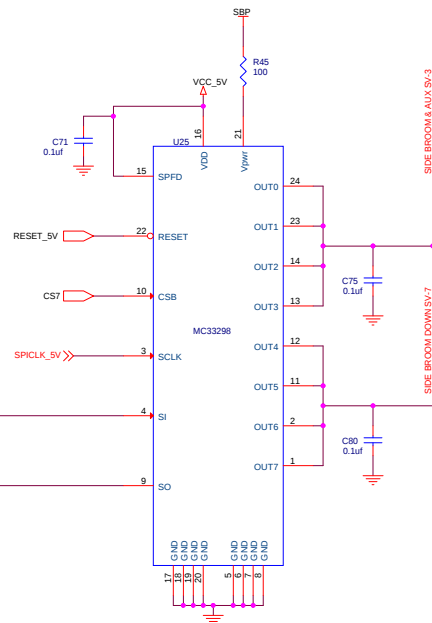
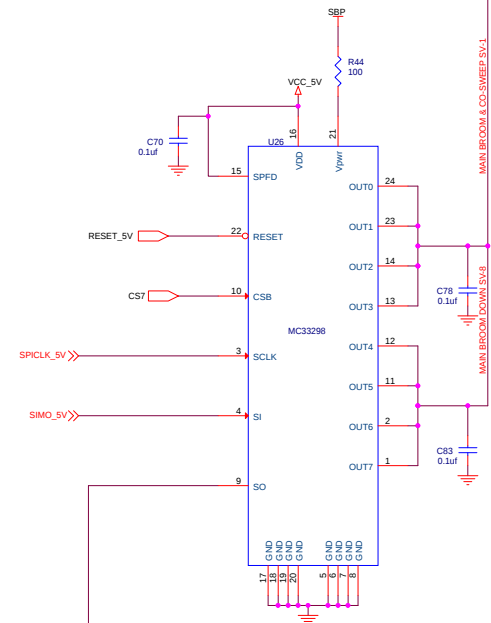
CHANGE HISTORY:

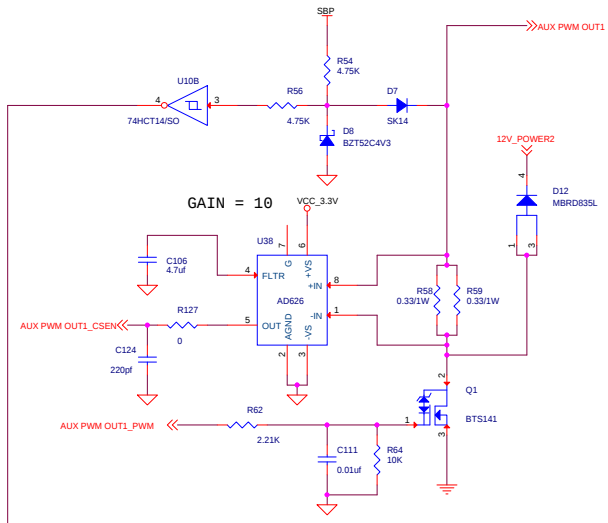
REV 03: ADDED POWER SUPPLY AND CIRCUITRY FOR ROTARY SENSORS.
REV 04: SPLIT SPICLK AND REROUTED, ADDED TERMINATION AND MISC OTHER CHANGES BASED ON MAKO PROBLEM. (THIS VERSION NEVER BUILT)
REV 05: REMOVED ROTARY SENSOR CIRCUITRY. MOVED HYD TEMP AND HYD FILTER OUTPUTS TO P1 CONNECTOR. ADDED SPARE INPUT AND OUTPUT TO P1 CONNECTOR. ADDED SPARE INPUTS AND LOW I OUTPUTS TO P2 CONNECTOR.
CHANGED KEYPAD AND LED LABELING. ADDED 5V SUPPLY TO P2 CONNECTOR. ADDED VOLTAGE DIVIDER TO SPARE INPUT ON P1.



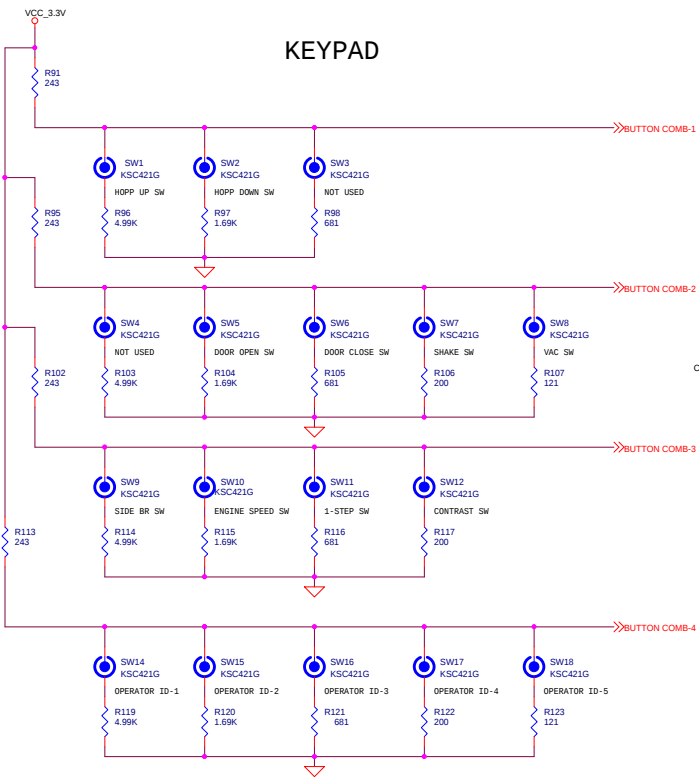
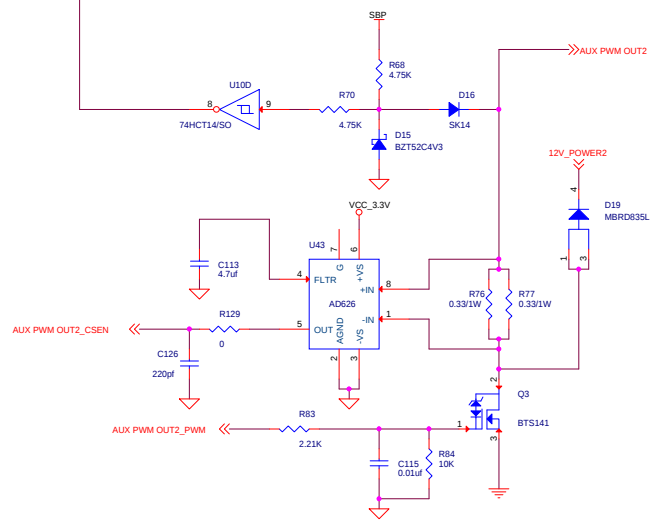
DISPLAY MOUNTING
HARDWARE



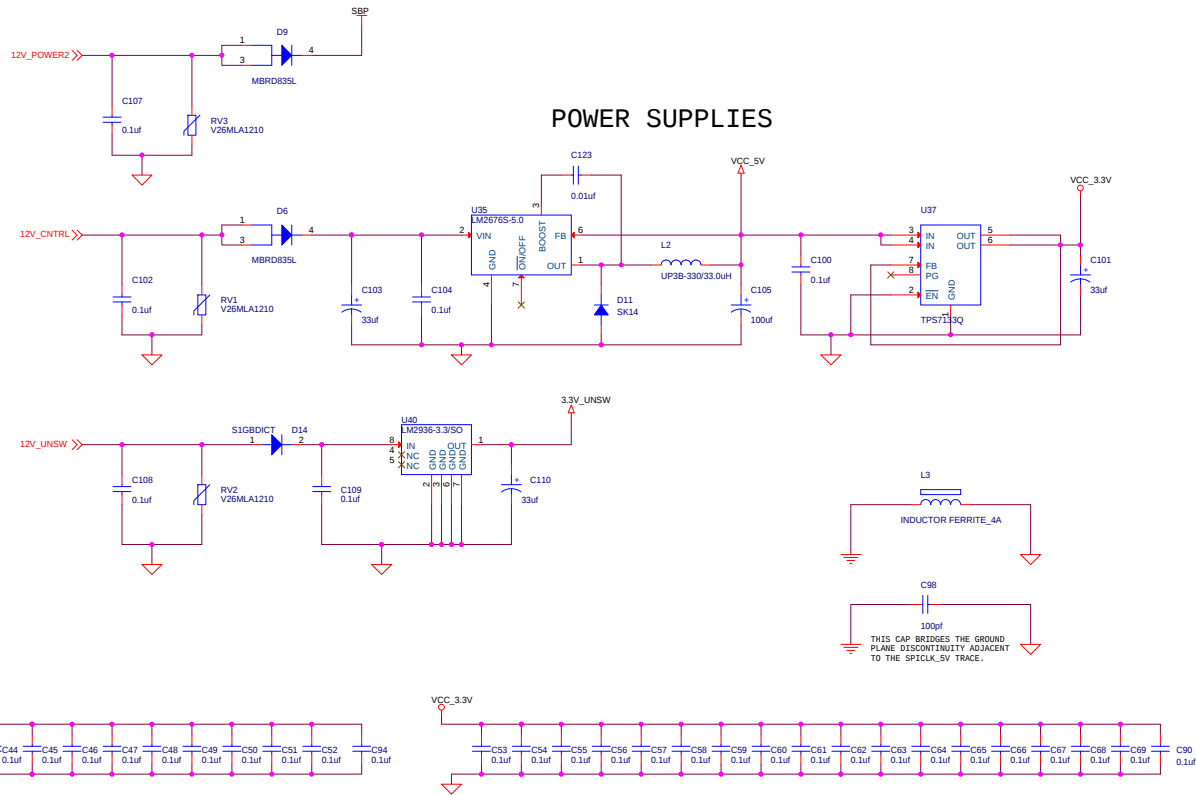




NON POPULATED PWM CIRCUITRY

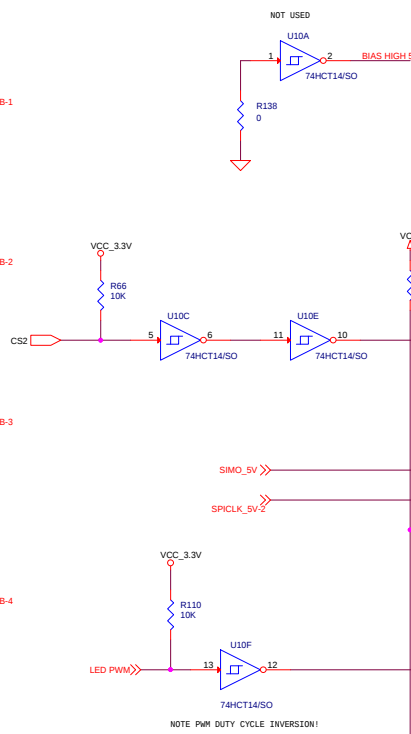


ALL SWITCHES EXCEPT THE OP ID'S AND CONTRAST WILL HAVE ASSOCIATED LED'S. THE CONTRAST SWITCH WILL BE ADJACENT TO THE DISPLAY.



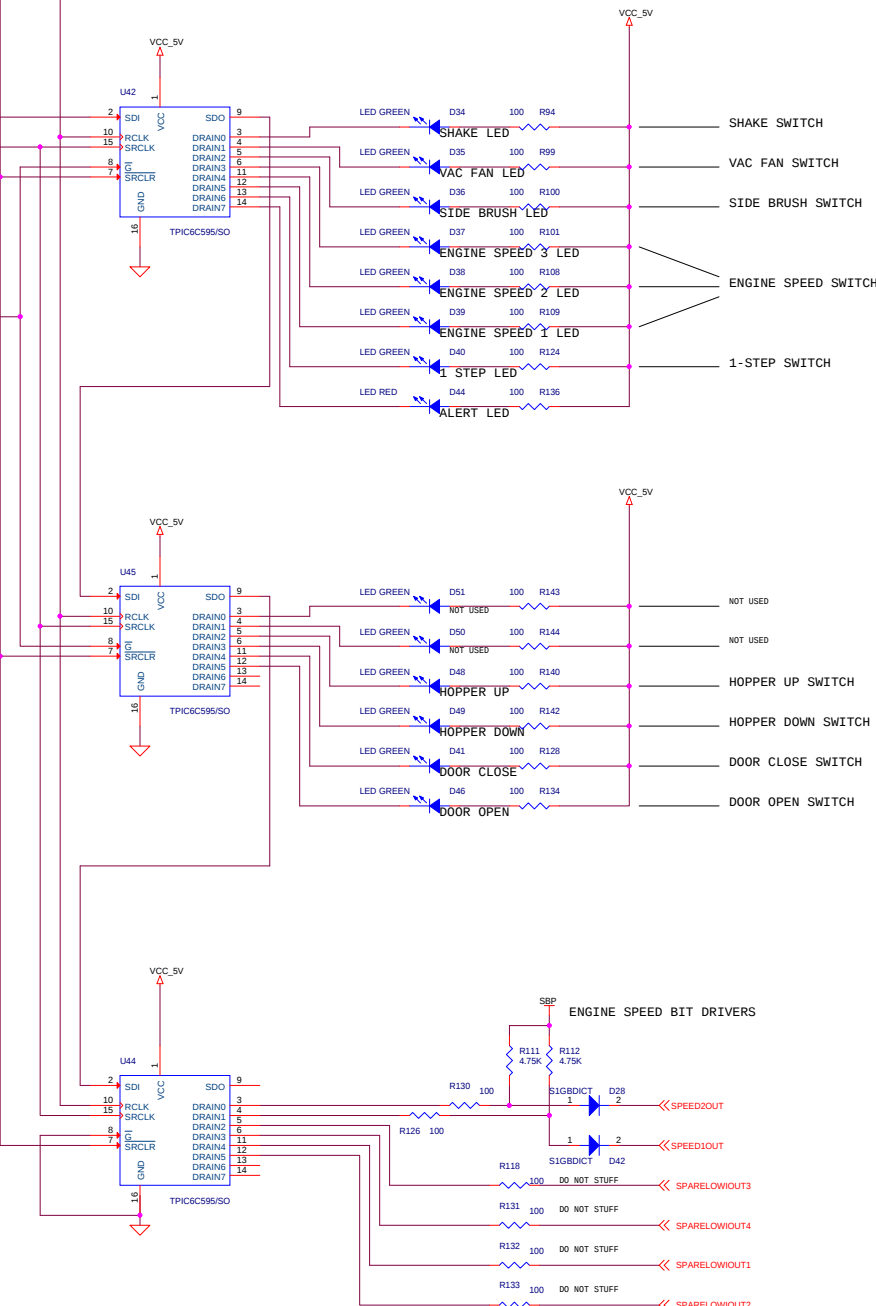
KEYPAD

POWER SUPPLIES



PANEL LEDS ADJACENT TO: THESE SWITCHES

ALL LEDS ARE ASSOCIATED WITH SWITCHES, WITH THE EXCEPTION OF THE "ALERT" LED WHICH IS TO THE LEFT OF THE DISPLAY. ALL THREE ENGINE SPEED LEDS ARE ADJACENT TO THE ENGINE SPEED SWITCH.



ENGINE SPEED BIT DRIVERS