Issues Identified after Manufacture
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1) NodeLua board width is 5.08 mm too much
2) DONE - LEDs D3 is incorrectly linked to Row 0 instead of 9.
3) DONE - Chip enable lines need to be inverted. This should be done by replacing the 74HC238 with a 74HC138.

Potential Issues
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1) DONE - Encoders on RHS too close to displays
2) DONE - Mounting holes for the rotary encoders are not big enough
3) DONE - Toggle switch mounting position too cramped
4) DONE - Ideally the HT16K33 should be address 0x71
5) DONE - GPIO 23 - No hw control of the i2c multiplexer reset line
6) DONE - Location of the power socket
7) DONE - put in a bridge - In situ adjustment of the buck converter is dangerous. Needed to be turned all the way down and then wound up with a meter
8) DONE - bit the bullet and made the change - I2C Connectors would be better if they had a different pin arrangement
9) NOT DONE - the resistors can go on the external boards - I2C Mux should have pull up resistors on each output
10) DONE - I2C Mux Connectors are not in numeric order on the board.
11) DONE - Power Jack might be better moved into the board more so the plug does not overhang the board.
12) DONE - Replaced by ESP32 - ESP8266 has issues exposing the number of GPIO pins needed for the encoders.
13) DONE _ Encoder pins need 100nF caps going to ground to debounce.
14) DONE - Gateron LED leads swapped positioned. Corrected in Lib.
15) Started to see I2C bus problems with OLED display in situ - This seems to have been solved with lower PSU voltage.
16) DONE - Using chip pull-ups instead of discrete resistors on encoders seems fine.
17) DONE - ESP32 fixed this - D8 on Vol1 seems problematic replaced by D4
18) NOT DONE - left the mounting in place - Having the I2C Master connector on the board seems unnecessary. Probably everything should go via the MUX
19) DONE - Some of the keyswitch LEDs need to be linked to COM3 because they are floating.
20) DONE - ADF switch squeezed vertically
21) JST connector for ADF too close to ADF switch
22) DONE - ESP32 linked - DLG2416's BL line should be on a PWM pin of the MCU via a MOSFET.

Issues With V2
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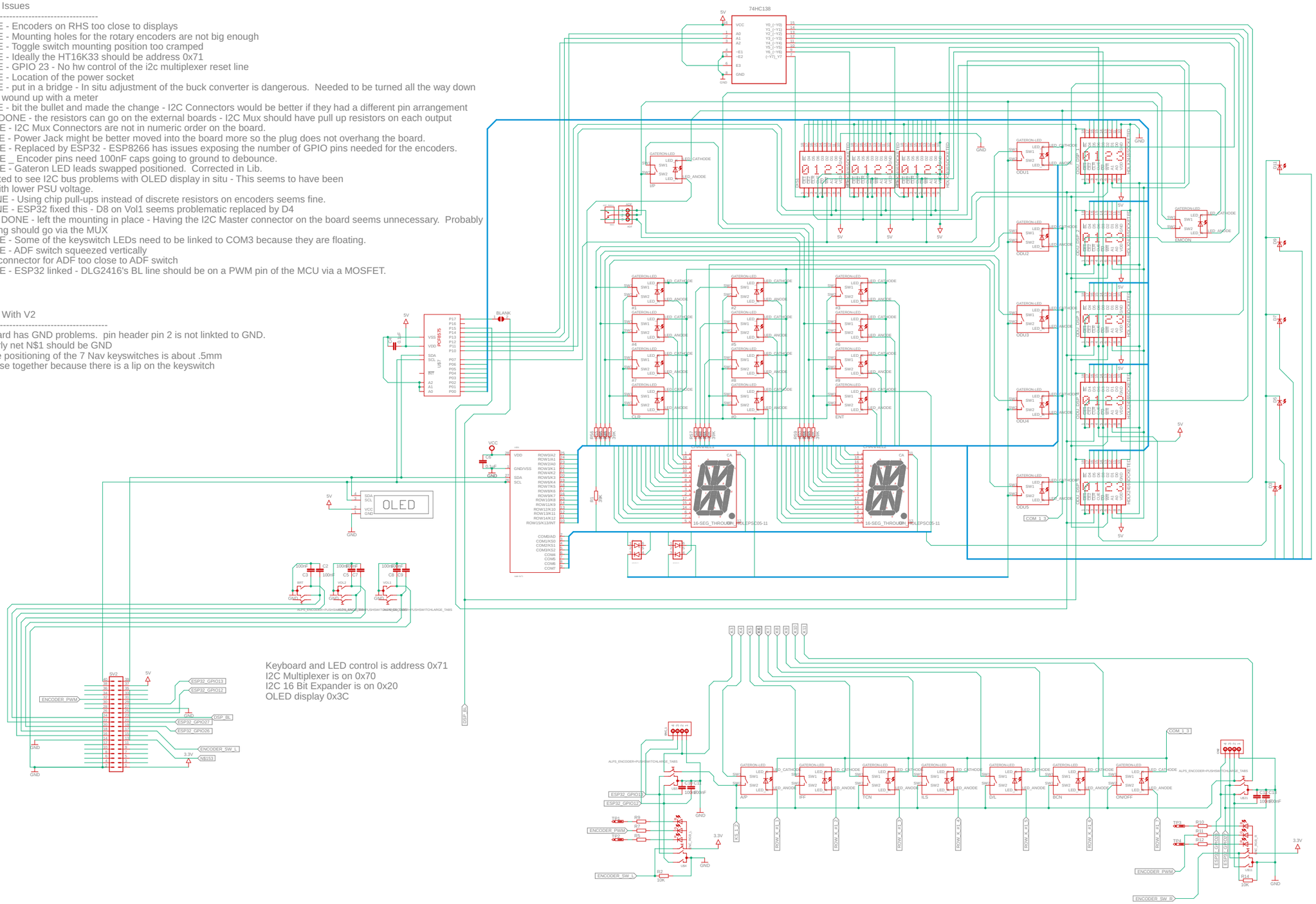
1) Board has GND problems. pin header pin 2 is not linkted to GND. Similarly net N$1 should be GND
2) The positioning of the 7 Nav keyswitches is about .5mm too close together because there is a lip on the keyswitch



TITLE: Hornet UFC 020a

Design by: Neil Larmour

REV: V02

Date: 30/11/2018 13:47

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