**Test Plan for new circuit board (Based on Rev 05)**

**I. Visual inspection**

**Step 1**: Board damage

Look for any cracks, break, peeling solder mask, etc.

**Step 2**: Solder Inspection

Looks for any solder bridge, twisted, solder-lack, part missing, etc.

**Step 3**: Check label placement and component orientation according to the layout.

**Step 4**: Check “Do not populate” part if we have any

**Top**: \*listing DNI components\*

**Bottom**: \*listing DNI components\*

**II. Power test**

**Step 1**: Power the hardware alone using current limiting power supply.

Check if the indicator LED is ON; Check C38 if it is 5V.

**Step 2**: Check other power supply

Check U10 out (pin 5), or C24, if the ouput is 3.3 V

Check U3 Out, (pin 5), or C21, if the output is 1.8 V

Check U4 Out (pin 5), or C26, if the output is 2.8 V

**Step 3**: Check Serial communication

Check pin 2 and pin 3 of J3 for serial

**Step 4**: Check I2C communication

Check pin 2 and pin 3 of J4 for I2C

**Step 5**: Check Pixhawk 4 power and Serial communication on J2

Check pin 1 VCC and Pin 6 GND for power

Check pin 2 and pin 3 for serial communication from 1500 OEM to Pixhawk 4

**III. Performance Test**

**Step 1**: Connect SLA 1500 hardware, Ethernet and Analog Out to the new circuit board.

**Step 2**: Open the Tera Term to see if they have any serial communication.

**Step 3**: Open the SLA-Panel plus, connect to the IP address of our hardware.

Check if the video streaming on Panel Plus

Check if it has analog video out.