PCB Checklist

PCB Information	
PCB Version:	2.1
PCB Serial Number:	
PCB Software Version:	6
Test Date:	

PCB Power Supply Test		
1. Insert the 3A mini ATO fuse in "PS10".	☐	
2. Connect the test box harness to the PCB.	☐	
3. Turn on the power switch and ignition switch on the test box. All other switches on the test box are off.	☐	
4. Check the main 3V3 supply on "TP8".	☐	
5. Check the auxiliary 3V3 supply on "TP9".	☐	
6. Check the current sensor 5V supply on "TP7".	☐	
7. Check the isolated CAN bus 5V supply across "C67" or "C47"	☐	
PCB Functional Test		
8. Connect the PICkit 4 programmer to the programming port "CN6". Press the programming button on the PICkit to program the micro.	☐	
9. Unplug the programmer and press the "RESET" switch. "D5"," D6","D14" and "D15" will turn on and then off again. The LED's will turn on again to reflect the software version. D5=0, D6=1,	☐	

D14=1, D15=0. This binary value is version 6.	☐	
10. The PCB will perform a self-test 60 seconds after the "RESET" was pressed and enable all functionality.	☐	
11. Connect a micro-USB cable from the PC to "CN3". Start a PUDU Terminal program on the PC.	☐	
12. Select COM Port then click connect or click auto connect on the PUDU Terminal program. Response should be "password correct, access granted".	☐	
13. Click the analog command on the PUDU Terminal program and record the values for: • 3V3 Monitor • 3V3 Aux • 12V Monitor • Main Battery monitor	☐	• • • •
14. Click the digital command on the PUDU Terminal program and check the values are all "0" except for DIP_SWITCH1,2,3,4 and IMU_INT2.	☐	
15. Turn on the tamper, door closed, master trigger and aux trigger switches on the test box. Click the digital command on the PUDU Terminal program and check the applicable values are all "1".	☐	
16. Turn off the door closed switch and turn on the door locked switch. Click the digital command on the PUDU Terminal program and check the applicable values are "1".	☐	
17. Turn off the master trigger and aux trigger switches. Turn on the door closed switch again. The armed led "D6" should light up. Ensure the PCB is in a vertical position in the PCB tilt jig. Click the IMU command on the PUDU Terminal program and check the tilt angle is close to 0 degrees.	☐	
18. Tilt the PCB in the test jig more than 45 degrees in any angle. The PCB should perform a fire sequence after 15 seconds. Check on the test jig that the mixer and all the detonator LED's light up.	☐	

19. After the fire sequence return the PCB to 0-degree position. Press the RESET button "SW1" on the PCB, LED "D5"," D6"," D14" and "D15" will turn on and then off again. The LED's will turn on again to reflect the software version D5=0, D6=1, D14=1, D15=0. This binary value is version 6, then the LEDs will flash across D5, D6, D14, D15. This is a night rider mode.	☐	
20. On the DIP_SW2 of the PCB, Slide DIP switch 1 to the on position and down to off position. The PCB should reset.	☐	
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