## BTSA-3 No Comm Modification

Ave Sako 11/2014 6/4/15, 11/19/15

The Analyzer doesn't operate with all USB ports. This is caused by the current needed to run the BTSA. If the PC's hardware decides there's too much of a load, it turns off the port. Sometimes, the PC will cycle connect-unconnect. The severity of the problem is complicated by the length of USB cable and the individual requirements of the PC hardware. It's seems intermittent depending on the PC used and PCB revision. The problem is mitigated by adding supply capacitors that are about 10X original value and re-wired the unit to make the front-panel LED blink when PC COM is achieved. This lowers the in-use current draw several milliamps, provides the board with enough power to operate, and gives the user an indication that the software may be started.

- 1. A few inch extension is soldered to the green LED's wires and used in place of DS1. Anode is closest to R1. Cover wires with hot glue. The pads need to be accessible for the 5Hz calibration test (not shown in photo).
- 2. C56 changed to 470uF (MB126) Change C56 FIRST, then try to connect to PC. Newer revision PCB's apparently don't require both capaitors.
- 3. C36 changed to 330uF (MB125) Change C36 LAST

Make polarity notation before removing original capacitors. Heatshrink the capacitor leads and mount as shown. Affix with hot glue.



