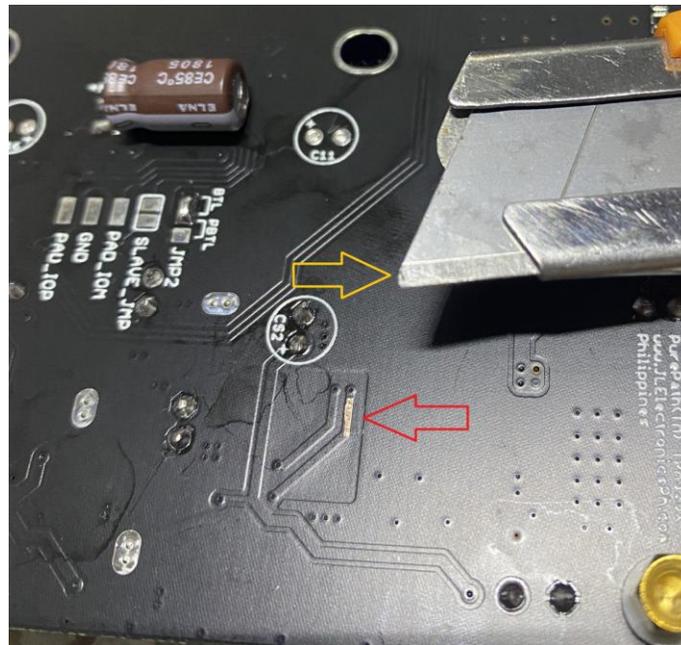
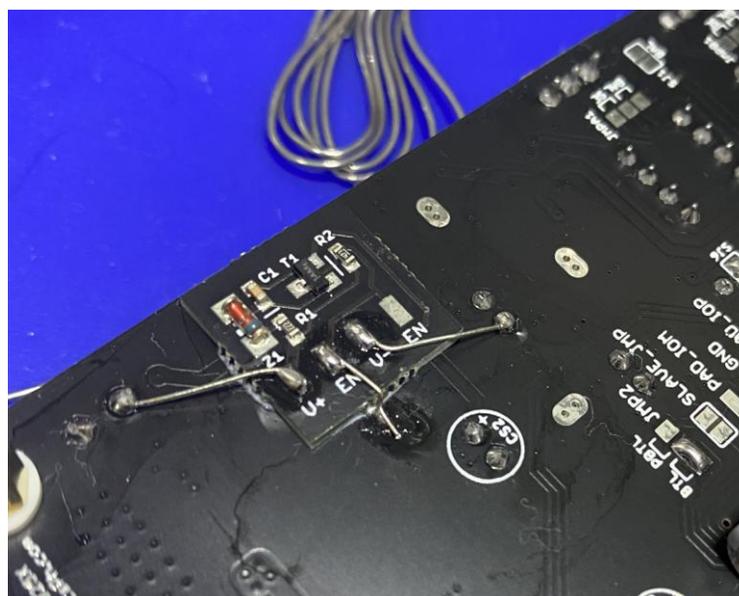


Connecting ramp up-down daughterboard under the PCB

Using the non-sharp side of cutter tool (yellow arrow), scrape off the PCB trace shown in the picture (red arrow). Placing CS2 on top side PCB is optional (for easier access when soldering daughtercard, use temp controlled soldering iron)



Glue the daughtercard using heatsink glue (or any glue), align the EN pad close to the scraped off PCB trace. Wait for the glue to dry before doing any solder job. Connect the traces on the main board using the pic below as a guide, we used 1/4w through hole resistor leads as a wire to connect the daughtercard to the main board trace taps. V+ connects to 12.5V, EN connects to scraped-off trace, V- connects to -6.5V.



Modifications to improve sound quality

Caution: Only perform the modifications if you have a temperature controlled soldering iron, otherwise the pcb traces might get peeled and damaged due to over temperature. Also perform modification if you have the black ATS heatsink ATS-TI10P-519-C1-R3, the non-ATS retrofit silver colored heatsink requires some skills to put back onto the module.

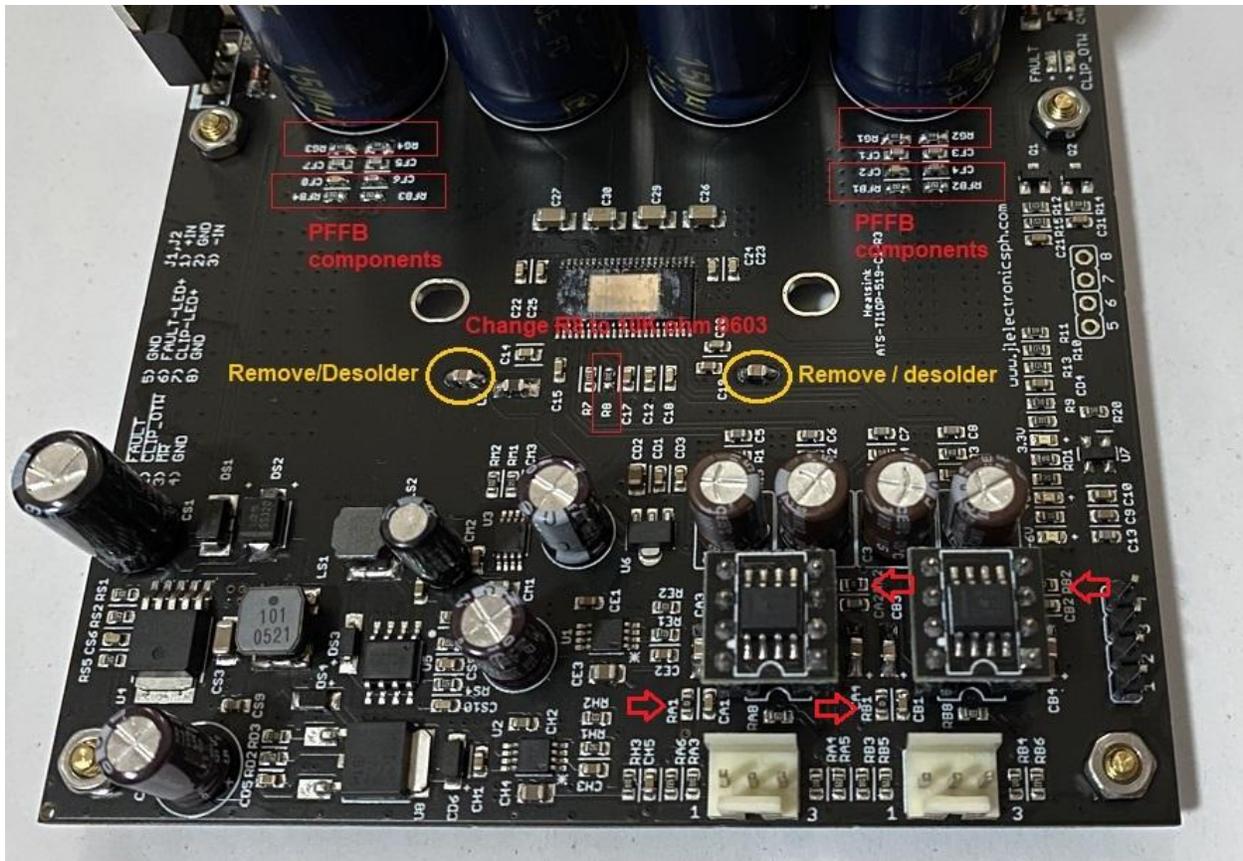
Level 1 modification

1. **IMPORTANT:** Remove ALL capacitors on C11 and C16, including ceramic caps on the top side PCB (if present)
2. Change AVDD cap to 100uF Panasonic FC (or ELNA Silmic II) 16V or higher
3. verify if RA1, RA2, RB1, RB2 is 0 ohm or shorted with solder blob (needs to be 0 ohm)
4. do not put any bypass / decoupling caps on the buffer opamps as it may degrade the sound.

Level 2 modification (requires skilled SMT parts soldering)

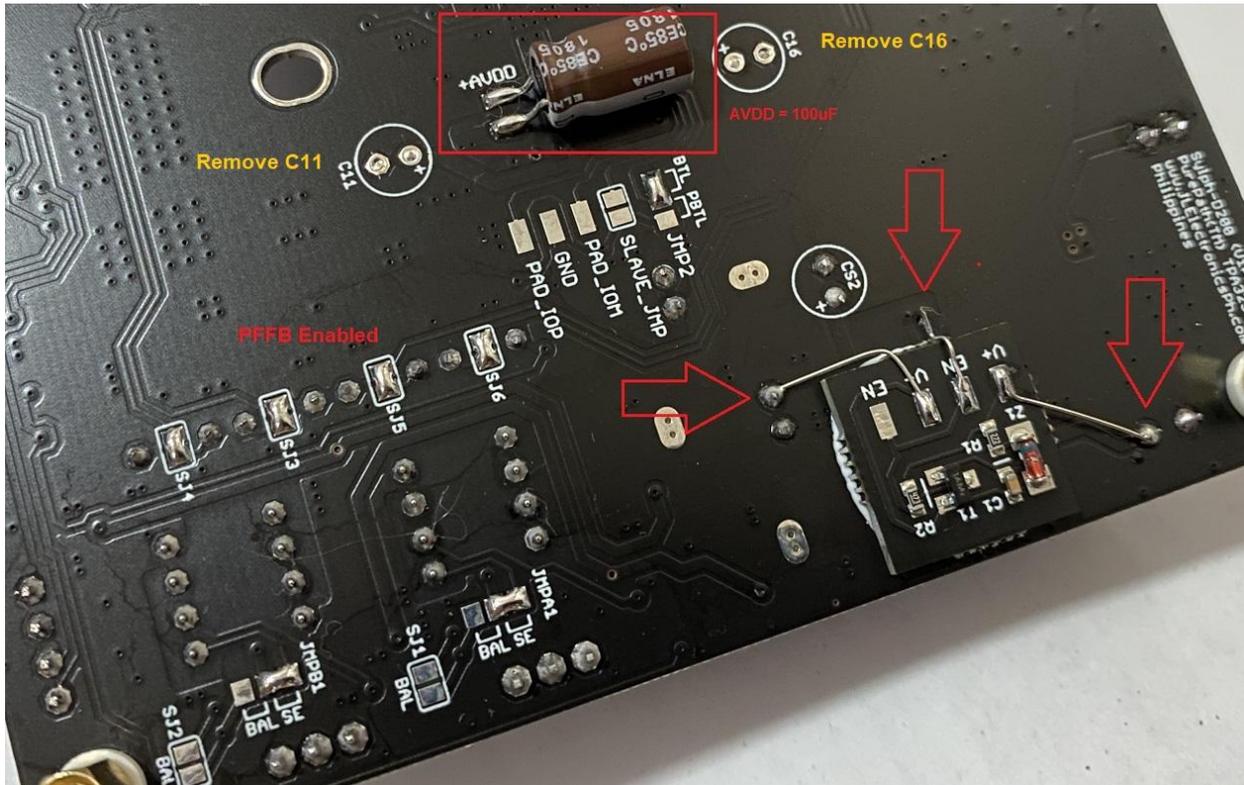
Latest PFFB modifications (Lower THD+N and 2nd harmonic dominant)

- Email us at support@jlelectronicph.com for PFFB component values.



JLE Sylph-D200 V1P (2)

Use 100uF, 16V or higher ELNA Silmic II or Panasonic FC on AVDD cap on the bottom PCB



Panasonic FC capacitor for AVDD cap on the bottom PCB

<https://www.mouser.ph/ProductDetail/667-EEU-FC1E101SB>