http://www.diyaudio.com/forums/class-d/287470-tpa3255-diy-discussion-design-etc-35.html

page 35 #349

moding by sybic - look a t the pics	
1.	
choke CoilCraft VER2923-103	output filter
2.	
680nF EPCOS instead 470nF	output filter
3.	
NE5532 instead TL072	input
4.	
6 x Nichicon Fine Gold 10uF in the signal path instead 6x22uF	input
5.	
LM2575HVS-15 instead LM2575S-15	regulator
6.	
choke in the stabilizer 220uH (221) instead 22uH (220)	regulator
7.	
2k instead 2.2k (stabilizer LM317)	regulator
8.	
220uF (Low ESR) instead 22uF (LM2575HVS-15 - 15V, LM317 - 12V)	regulator
9.	
capacitor PVDD	
1500uF Panasonic Low ESR instead 3900uF Elna(???)	PSU
10.	
10k 1% instead 10k 5%	??

page 54 #536

moding by bih - look at the pics
Here ist my blue chinese board without the heatsink with the yellow Mods
1. Replace the 1K0 Ohm resistor
2. Make a bridge over the 9K1 resistor
3. Replace the cap with the 6K2 resistor
4. Replace the cap with the 4V7 zener
5. Pray that you have made no mistake and that the doctor is right.
But there is no room for other components. Only the 6k2 and the 4V7 would go. the 9k1 bridge is verry difficult.

moding by abraxalito - page 60 #591

Checking the DS for the LM2575 (note not -HV so supplies above 40V won't be tolerated) and looks like the board's designer didn't take to heart the guidelines expounded there. The output inductor for this (buck) reg is marked on the silkscreen as '220uH' but what's fitted is a 22uH (220 marking). My reading for the nomographs in the DS (fig 30 pertains as its a -15) shows a recommended inductor of 2.2mH, which I just happen to have in my box.
The output capacitor fitted is a 10uF/35V SMT. I removed this and checked its ESR - around 5ohms. To replace it I went with a Sancon 220uF with about 0.1ohm ESR. Note the DS cautions against caps here with ESR below 0.05ohm - stability may suffer.
I've not 'scoped this yet but I figure having the correct inductor value (100X bigger than fitted) and an output cap 22X larger has to help with output ripple.

page 54 #540

doctormord
The 6k2 needs to dissipate about 400mW at PVCC=55V, so i'd prefer the following:
Change the 1k0 for 22k (R26)
9k1 has to be **removed** (that's what the red cross means).
Change the 6k2 for 100k (R6),

Broken by design as the board is missing some parts on the 3.3V rail.	??		page 47 #462	doctormord