
PFFB Modification

On EAUMT series Amplifier Board

This document showing you how to implement PFFB on our EAUMT series amplifier board for all DIY stuff or fun on design and modification.

First, please make sure you had read Ti's App note([s1aa788a](#)) and understand on the architecture and modification detail, and also prepare related components,tools,etc.

Secondary, please follow this document step by step for detail modification points, make sure everything mentioned are correct to make a successful implementation, *either you will result in some failure or burn some components in some worse case!*

Below table list PFFB modification components, please find the correct value and size according to our board design:

- Footprint: R_z=2512, C_z= 1206, others are all 0603
- LC filter are good matched design then don't suggest change (especially value)
- We suggest use balance input when PFFB is implemented for best performance

PFFB Designator	EVM Schematic Location and Designator	TPA3244 (PVDD = 30 V, Fpwm = 450 kHz)	TPA3245 (PVDD = 30 V, Fpwm = 600 kHz)	TPA3250 (PVDD = 36 V, Fpwm = 450 kHz)	TPA3251 (PVDD = 36 V, Fpwm = 600 kHz)	TPA3255 (PVDD = 51 V, Fpwm = 450 kHz)
L_out	L2, L3, L4, L5	10 μ H	10 μ H	10 μ H	7 μ H	10 μ H
C_out	C24, C35, C43, C59	1 μ F	1 μ F	1 μ F	680 nF	1 μ F
R_fb	R47, R49, R50, R51	18 k Ω	18 k Ω	18 k Ω	18 k Ω	33 k Ω
C_fb_in	N/A	220 pF	220 pF	220 pF	220 pF	220 pF
C_fb_out	N/A	220 pF	1 nF	220 pF	1 nF	220 pF
R_fb_gnd	N/A	2 k Ω	2 k Ω	2 k Ω	2 k Ω	10 k Ω
R_in	R4, R12, R44, R46	2.7 k Ω	2.7 k Ω	2.7 k Ω	2.7 k Ω	2.7 k Ω
C_z	C77, C78, C79, C80	220 nF	220 nF	220 nF	220 nF	220 nF
R_z	R54, R55, R56, R57	1 Ω	1 Ω	1 Ω	1 Ω	1 Ω
C_op	C18, C23, C57, C65	330 pF	330 pF	330 pF	330 pF	330 pF
R_op_fb	R8, R41, R21, R25	10 k Ω	10 k Ω	10 k Ω	10 k Ω	10 k Ω









