

## Napomene:

Sve komponente koje su povezane za ulaze op-amp staviti što bliže ulazima; drugi krajevi istih mogu imati dužu štampanu vezu!

Za otpornost zvučnika od 4Ω: napajanje do ±22VDCmax(2x16VAC), za 8Ω: do ±27VDCmax(2x20VAC).

C15, C17 i C18, što bliže pripadajućem LM3886TF i C23 što bliže U3!

R28=R20 i  $A = 1,91 + 2 \times R16/R20$ .

## Osobine:

Damping faktor na 8ohm:

Sa MC33272: @20KHz = 450, @10KHz = 685, @1KHz = 730.

Sa LME49720: @20KHz = 550, @10KHz = 1080, @1KHz = 1390, @500Hz = 1740.

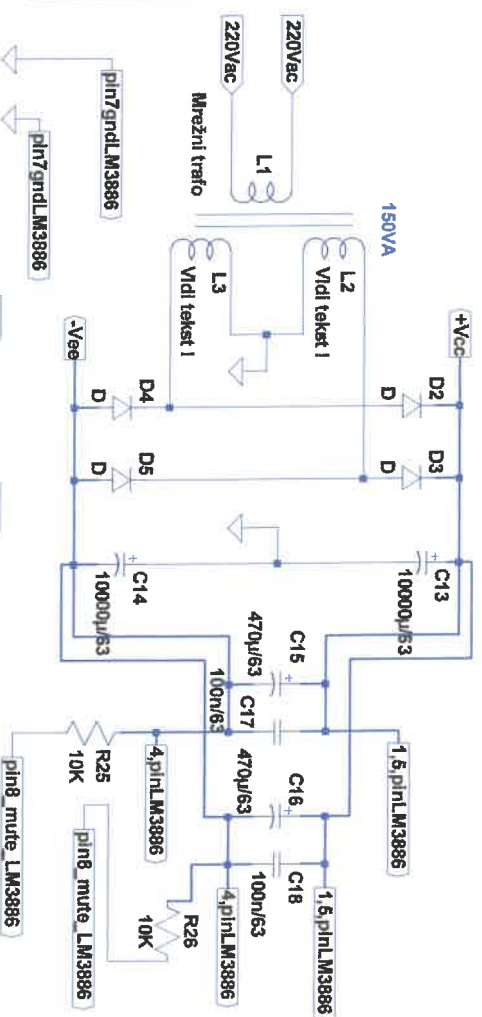
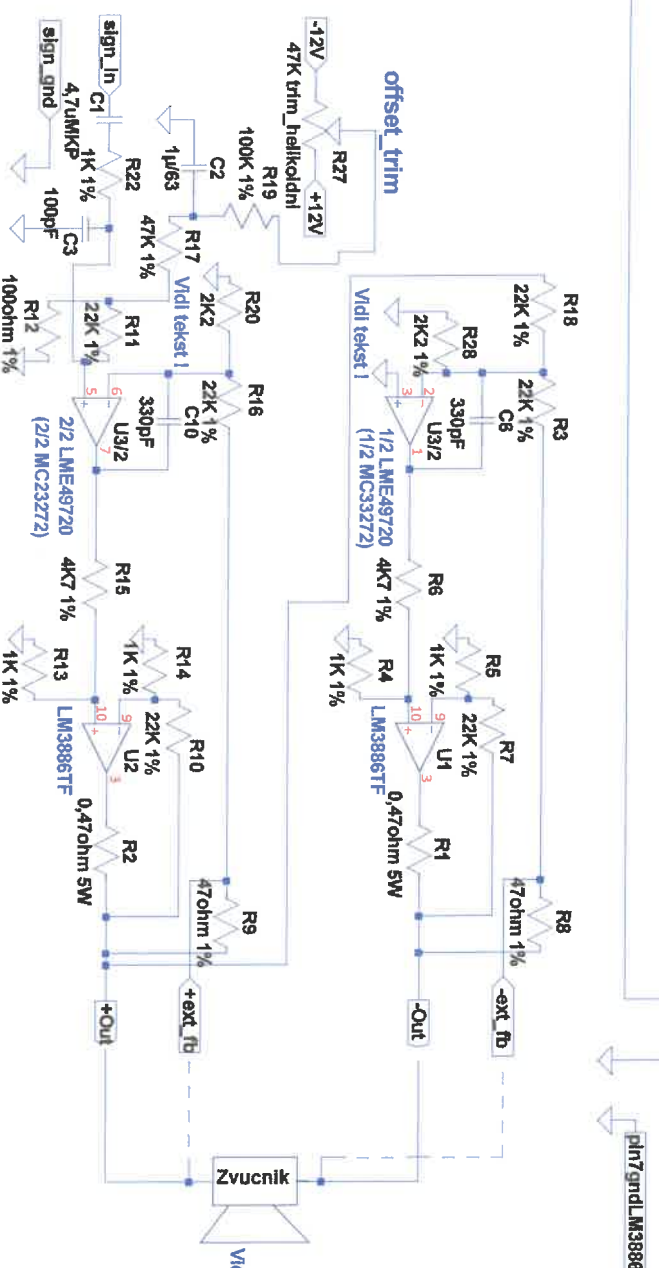
$\xi_{LME} = 1,5mV$

Dugoročna stabilnost offset-a <500uV

Stabilnost sa čistim kapacitivnim opterećenjem: >8uF@1KHz@40Vpp

THD pri 50W sa LME49720 izmerite sami :-))

Impedansa ulaza 22kohm.



## Hi-End Pojačavač 70+W

1,8Hz -3dB do 180KHz -3dB

20Hz do 20KHz < ±0,25dB

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## AMP Plocica V1.0 (max +/-27V)

Oznaka	Vrednost	Opis	Kuciste	Napomena	Fabricka oznaka	Kataloski broj
R1A	1Ω 2W 1%	Metal oksid otpornik	TH	Zajedno zamena za R1 0.5Ω 4W 1%		
R1B	1Ω 2W 1%	Metal oksid otpornik	TH			
R1A	1Ω 2W 1%	Metal oksid otpornik	TH	Zajedno zamena za R2 0.5Ω 4W 1%		
R1B	1Ω 2W 1%	Metal oksid otpornik	TH			
R3	22kΩ 0.25W 1%	Metal film otpornik	SMD 0805	Podesiti prema napajanju R= (Ub / 2 - 12V) / 20mA		
R4	1kΩ 0.25W 1%	Metal film otpornik	SMD 0805			
R5	1kΩ 0.25W 1%	Metal film otpornik	SMD 0805			
R6	4.7kΩ 0.25W 1%	Metal film otpornik	SMD 0805			
R7	22kΩ 0.25W 1%	Metal film otpornik	SMD 0805			
R8	47Ω 0.25W 1%	Metal film otpornik	SMD 0805			
R9	47Ω 0.25W 1%	Metal film otpornik	SMD 0805			
R10	22kΩ 0.25W 1%	Metal film otpornik	SMD 0805			
R11	22kΩ 0.25W 1%	Metal film otpornik	SMD 0805			
R12	100Ω 0.25W 1%	Metal film otpornik	SMD 0805			
R13	1kΩ 0.25W 1%	Metal film otpornik	SMD 0805			
R14	1kΩ 0.25W 1%	Metal film otpornik	SMD 0805			
R15	4.7kΩ 0.25W 1%	Metal film otpornik	SMD 0805			
R16	22kΩ 0.25W 1%	Metal film otpornik	SMD 0805			
R17	47kΩ 0.25W 1%	Metal film otpornik	SMD 0805			
R18	22kΩ 0.25W 1%	Metal film otpornik	SMD 0805			
R19	100kΩ 0.25W 1%	Metal film otpornik	SMD 0805			
R20	2.2kΩ 0.25W 1%	Metal film otpornik	SMD 0805			
R22	1kΩ 0.25W 1%	Metal film otpornik	SMD 0805			
R23	?		TH			
R24	?		TH			
R25	10kΩ 0.25W 1%	Metal film otpornik	SMD 0805			
R26	10kΩ 0.25W 1%	Metal film otpornik	SMD 0805			
R27	47kΩ	Helikoid 10T trimer				
R28	2.2kΩ 0.25W 1%	Metal film otpornik	SMD 0805			
C1A	4.7μF 50V X7R	MLCC keramicki kondenzator	SMD 1206	Moze i C0G dielektrik		
G4B	4.7μF 50V X7R	MLCC keramicki kondenzator	SMD 1206			
C2	1μF 50V X7R	MLCC keramicki kondenzator	SMD 0805	Moze i C0G dielektrik		
C3	100pF 50V NP0	Keramicki kondenzator	SMD 0805			
C6	330pF 50V NP0	Keramicki kondenzator	SMD 0805	Moze i C0G dielektrik		
C10	330pF 50V NP0	Keramicki kondenzator	SMD 0805			
C15A	680μF 63V	ALU kondenzator	TH	Moze i C0G ili X7R dielektrik	UHE1J681MHD	493-1650-ND
C15B	680μF 63V	ALU kondenzator	TH		UHE1J681MHD	493-1650-ND
C16A	680μF 63V	ALU kondenzator	TH		UHE1J681MHD	493-1650-ND
C16B	680μF 63V	ALU kondenzator	TH		UHE1J681MHD	493-1650-ND
C17A	4.7μF 100V X7S	MLCC keramicki kondenzator	SMD 1206		12061Z475MAT2A	478-8719-1-ND
C17B	1μF 100V X7R	MLCC keramicki kondenzator	SMD 1206		C3216X7R2A105M160AA	445-4468-1-ND
C17C	0.1μF 100V X7R	MLCC keramicki kondenzator	SMD 1206		C3216X7R2A104K160AA	445-1377-1-ND
C17D	10nF 100V X7R	Keramicki kondenzator	SMD 1206		C1206C103K1RACTU	399-1236-1-ND
C17E	4.7μF 100V X7S	MLCC keramicki kondenzator	SMD 1206		12061Z475MAT2A	478-8719-1-ND
C17F	4.7μF 100V X7S	MLCC keramicki kondenzator	SMD 1206		12061Z475MAT2A	478-8719-1-ND
C18A	4.7μF 100V X7S	MLCC keramicki kondenzator	SMD 1206		12061Z475MAT2A	478-8719-1-ND
C18B	1μF 100V X7R	MLCC keramicki kondenzator	SMD 1206		C3216X7R2A105M160AA	445-4468-1-ND
C18C	0.1μF 100V X7R	MLCC keramicki kondenzator	SMD 1206		C3216X7R2A104K160AA	445-1377-1-ND
C18D	10nF 100V X7R	Keramicki kondenzator	SMD 1206		C1206C103K1RACTU	399-1236-1-ND
C18E	4.7μF 100V X7S	MLCC keramicki kondenzator	SMD 1206		12061Z475MAT2A	478-8719-1-ND
C18F	4.7μF 100V X7S	MLCC keramicki kondenzator	SMD 1206		12061Z475MAT2A	478-8719-1-ND
C19A	0.1μF 50V X7R	MLCC keramicki kondenzator	SMD 0805		Zajedno zamena za C19, montirani paralelno	
C19B	1μF 50V X7R	MLCC keramicki kondenzator	SMD 0805			
C20	22μF 16V Tantal	Tantal kondenzator	SMD 1411	Moze i 33μF 16V Tantal		
C21A	0.1μF 50V X7R	MLCC keramicki kondenzator	SMD 0805			
C21B	1μF 50V X7R	MLCC keramicki kondenzator	SMD 0805	Zajedno zamena za C21, montirani paralelno		
C22	22μF 16V Tantal	Tantal kondenzator	SMD 1411			
C23A	0.1μF 50V X7R	MLCC keramicki kondenzator	SMD 0805	Moze i 33μF 16V Tantal		
C23B	1μF 50V X7R	MLCC keramicki kondenzator	SMD 0805			
CD1	1000μF 35V	ALU kondenzator	TH	Zajedno zamena za C23, montirani paralelno	UHE1V102MHD	493-1588-ND
CD1A	1μF 50V X7R	MLCC keramicki kondenzator	SMD 0805		UHE1V102MHD	493-1588-ND
CD2	1000μF 35V	ALU kondenzator	TH			
CD2A	1μF 50V X7R	MLCC keramicki kondenzator	SMD 0805			
D6	ZY12 1.2W	Zener dioda	TH			
D7	ZY12 1.2W	Zener dioda	TH			
U1	LM3886TF	Audio POWER AMP	11-Lead TO-220			
U2	LM3886TF	Audio POWER AMP	11-Lead TO-220	LME49720MA/NOPB		Farnell 1523846
U3	LME49720	Dual OP AMP	8-Pin SOIC			
	4.7kΩ 0.25W 1%	SMD Film Resistor	SMD 1206	Moze i sa Tagor Lagera	RC1206FR-074K7L	311-4.70KFRCT-ND
	1kΩ 0.125W 1%	SMD Film Resistor	SMD 0805			
	2.2kΩ 0.125W 1%	SMD Film Resistor	SMD 0805			
				Moze i sa Tagor Lagera	RC0805FR-071KL	311-1.00KCRDKR-ND
					RC0805FR-072K2L	311-2.20KCRCT-ND