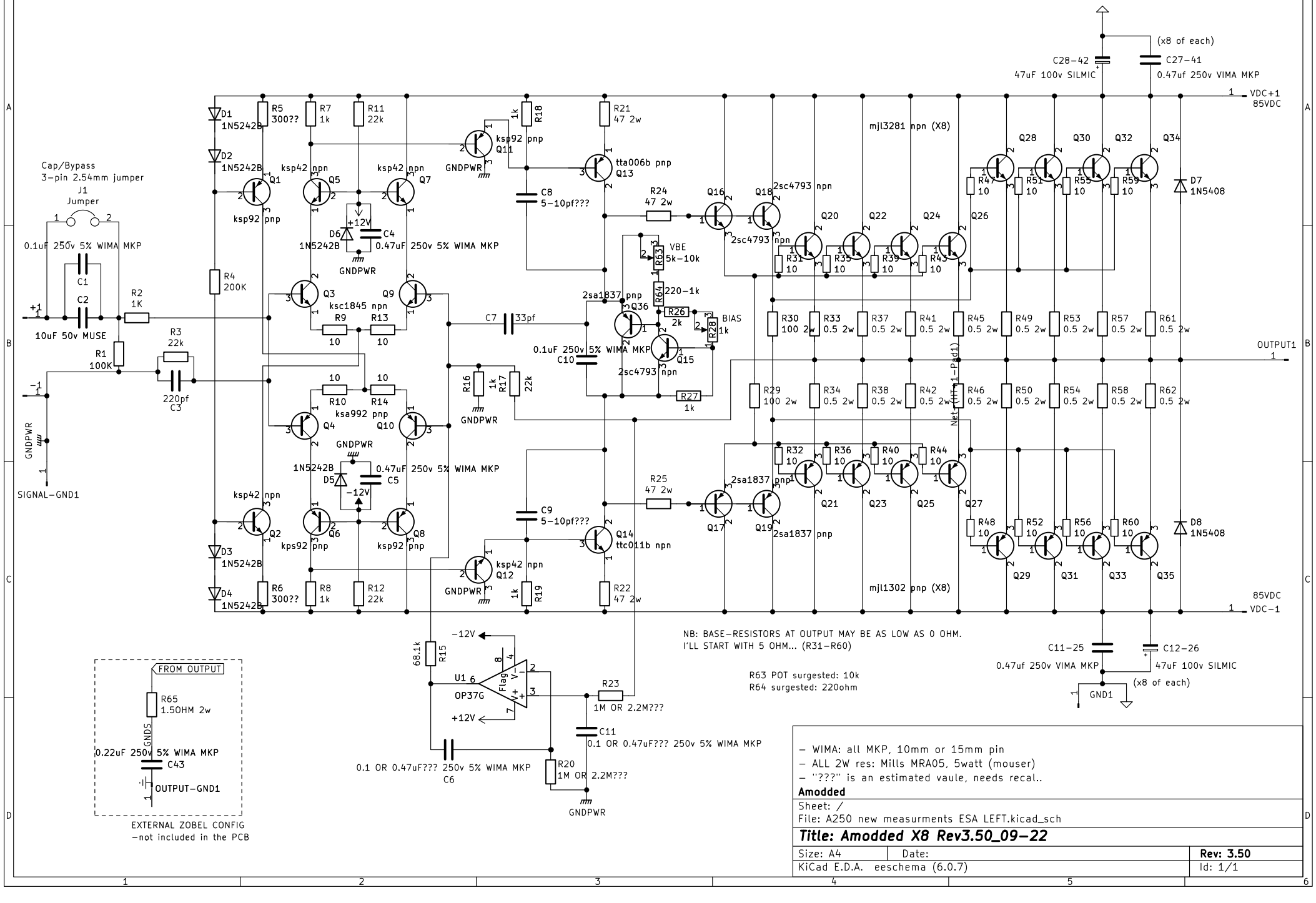
Cap/Bypass
3-pin 2.54mm jumper
J1
Jumper
0.1uF 250v 5% WIMA MKP
C1
C2
10uF 50v MUSE
R1
100K
R2
1K
R3
22k
220pf
C3
SIGNAL-GND1
GNDPWR
R4
200K
D1
1N5242B
D2
1N5242B
D3
1N5242B
D4
1N5242B
R5
300??
R6
300??
R7
1k
R8
1k
R11
22k
R12
22k
Q1
ksp92 pnp
Q2
kps92 pnp
Q3
ksc1845 npn
Q4
ksa992 pnp
Q5
ksp42 npn
Q6
Q7
ksp42 npn
Q8
ksp92 pnp
Q9
R9
10
R10
10
R13
10
R14
10
D6
1N5242B
+12V
C4
0.47uF 250v 5% WIMA MKP
D5
-12V
C5
0.47uF 250v 5% WIMA MKP
R16
1k
R17
22k
Q10
Q11
ksp92 pnp
Q12
ksp42 npn
R18
1k
R19
1k
C7
33pf
C8
5-10pf???
C9
5-10pf???
R21
47 2w
R22
47 2w
R24
47 2w
R25
47 2w
Q13
tta006b pnp
Q14
ttc011b npn
Q15
2sc4793 npn
Q16
2sc4793 npn
Q17
2sa1837 pnp
Q18
2sc4793 npn
Q19
2sa1837 pnp
Q36
2sa1837 pnp
R63
VBE
5k-10k
R64
220-1k
R26
2k
R27
1k
R28
1k
BIAS
C10
0.1uF 250v 5% WIMA MKP
mjl3281 npn (X8)
mjl1302 pnp (X8)
Q20
Q21
Q22
Q23
Q24
Q25
Q26
Q27
Q28
Q29
Q30
Q31
Q32
Q33
Q34
Q35
R30
100 2w
R31
10
R32
10
R33
0.5 2w
R34
0.5 2w
R35
10
R36
10
R37
0.5 2w
R38
0.5 2w
R39
10
R40
10
R41
0.5 2w
R42
0.5 2w
R43
10
R44
10
R45
0.5 2w
R46
0.5 2w
R47
10
R48
10
R49
0.5 2w
R50
0.5 2w
R51
10
R52
10
R53
0.5 2w
R54
0.5 2w
R55
10
R56
10
R57
0.5 2w
R58
0.5 2w
R59
10
R60
10
R61
0.5 2w
R62
0.5 2w
D7
1N5408
D8
1N5408
OUTPUT1
Net-(U1-Pad1)
(x8 of each)
C28-42
47uF 100v SILMIC
C27-41
0.47uf 250v VIMA MKP
VDC+1
85VDC
85VDC
VDC-1
C11-25
0.47uf 250v VIMA MKP
C12-26
47uF 100v SILMIC
(x8 of each)
GND1
NB: BASE-RESISTORS AT OUTPUT MAY BE AS LOW AS 0 OHM.
I'LL START WITH 5 OHM... (R31-R60)
R63 POT surgested: 10k
R64 surgested: 220ohm
-12V
68.1k
R15
U1
OP37G
Flag
+12V
R23
1M OR 2.2M???
C11
0.1 OR 0.47uF??? 250v 5% WIMA MKP
0.1 OR 0.47uF??? 250v 5% WIMA MKP
C6
R20
1M OR 2.2M???
GNDPWR
FROM OUTPUT
R65
1.5OHM 2w
GNDS
0.22uF 250v 5% WIMA MKP
C43
OUTPUT-GND1
EXTERNAL ZOBEL CONFIG
-not included in the PCB
- WIMA: all MKP, 10mm or 15mm pin
- ALL 2W res: Mills MRA05, 5watt (mouser)
- "???" is an estimated vaule, needs recal..
Amodded
Sheet: /
File: A250 new measurments ESA LEFT.kicad_sch
Title: Amodded X8 Rev3.50_09-22
Size: A4
Date:
Rev: 3.50
KiCad E.D.A. eeschema (6.0.7)
Id: 1/1