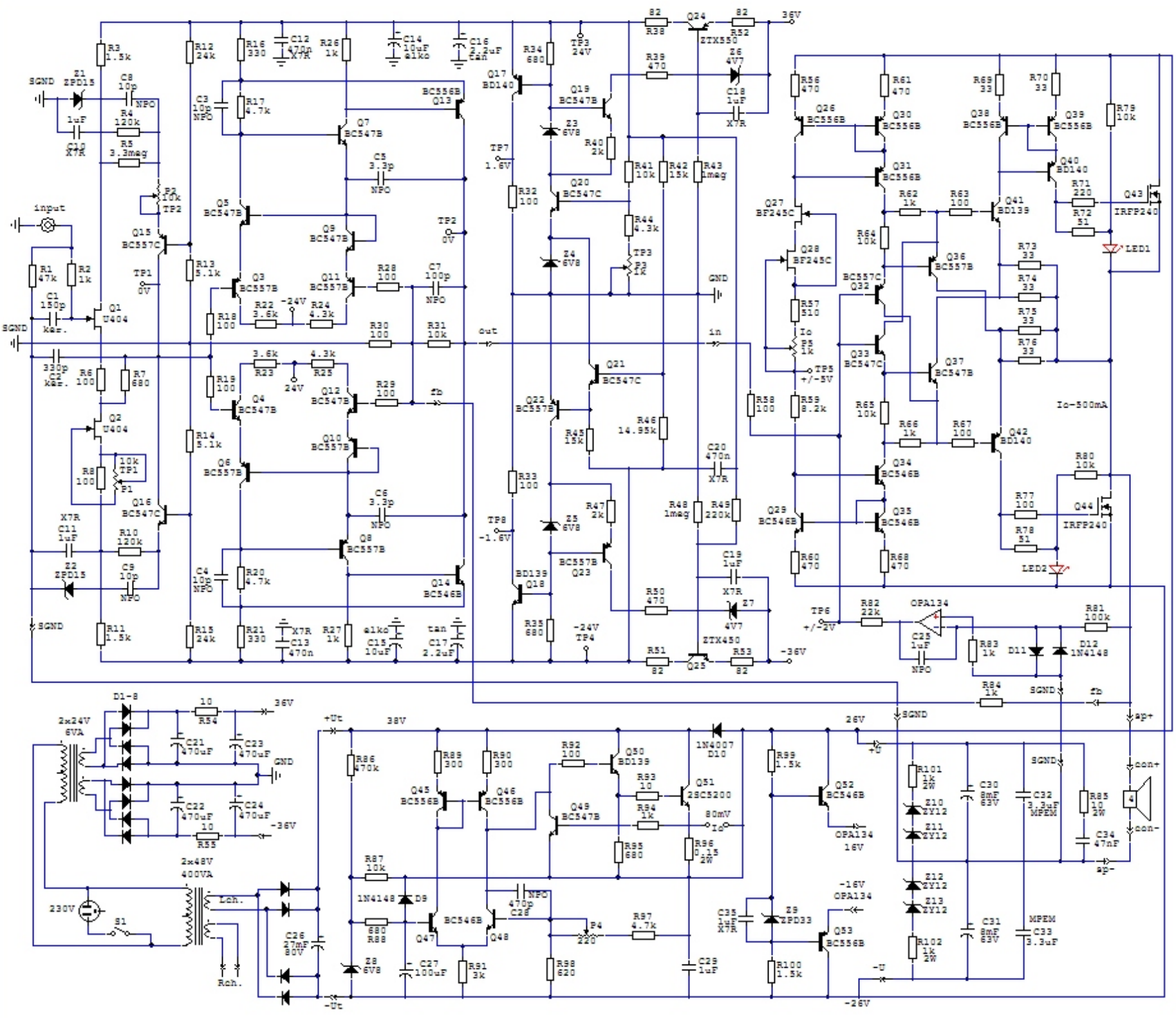
SGND
Z1 ZPD15
C8 10p NPO
1uF
C10 X7R
R4 120k
R5 3.3meg
P2 10k
TP2
input
Q15 BC557C
TP1 0V
R1 47k
R2 1k
C1 150p ker.
Q1 U404
SGND
330p C2 ker.
R6 100
R7 680
Q2 U404
R8 100
10k TP1
P1
Q16 BC547C
X7R C11 1uF
R10 120k
Z2 ZPD15
C9 10p NPO
SGND
R11 1.5k
R12 24k
R16 330
C12 470n X7R
R26 1k
C14 10uF elko
C16 2.2uF tan
C3 10p NPO
R17 4.7k
BC556B Q13
Q7 BC547B
C5 3.3p NPO
Q5 BC547B
Q9 BC547B
TP2 0V
R13 5.1k
Q3 BC557B
Q11 BC557B
R28 100
C7 100p NPO
TP1 0V
R18 100
R22 3.6k
-24V
R24 4.3k
R30 100
R31 10k
out
SGND
3.6k R23
4.3k R25
24V
R19 100
Q4 BC547B
Q12 BC547B
R29 100
fb
R14 5.1k
Q6 BC557B
Q10 BC557B
C6 3.3p NPO
Q8 BC557B
C4 10p NPO
R20 4.7k
Q14 BC546B
R15 24k
R21 330
X7R C13 470n
R27 1k
elko C15 10uF
tan C17 2.2uF
R34 680
TP3 24V
Q17 BD140
TP7 1.6V
R32 100
Q19 BC547B
Z3 6V8
R40 2k
Q20 BC547C
Z4 6V8
TP8 -1.6V
R33 100
Z5 6V8
R47 2k
BC557B Q23
BD139 Q18
R35 680
-24V TP4
82 R38
Q24 ZTX550
82 R52
36V
R39 470
Z6 4V7
C18 1uF X7R
R41 10k
R42 15k
R43 1meg
R44 4.3k
TP3 P3 1k
GND
in
Q21 BC547C
Q22 BC557B
R45 15k
R46 14.95k
C20 470n X7R
R48 1meg
R49 220k
C19 1uF X7R
Z7 4V7
R50 470
ZTX450 Q25
R51 82
R53 82
-36V
R58 100
R56 470
Q26 BC556B
Q27 BF245C
Q28 BF245C
R57 510
Io P5 1k
TP5 +/-5V
R59 8.2k
R61 470
Q30 BC556B
Q31 BC556B
R62 1k
R63 100
Q41 BD139
R64 10k
Q36 BC557B
BC557C Q32
Q33 BC547C
Q37 BC547B
R65 10k
R66 1k
R67 100
Q42 BD140
Q34 BC546B
Q29 BC546B
Q35 BC546B
R60 470
R68 470
R69 33
R70 33
Q38 BC556B
Q39 BC556B
Q40 BD140
R71 220
R72 51
Q43 IRFP240
R79 10k
LED1
R73 33
R74 33
R75 33
R76 33
Io-500mA
R80 10k
R77 100
Q44 IRFP240
R78 51
LED2
TP6 +/-2V
R82 22k
OPA134
C25 1uF NPO
R83 1k
D11
D12 1N4148
R81 100k
R84 1k
SGND
fb
sp+
sp-
con+
con-
D1-8
2x24V 6VA
10 R54
36V
C21 470uF
C23 470uF
GND
C22 470uF
C24 470uF
-36V
10 R55
2x48V 400VA
230V
S1
Lch.
Rch.
C26 27mF 80V
+Ut
38V
R86 470k
R89 300
R90 300
R92 100
Q50 BD139
1N4007 D10
Q45 BC556B
Q46 BC556B
Q49 BC547B
R93 10
Q51 2SC5200
R94 1k
80mV Io
R95 680
R96 0.15 2W
R87 10k
1N4148 D9
680 R88
BC546B Q47
Q48
470p NPO C28
P4 220
R97 4.7k
Z8 6V8
C27 100uF
R91 3k
R98 620
C29 1uF
-Ut
26V
+U
R99 1.5k
Q52 BC546B
OPA134 16V
-16V OPA134
C35 1uF X7R
Z9 ZPD33
Q53 BC556B
R100 1.5k
-U
-26V
SGND
R101 1k 2W
Z10 ZY12
Z11 ZY12
C30 8mF 63V
C32 3.3uF MPEM
R85 10 2W
C34 47nF
Z12 ZY12
Z13 ZY12
R102 1k 2W
C31 8mF 63V
MPEM C33 3.3uF