

BOM (Jackinnj&sikahr board)

Jackinnj board	sikahr board	Description	Quantity	Value
R8	R7	Resistor, MF	1	1K
P1,P2	P1,P2,P3	Potentiometer	2(3)	1K
R3,R4,R7	R5,R6,RF	Resistor, MF	3	3.3K
R13,R14,R15,R16	R16,R17,R11,R12	Resistor, 1W	4	4.7R
R11,R12	R13,R14	Resistor, 1W	2	10R
R2	R8	Resistor, MF	1	100K
R5,R6	R3,R4	Resistor, MF	2	51R
R9,R10	R1,R2	Resistor, 1W	2	249R(499R)
R1	R9,R10	Resistor, MF	1(2)	330R
D1,D2,D3	D1,D2,D3	Small Signal Diode	3	1N914
Q1	Q1	Transistor	1	2N5087(BC560C)
Q2	Q2	Transistor	1	2N5088(BC550C)
J1	J1	FET Transistor	1	2N5457(MMBF5457)
J2	J2	FET Transistor	1	2N5460(MMBF5460)
Q3,Q6	Q3,Q6	Output Transistor	2	2SD669AC(2SC5694)
Q5,Q4	Q5,Q4	Output Transistor	2	2SB649AC(2SA2037)

R8.2,R9.2,R10.2 - alternative positions for smd resistors (needed for SMD JFETS with heatsink) - do not populate

R7.2 - alternative position for R7, connected serial, populate one, short one

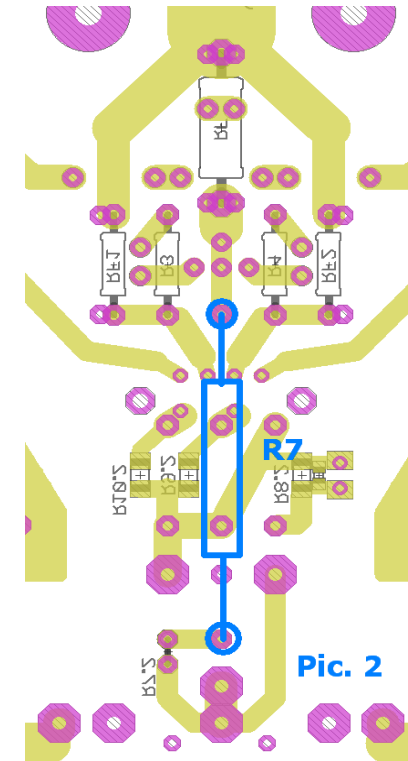
R7 position is not marked on board (too crowded), see picture 2. for mounting pad position (bottom side mount)

RF1,RF2 - alternative feedback resistors - do not populate

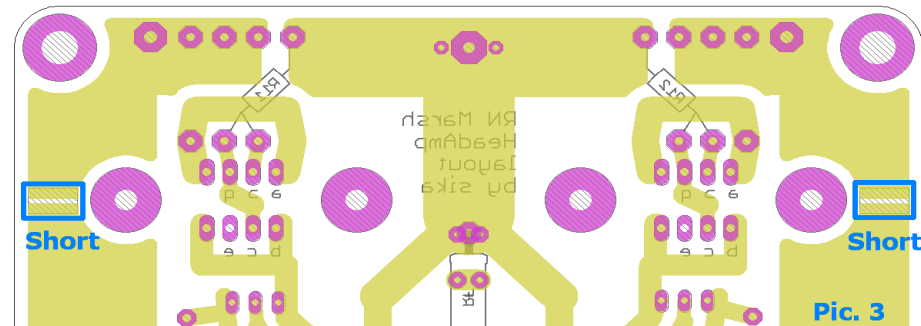
JP1,JP2 - for optional operation in balanced mode with interconnected feedback networks - short

SENSE+,SENSE- - optional connection for power regulators with remote sense feature

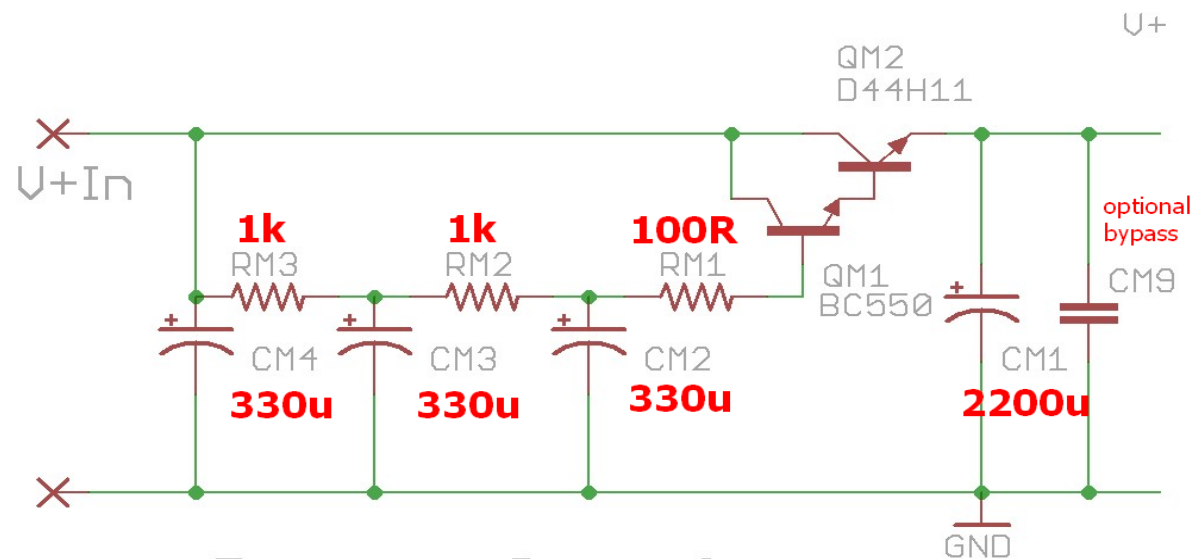
Power supply for output pair and the front end is separated by default, please join with the solder blobs at the marked positions at the bottom, unless you are crazy enough :),and want to use separate power supplies.



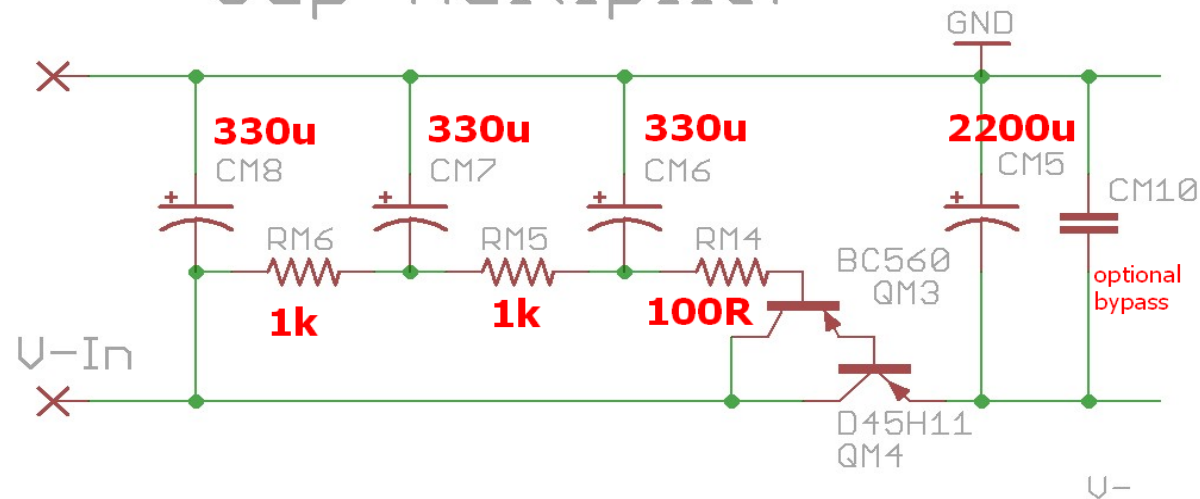
Pic. 2



Pic. 3



Power Supply Cap Multiplier

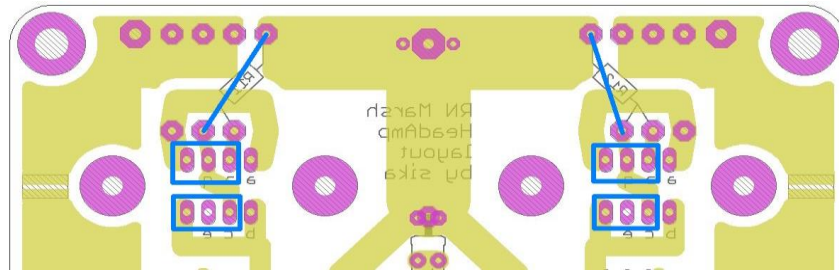
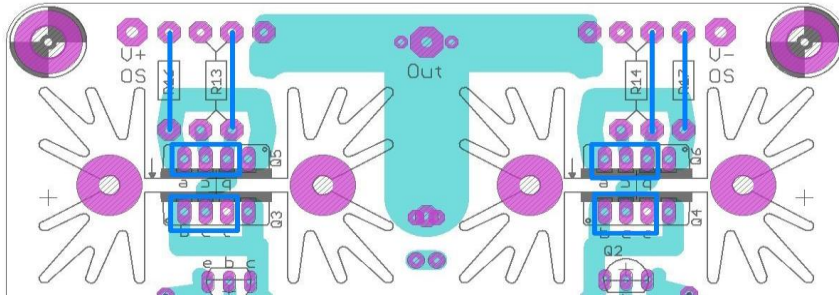


Output Transistor footprint **BCE**

transistor positions&resistor connections

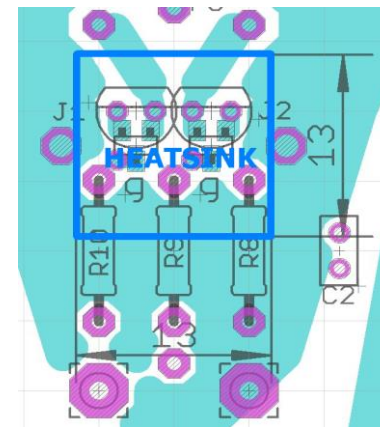
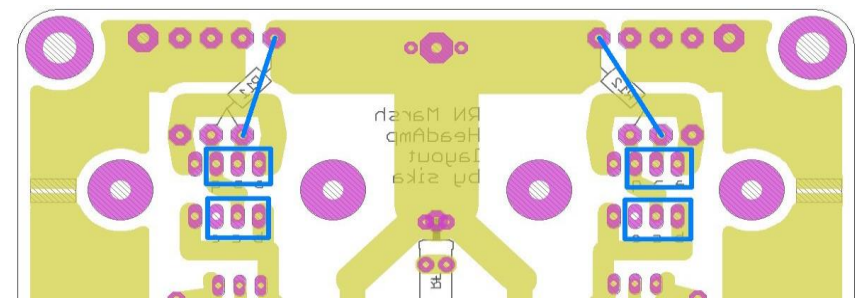
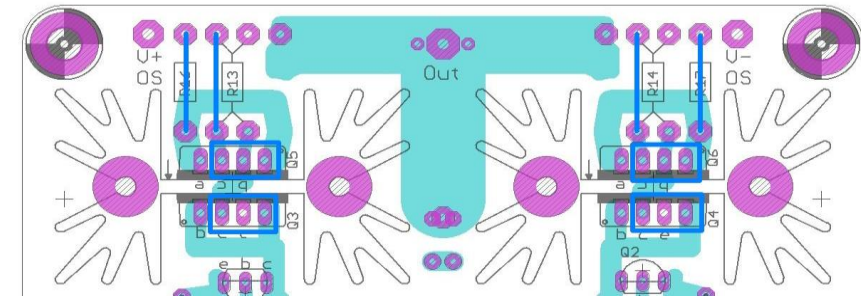
Output transistors footprint marked, on top for BCE, on bottom for ECB

Resistors R11/R13 & R12/R14 change connection point when you change output transistors pinout BCE <-> ECB



Output Transistor footprint **ECB**

transistor positions&resistor connections



Input JFET pair, board is compatible with both THT&SMD input JFETs.

THT JFETs can be both SGD&GSD with minimal bending.

SMD JFETs are SOT-23 Fairchild MMBF5457/MMBF5460 pinout.

In all cases, presumed Source & Drain are interchangeable.

For SMD SOT-23 JFETs , this heat sink is planned:

[13x13x11mm Aluminum Heat Sink H36](#)

For heat sink mounting, M2 holes are provided

(1.6 mm drill) distance center to center 15mm.