## E202VAR Natural (VLF) Radio Receiver

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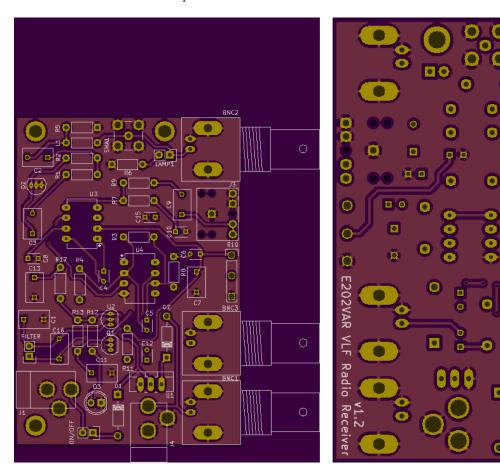


Figure 1:

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## Bill of Materials

Ref	Qty	Description	Digikey PN
C1	1	CAP CER 0.033UF 50V C0G RADIAL	445-8490-ND
C10	1	CAP CER 10000PF 50V C0G RADIAL	445-8384-ND
C16 C7	2	CAP CER 4700PF 50V C0G RADIAL	445-8585-ND
C2 C11	2	CAP CER 0.1UF 50V C0G RADIAL	445-8532-ND
C3	1	CAP CER 8.2PF 50V NP0 RADIAL	399-8923-ND
C5 C15 C8	3	CAP CER 150PF 50V NP0 RADIAL	BC1015CT-ND
C6 C12 C4	3	CAP CER 10UF 16V X5R RADIAL	445-8290-ND
C9 C13	$^2$	CAP CER 100UF 6.3V X5R RADIAL	445-8441-ND

Ref	Qty	Description	Digikey PN
D1 D2	2	DIODE GEN PURP 50V 1A DO41	1N4001-TPMSCT-ND
D3	1	LED BLUE CLEAR 5MM ROUND T/H	C503B-BCS-CV0Z0461-ND
J1 J4	2	CONN PWR JACK 2.5X5.5MM HIGH CUR	PJ-202BH
J2 J5	2	CONN TERM SCREW GREEN 2.54MM 2POS TH	ED10561-ND
J3	1	CONN JACK STEREO R/A 3PIN 3.5MM	CP1-3523N-ND
L1	1	FIXED IND 3.3UH 575MA 300 MOHM	78F3R3J-RC-ND
LAMP1	1	LAMP NEON 6.2MM WIRE TERMINAL	A9A-ND
Q1 Q2	2	TRANS NPN 45V 0.1A TO-92	BC547BTACT-ND
R10	1	POT 10K OHM 1/5W PLASTIC LINEAR	987-1301-ND
R11	1	RES $4.7K$ OHM $1/4W$ $5\%$ CF MINI	S4.7KQCT-ND
R12	1	RES $2.2K$ OHM $1/4W$ $5\%$ CARBON FILM	CF14JT2K20CT-ND
R13	1	RES 1K OHM 1/4W 5% CF MINI	S1KQCT-ND
R4	1	RES $3.3$ K OHM $1/4$ W $5\%$ CARBON FILM	CF14JT3K30CT-ND
R5 R1	2	RES 10M OHM 1/4W 5% CARBON FILM	CF14JT1M00CT-ND
R6 R2 R3	3	RES 100K OHM $1/4$ W 5% CARBON FILM	CF14JT100KCT-ND
R7	1	RES 10 OHM 1/4W 5% CARBON FILM	CF14JT10R0CT-ND
R8	1	RES $10K$ OHM $1/4W$ $5\%$ CF MINI	S10KQCT-ND
R9 R17	2	RES 33 OHM $1/4$ W 5% CARBON FILM	CF14JT33R0CT-ND
SMA1	1	CONN SMA JACK R/A 50 OHM PCB	ARFX1232-ND
U1	1	IC REG LDO 9V 1A MC7809 TO220AB	MC7809CTGOS-ND
U2	1	IC VREF GND REF ADJ TO92	296-6549-5-ND
U3	1	IC AUDIO PWR AMP LOW VOLT 8-DIP	NJM386D-ND
U4	1	IC OPAMP JFET 3MHZ DIP8	296-7203-5-ND

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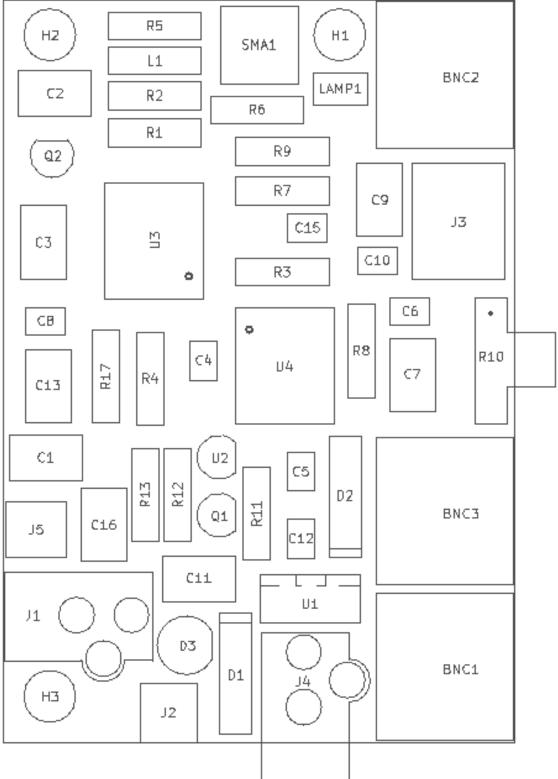


Figure 2: